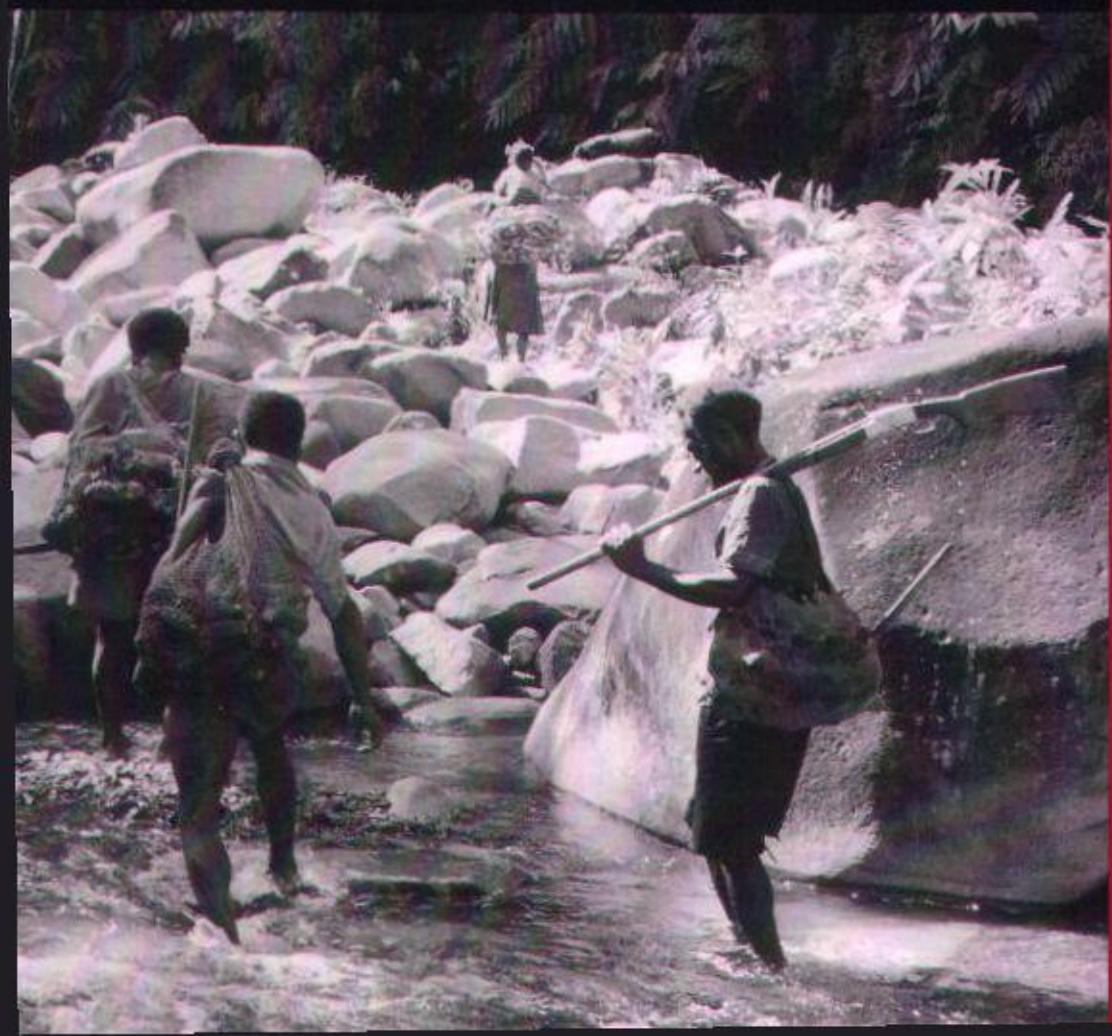
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Through the Thicket

Disentangling the social dynamics of an integrated conservation and development project on mainland Papua New Guinea

Flip van Helden



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1. While it may be true that capitalism develops 'a conservationist tendency' (Escobar 1996: 47), it is equally true that many conservationists actively develop capitalist tendencies *(this thesis)*.

2. In Papua New Guinea, attempts to improve the registration of customary landholdings are often seen as outside-sponsored attempts to gain control over land and resources. The main drive towards registration, however, is coming from within *(this thesis)*.

3. Conservationists should take more time to listen to and engage with local people *(this thesis)*.

4. The next twenty years will be a time of great disappointment for many environmental groups 'working together' with so-called indigenous peoples.

5. If development interventions are essentially struggles 'about ideas, about forms, about images and imaginings' (Said 1994: 7), and if such interventions are characterised by 'more or less naive, unproven, simplifying assumptions' (Hoben 1995: 1008), then development is the business of imposing simple ideas on poor people.

6. Participation, social capital and local knowledge are not necessarily good things.

7. 'Facts never speak for themselves, they are bespoken and spoken for' (Apthorpe 1986: 380).

8. Niet-Westerse Sociologie, ... maar wat dan wel? (Paul van den Brink).

Stellingen behorende bij het proefschrift: *'Through the Thicket: Disentangling the social dynamics of an integrated conservation and development project on mainland Papua New Guinea'* te verdedigen op 27 November 2001 door Flip van Helden.

Through the Thicket

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Through the Thicket

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Cover: a Jimi family travelling through the Bismarck Fall. Picture by the author.

Voor Inger

TABLE OF CONTENTS

Figures & Tables x

Abbreviations xi

Acknowledgements xiii

Introduction: ICAD projects as intervention 1

Protected areas under fire 3

The case of Papua New Guinea and the Biodiversity Program 5

Towards an anthropology of conservation 7

Planned intervention and the social sciences 15

Outline of this thesis 21

1 From stick to carrot: Changing narratives in international conservation 25

Introduction 25

Shifting conceptions of man and nature 29

African parks and the 'primitive other' 34

Contrasting conceptions of the 'primitive other' 36

biodiversity and the preservationist framework 42

Narratives of community-based conservation 49

Integrating conservation and development 56

Conclusion 59

2 Conservation without coercion: Conservation policy in Papua New Guinea 63

Introduction 63

Setting the scene: People and nature in Papua New Guinea 64

A sense of crisis: Forestry, development and good governance 70

The GEF/UNDP Biodiversity Programme 78

Processing the Lak experience 97

Introducing the Bismarck-Ramu area 103

Conclusion 104

3 Fragmentation and competition: a description of Jimi society **107**
Introduction 107
A description of the Jimi Valley 108
Insecurity, competition and position 118
The 'moral community' and the outside world 131
Security, cash and the politics of development 140
Changing values and the environment 150
Conclusion 151

4 Migration, marriage and social conflict: Introducing the Ramu Valley **153**
Introduction 153
A description of the Bismarck Fall and the Ramu Floodplains 154
Social organisation among the Ramu people 158
The needle and the thread: Jimi migration into the Ramu Valley 162
Resources, development and the state in the Ramu Valley 169
Western conservation and local society 173
Conclusion 185

5 The nature of 'good business': Conservation patrols among the Jimi people **187**
Introduction 187
Selecting the Bismarck-Ramu area 188
The April 1995 patrol into the Marum and Ramu sections 191
The September 1995 patrol: Money, talk and violence 198
The Bubkile biological survey 204
The early 1996 patrols 218
Conclusion 223

6 Reducing expectations: The Bismarck-Ramu community entry approach **227**
Introduction 227
Towards a more people-oriented approach 228
Between development and dependency 235
The Bismarck-Ramu community entry approach 247
The politics of participatory conservation 256
The disciplining of an open-ended process 264
Conclusion 269

7 Community-based conservation and territoriality on the Ramu River 271
Introduction 271
The first community entry patrols 272
A breakdown in relations with the Jimi Valley communities 280
Community work and conflict in the mixed Jimi-Ramu communities 287
Community entry on the Ramu River 295
Territoriality and conservation on the Ramu River 299
The Sogeram conservation deed 317
Conclusions 321

8 Narratives of conservation, sustainability and control 323
Introduction 323
Measures of success 324
Securing second phase funding 327
The break away project 342
The Bismarck-Ramu Group after May 1999 352
Conclusion 355

Conclusions 357
Interfaces as clashing worldviews 358
The stories that we tell about nature and 'local' people 365
The fragile 'middle ground' 368

References 371
Samenvatting 391
Curriculum Vitae 399

FIGURES & TABLES

Figure 1: The two project sites of the Biodiversity Program in PNG 6

Figure 2: Overview of the Bismarck-Ramu project area 10

Figure 3: Map of the Upper and Middle Jimi Valley 109

Figure 4: Map of the Ramu Valley section of the Bismarck-Ramu area 155

Figure 5: The Long and Winding Road Towards Sustainable Development 261

Figure 6: Map of the Proposed Ramu Biosphere Reserve 331

Table 1: Earnings per Kema-clan during the biological survey 217

Table 2: Issues and tools of the step-by-step community entry approach 252

Table 3: The matrix of conservation options under PNG law. 307

Table 4: Rules and Penalties of the Foroko Wildlife Management Area 312

ABBREVIATIONS

ANGAU	-	Australian New Guinea Administrative Unit
AOI	-	Area of Interest
ASL	-	Above Sea Level
BIORAP	-	Biodiversity Rapid Survey
BR	-	Bismarck-Ramu
BRG	-	Bismarck-Ramu Group
CD	-	Community Development
CNA	-	Conservation Needs Assessment
CRC	-	Conservation Resource Centre
CRI	-	Christensen Research Institute
DEC	-	Department of Environment and Conservation
FA	-	Forest Authority
GDP	-	Gross Domestic Product
GEF	-	Global Environment Facility
GTZ	-	Gesellschaft für Technische Zusammenarbeit
ICAD	-	Integrated Conservation and Development
ICDP	-	Integrated Conservation and Development Project
IIED	-	International Institute for Environment and Development
IUCN	-	World Conservation Union
LGC	-	Local Government Council
MAB	-	Man and Biosphere
MP	-	Member of Parliament
NFCAP	-	National Forestry and Conservation Action Plan
NGO	-	Non-Governmental Organisation
NIO	-	National Intelligence Organisation
OEC	-	Office of Environment and Conservation
PC	-	Personal Communication
PDF	-	Project Development Facility

PFD	-	Project Formulation Document
PNG	-	Papua New Guinea
PRM	-	Project Review Mission
SFS	-	Social Feasibility Study
TNC	-	The Nature Conservancy
UNDP	-	United Nations Development Program
UNICEF	-	United Nations Children's Fund
UNOPS	-	United Nations Office of Project Services
WMA	-	Wildlife Management Area
WMC	-	Wildlife Management Committee
WWF	-	World Wide Fund for Nature

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I dedicate this study to her.

Flip van Helden - October 2001

INTRODUCTION: ICAD PROJECTS AS INTERVENTION

The notion of 'crisis' constitutes the lifeblood of both conservation and development discourse. Images of poverty, war, starvation, pollution and deforestation serve as an urgent call to action and legitimise a variety of rapid response policies, actions and projects (Apthorpe 1986, Roe 1995). The discourse on the loss of biological diversity too, rode to prominence on a wave of catastrophic predictions concerning the rate of tropical deforestation and resulting species extinctions. In this view, environmental degradation and species loss is a result of the combination of human overpopulation and the use of increasingly extractive and destructive technologies. These lead to the fragmentation of natural habitats, the extinction of localised species and ultimately, the collapse of whole ecosystems. Especially habitats and species in the naturally rich tropical countries are thought to be at risk. These arguments, reinforced with dramatic projections of the rate of extinctions, led the Club of the Earth to claim that 'the species extinction crisis is a threat to civilization second only to the threat of thermonuclear war' (Takacs 1996: 38). Although the earliest crisis scenarios based on the highly schematic inferences from island biogeography were exaggerated,[1] their political impact was huge, making the destruction of tropical rainforests and the loss of species a topic of international concern.

During the 1980s environmental scientists have not only entered the field of international politics to make the point that biological diversity should be preserved (Takacs 1996). A number of them have also used their position as scientists to assert

[1] Myers (1979), for example, predicted that we were losing some 2.6 percent of tropical forest per annum, a figure, which combined with an exponentially growing population, led him to the conclusion that we were on the road to losing one-quarter of all species by the year 2000. The Ehrlichs similarly calculated that a deforestation rate of 1 percent per year would lead to a near-total loss of species by 2025, while a rate of 2 percent per annum meant that half of all biological diversity would be gone by the year 2000 (Ehrlich and Ehrlich 1981; 161-62 footnote 96).

that mainly those trained in the scientific area at stake are to speak out on moral issues pertaining to that area. Thus recourse to science not only becomes a means to inform and legitimise certain viewpoints, but also serves to exclude other people from debate. According to this view, only doctors are sufficiently qualified to speak out on medical matters, only nuclear technicians can judge the acceptability of the use of nuclear technology and only biologists have sufficient credibility to speak out on biological diversity. Janzen for example, argues that:

> 'Engineers build bridges, writers weave words and biologists are the representatives of the natural world.... In short, biologists are in charge of the future of tropical ecology.... Set aside your random research and devote your life to activities that will bring the world to understand that tropical nature is an integral part of human life. If our generation does not do it, it won't be there for the next' (Janzen 1986: 305).

These assertions of authority, however, ignore the fact that environmental problems are not just of a technical and scientific nature, but essentially cultural, political and moral questions, which revolve around the issue of who conserves what, for whom and why. Scientists are no better equipped to make such moral choices than anyone else.

The political implications of environmentalist assertions are often hidden behind the strategic use of words. Next to the language of catastrophe as a mobilising mechanism, and recourse to science as a means to further a personal agenda, conservationists tend to employ rhetorical devices centring on the notion of 'responsibility' and 'precaution'. Responsibility in this case is defined in terms of the dictum that 'we have not inherited the Earth from our parents, but borrowed it from our children' (Raven in Hannigan 1996: 155). It covers mankind's moral obligations towards nature and future generations, but does not necessarily include people presently alive. 'Precaution' as in the application of the 'precautionary principle' too refers to how we deal with the natural world, not to the question how to take care of the needs of other people. The universalist proclamations made in the name of 'mankind', the 'public good', or the 'global community', thus hide a deep conflict of interest between two sets of rights; the right of people in tropical countries to use their natural resources as they deem fit and to make their own mistakes on the one hand, and the right of well-meaning outsiders to intervene in the name of nature, future generations and their own interests on the other.

According to Guha (1989: 78) for example, Janzen's claim to authority over global nature implies a 'frankly imperialist manifesto'. Large parts of the globe are to be taken over for conservation purposes in a move that subsumes the social, political and economic interests of poor people to a foreign and culturally rooted brand of environmentalist concerns. Rather than the 'love for nature' of a few well-heeled, white conservationists who tell usually poor, coloured, resource-dependent people to set aside their natural resources for the global good, local communities should have the ultimate right to speak up on behalf of their natural resources.

APPORTIONING BLAME

From this latter perspective, it is particularly galling that the West, which has relentlessly exploited its own natural resources and those of other people, now presents the biodiversity problem as an essentially tropical issue and itself as the saviour of the environment (Shiva 1991). Whereas Western conservationists perceive a natural world in crisis, people in developing countries are experiencing a development problem. To many poor people the suggestion that should bear the cost of maintaining 'biodiversity' in the name of an abstract 'global community' only shows that the western world cares more about tropical nature than about non-western people.

As in all environmental discussions, the debate centres partly on the apportioning of blame. Whereas western conservationists have tended to focus on the 'uncontrolled' growth of poor populations and their supposedly destructive habits, a number of dissenting social activists agree that the natural world is at risk but instead take aim at western culture. They argue that the level of consumerism in western countries might be the more fundamental issue, or suggest that the unequal exchange inherent to the western capitalist system lies at the root of environmental degradation. They may also claim that indigenous people have at least retained some sort of traditional conservation ethic. In this latter view, biodiversity thus not so much needs to be protected from local people. Instead it needs to be kept from northern conservationists, whose ostentatiously well-intended concerns compromise the autonomy of indigenous peoples and provide a cover for industrial interests aiming to appropriate Third World biogenetic resources.

Conservation issues are thus inevitably linked to cultural and political questions concerning the version of reality at play, the allocation of blame, the distribution of costs and benefits, and issues of autonomy, power and control. Conservation issues cannot be resolved by recourse to scientific argumentation. It is this clash between perceptions of reality, systems of knowledge or 'moral universes' (Cussins 1998) which has come to dominate conservation issues in tropical countries. There are few areas where the political debate over the nature of environmental problems, the features of possible solutions and the relative importance of environmental and economic issues have become so outspoken as around the issue of protected area establishment. Ironically while the biodiversity issue gained prominence during the 1980s and 1990s, its predominant solution to species loss - the establishment of an international system of protected areas - has come under fire.

PROTECTED AREAS UNDER FIRE

Since the end of the 19th century, the establishment of parks and nature reserves has been based on the assumption that only the exclusion of humans enables the maintenance of 'wild' ecosystems. Programs to protect nature have mainly been conceived as technical and managerial programs in which centralised agencies select

potential conservation areas based on biological indicators. The experts of these agencies subsequently design management models to reduce human pressures on the ecosystems inside these areas. Such a mechanistic view of outside conservation intervention negates the fundamentally social, political and negotiated nature of such conservation initiatives. Protected areas can not serve as straightforward technical solutions for the worldwide threat to biodiversity because of the simple fact that conservation programs affect people's access to natural resources and their ability to make a living from these resources. In many cases, their relation with the environment forms an essential element of local culture. A second problem in the establishment of national parks lies with the division of costs and benefits attached to a protected area. The 'global community' through the protection of biodiversity, tourists through their enjoyment of local flora and fauna, hunters through the game that they shoot, and the state through its collection of revenues, all benefit from the establishment of conservation areas. In contrast, local people carry the brunt of the costs associated with this type of nature protection.

Not surprisingly, the exclusion of local communities from traditional hunting and gardening lands elicits strong responses. These responses may directly contravene the conservation objectives of the executing agency or the state and in many cases break state law, as people continue to use protected land and resources. In some cases, such popular resistance takes the form of open revolt (See Pimbert and Pretty 1993). More usually, however, it takes the shape of 'everyday forms of resistance' (Scott 1986) through sabotage, foot dragging, and smuggling, poaching, resettlement, gardening, fuel wood collection and incendiarism. Conservationists, in turn, have responded with what Machlis and Tichnell (1985: 96) call 'an essentially military defense strategy'. As the conflicts around protected areas intensify, conservationists are becoming aware that a policy based on a denial of access to resources may appear manageable in the short term, but 'runs the risk of backfiring in the longer run' (Brown and Wyckoff 1992: 24).

In an attempt to deal with the social-economic and moral implications of protected area establishment, the 1980s and 1990s have seen the development of a number of new conservation strategies. One such methodology constitutes the use of income earning and service-delivery activities to raise the benefits derived from an intact environment. An example of such an endeavour is the development of eco-tourism enterprises. There is no point in setting up community-based guesthouses for divers in a coastal area where the reefs have been dynamited. By stimulating such enterprises in an undegraded environment, the conservation agency actually increases the benefits derived from keeping the environment as it is, while reducing the incentive to seek other, potentially more destructive alternatives to development.

Many of the new strategies focus on the community level. These strategies have in common that they redefine conservation from an expert-driven, state-sponsored imposition on local people to a more–or-less participatory process. In the latter case, conservationists aim to come to a common understanding with local people over whether there is an environmental problem, what to do about it and how to

compensate those that bear the costs of the proposed solutions. In the organisation of community-based and participatory conservation activities, conservationists are increasingly using approaches that are comparable to those in rural development projects (Wells and Brandon 1992). Like development experts conservation managers are nowadays trying to devise ways to provide jobs, incomes, services and opportunities to rural people. Like development practitioners, they have to come to grips with the fact that such projects are seldom simple interventions that are 'rolled out' in a linear sequence of steps, but intensely social and political, processes. Within the general international trend towards less exclusionary forms of conservation, PNG represents a specific case.

THE CASE OF PAPUA NEW GUINEA AND THE BIODIVERSITY PROGRAM

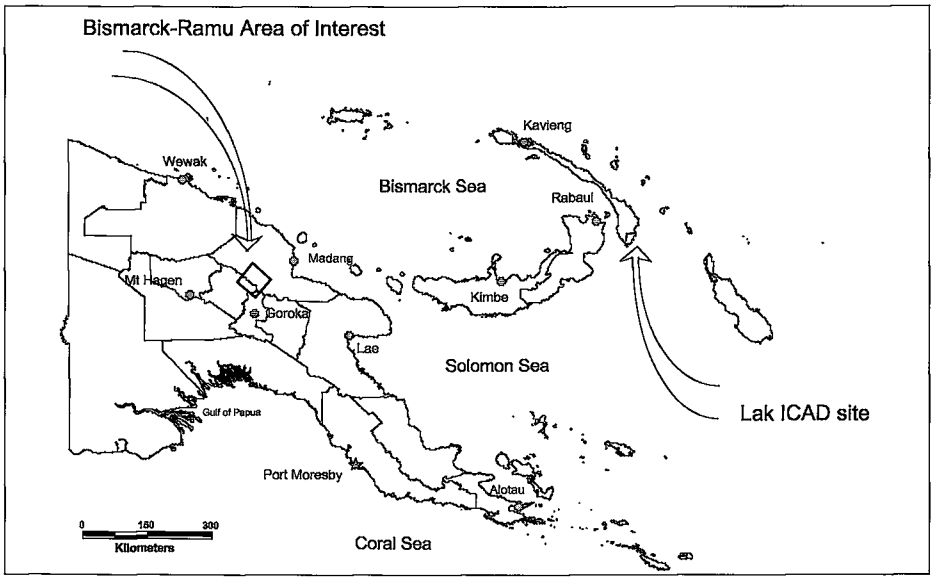
The prime audience of this thesis consists of conservation practitioners that wish to understand some of the pitfalls that characterise people-oriented conservation initiatives. With the process of decolonisation, the growing emphasis on human rights, good governance and participation, the proliferation of NGOs, and the omnipresence of the media, a conservation policy based on the forceful exclusion of people is becoming more and more difficult to maintain. These trends, as well as the growing importance of local-level resource management (Ostrom 1990), have strengthened the bargaining power of the populations in naturally rich environments. The specific situation found in PNG, puts this country in the vanguard of developing community-based, participatory and incentive-driven conservation initiatives and provides a learning experience from which community-based conservation initiatives in other countries may benefit (See Lynch *et Al.* 1995).

A first element of importance in the discussion of conservation in Papua New Guinea (PNG), is the structural inability and unwillingness of the Government of PNG to control the logging operations of predominantly Asian multinationals. Donors have supported a variety of Government institutions in an attempt to improve the management of forest resources and to strengthen local capability for environmental management, but have generally met with very little success. The high demand for cash incomes by rural people coupled with the systematic inability of the Government to provide the most basic services leads many resource owning groups to commit their forest to timber companies. Timber companies promise a 'fast track' to development through royalty payments and the construction of roads, schools and aid posts, but in many instances leave people behind with little long term income, substandard infrastructure and a destroyed resource base. Apart from the social consequences of logging, the destruction of the forest habitat is thought to be the greatest threat to the environment and biodiversity of PNG.

In the second place, there is the issue of land tenure. Whereas the establishment of protected areas continues to be seen as the best means to conserve nature, the ability to do so is predicated on the existence of a strong state. Whereas this is already problematic in most countries, such a state-sponsored approach is not possible in

PNG because its constitution recognises the ownership rights of local clan groups over land and resources. In practice, the Government of PNG has no means to alienate land for the purpose of conservation or any other public good. This implies that the landowners, and not the Government, are the first interested parties when it comes to negotiations concerning the harvesting or conservation of their resources. The only practical means to conserve nature in PNG left open, is thus to negotiate directly with local groups of resource owners and to make conservation attractive by combining it with development services and income generating opportunities.

FIGURE 1: THE TWO PROJECT SITES OF THE BIODIVERSITY PROGRAM IN PNG



Because of the above features, donors and local NGOs concerned with the conservation of biodiversity in PNG have increasingly lost faith in the Government's ability to further conservation objectives. Instead, they put their hopes for conservation on the resource owning communities. This allows them to largely by-pass the central government, while at the same time focussing their attention on the actual owners of biodiversity. This analysis of the PNG situation has since the beginning of the 1990s led to a rapidly increasing interest in community-based Integrated Conservation and Development (ICAD) methods developed by a range of agencies. These methods have in common that they conduct direct negotiations with resource owning communities over the establishment of protected areas. This has led to a marked shift in the composition of project teams. Where these were initially dominated by natural scientists and conservation managers, community development specialists and anthropologists are playing an increasingly prominent role in the design and implementation of such interventions.

The GEF-funded PNG Biodiversity Conservation and Resource Management Program was established in 1993 with the intention of developing two conservation areas with the use of ICAD methods. The first project took place in the Lak area in New Ireland Province between early 1994 and late 1996. The second project focused on an area known as the Bismarck-Ramu area on the northern escarpment of mainland PNG. This latter area would be the target of UN interventions between April 1995, and halfway 1999. The project continues up to the present in a different institutional form. As such this study covers a period of almost 10 years, ranging from the first discussions over the need to develop such projects into the present. I will focus, however, on the interventions in the Bismarck-Ramu area.

In the next few pages, I will discuss my own work for the PNG Biodiversity Program, the relation between the studies conducted for the program and the present study, and the methodology and sources of information used. Subsequently I will take a brief look at the literature on planned intervention, and will conclude this chapter with an overview of this study.

TOWARDS AN ANTHROPOLOGY OF CONSERVATION

Not only the practice of development itself holds lessons for conservationists. The anthropological study of planned intervention may also do so. A detailed analysis of such projects may clarify the assumptions on which they are based, as well as the manner in which the people concerned modify, resist and adopt such interventions. Anthropological work on planned intervention can be divided into two kinds. On the one hand there are those that conduct *development anthropology* i.e. that use anthropological methods to 'make projects work'. On the other hand and there are scientists that focus on the *anthropology of development*, that is the 'socio-scientific analysis of development as a cultural, economic and political process' (Grillo 1997: 2). These two terms reflect a shift in my own work. Between June 1996 and January 1998, I had the good fortune of working for the National Research Institute in Port Moresby. In that capacity I was seconded to the Bismarck-Ramu Integrated Conservation and Development Project of the Biodiversity Program and responsible for the conduct of a Social Feasibility Study (SFS). The aim of the SFS was to assess the best opportunities for conservation in the Bismarck-Ramu area. As such, I worked closely together with the project team that implemented the project, collecting data on the make-up of local society, the socio-economic situation of the Jimi and Ramu Valleys and people's predispositions to conservation and development initiatives.

On returning to the Netherlands, the Development Sociology Group of Wageningen University enabled me to adopt a perspective akin to the 'anthropology of development' mentioned above. Instead of focusing on local people, as had been the issue with the SFS, I decided to take the project interventions of the Biodiversity Program itself as the topic of this thesis. In contrast, this study takes not only the situation and perceptions of local people as its topic, but also looks at what Olivier

de Sardan (1995 in Den Ouden 1995: 32) calls the 'developmentalist configuration'. This entails the 'largely cosmopolitan universe of experts, bureaucrats, NGO employees, researchers, technicians, project leaders and field officers, who somehow live from the development of others and who mobilize or manage for that purpose considerable material and symbolic resources'. This focus on the sum-total of actors involved in the process of conservation and development is in line with a recent trend in the anthropology of development. Anthropologists studying processes of intervention have enlarged their focus from the way in which recipient populations manipulate and enlist planned interventions, towards the manner in which the intervenors themselves also represent a variety of personal and collective interests, imaginations and narratives. According to Olivier de Sardan, such intervention studies are characterised by:

- A non-normative approach towards interventions, in which the actions and reactions of various actors are in the first place seen as 'social events' that have to be analysed in their own right, rather than be judged as 'good', 'bad', 'successful' or 'failures'.

- A view of planned intervention as an 'ongoing, socially constructed and negotiated process' (Long 1992: 35). The outcomes of such processes can not be understood with a mechanical or linear approach, but are often unpredictable and unintended because of the strategic behaviour of the different actors involved.

- A methodology whereby 'the social event of development' is looked at by focusing on the interactions between various actors and the way in which these modify, resist, distort and use such programs to advance their own individual and collective goals.

- A historical approach. Whereas projects have a tendency to regard their intervention as unique and entering untouched territory, many communities have experiences with previous projects and interventions. Many community reactions to project interventions can only be understood in the context of the past (Olivier de Sardan 1988).

Fundamental to this endeavour is a so-called actor-oriented analysis (Long 1992, 2001) which focuses on the ability of actors to enrol other individuals, groups and institutions into their own strategic endeavours. The resulting picture of society is one of a network of individuals and collective actors all with their own understandings of the world, strategic goals and limited means, trying to organise their lives by enrolling each other into their personal and collective projects. Such enrolment is rarely complete, often temporary and may lead to spatially distended networks of people and groups which pass on ideas, images and representations, while simultaneously 'translating' these ideas to optimally suit their needs and wants at a given place and time. The social processes and constellations that result have to be seen as the

continuously emerging and shifting properties of an overlapping network of collective and individual actors.

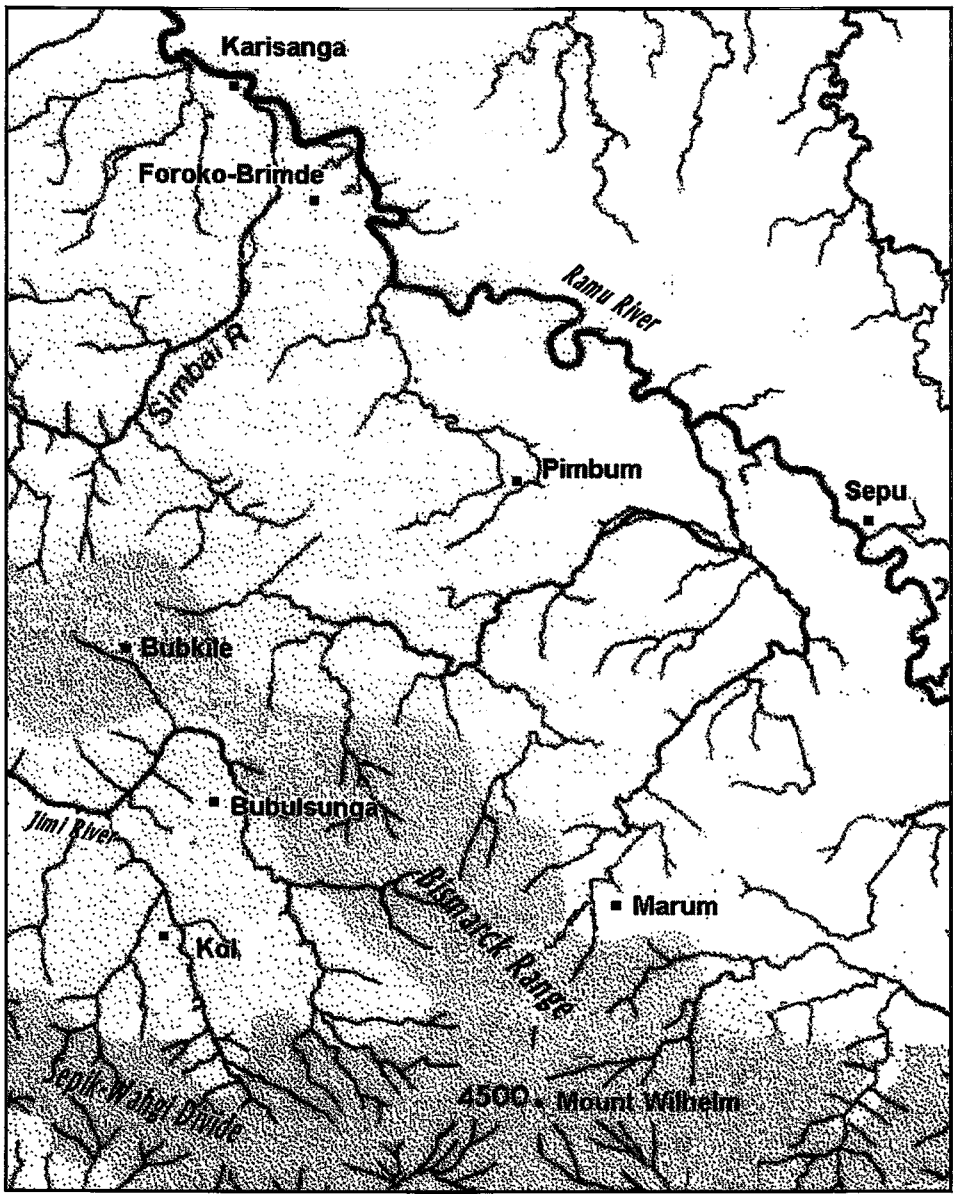
RESEARCH METHODOLOGY IN PRACTICE

Due to the size of the project area, its social and cultural fragmentation, and the fact that the project did not want to pin itself down on one particular area (See chapter 5), the sire selection process, community development work and my own field studies took the form of patrols. The resulting study was thus not that of the anthropologist in residence, spending an extended period of time with 'his' or 'her' people. In total, eight SFS patrols were made, of which the shortest lasted only several days, while the longest, which traversed the whole area on foot, took three weeks to complete. The first patrols were conducted together with community development workers who introduced me to the villagers and their leaders. After the initial introduction, I was able to visit villages with the assistance of the two Jimi radiomen of the project. They acted as guides, carriers, and interpreters. In this manner I studied three Jimi Valley and three Ramu Valley communities, each of which was inhabited by a number of different clan groups. These villages were located in the area between the district centre of Kol in the Jimi Valley, and the villages of Foroko-Brimde, and Sepu in the Ramu Valley. To give an impression of the size of this road-less area: the distance between Kol and Foroko-Brimde is a hard five day walk through the Jimi Valley and down the virtually uninhabited Bismarck Fall. The distance between Foroko-Brimde and Sepu takes between one and two days by motorised canoe, depending on whether one travels with or against the flow of the Ramu River.

During the first period, I was completely lost, as I found that I needed at least six months just to get a basic idea of the area and its people. The latter aspect proved to be especially complicated due to the complicated segmentary structure that characterises highland society. Finally, more than 150 names of groups were identified (See VanHelden 1998b Appendix II). Based on this information and an increasing understanding of local geography, individual and collective migration histories were recorded. This was an essential step in determining the patterns of alliance and enmity between clans and the basis for their claims to ownership and use rights in the area.

The collection of information on the availability of social and economic services proved to be the easiest part of the whole SFS as the lack of services, as their deterioration and the preoccupation with politics during the 1997 election year made this the favourite topic of many discussions. Some insight was gained in the decision-making patterns and social cohesion of various communities by discussing patterns of community work. 'Community work', as it is known in PNG, involves the joint maintenance of public infrastructure such as schools, aid posts, churches, airstrips, footpaths and marketplaces. Whether people are willing to undertake such activities, is often taken as a measurement for community cohesion.

FIGURE 2: OVERVIEW OF THE BISMARCK-RAMU PROJECT AREA



Apart from the features of groups and the level of services available in the Bismarck-Ramu area, information was collected concerning the agricultural and hunting practices and income generating activities of local people. This provided some insight into the manner in which people perceive their environment and the reasons why people could possibly be interested in resource management issues.

Field data were collected through a combination of observation and semi-structured interviews with a range of different respondents. Especially informal discussions with whoever wanted to talk proved useful. This often happened through the practice of '*storying*' ('to tell stories') which usually consists of sitting around a fire and the relaxed sharing of memories, stories and experiences, the asking of questions followed by an open discussion of the answers and mental associations. New stories and questions would again follow these. Inevitably the issues that were on people's minds at the time would come out, whether they had to do with conflicts with other groups, their perception of their place in the world or the problems that communities face in drawing in the necessary Government services.

Notes were written up on return and were largely incorporated into the final document. The community development workers of the Bismarck-Ramu program constituted an invaluable source of information as they recounted their exploits during the debriefing meetings, answered my queries, and clarified many things that I did not understand. PRA exercises conducted by the community development teams, provided additional information with regard to the main issues that lived in the various communities as well as an insight in the environmental changes that people thought were taking place. By combining the information collected from various sources of information with field observations, interviews and the results of the PRA exercises, the Social Feasibility Study provided an overview of the development and resource management issues at stake in the Bismarck-Ramu area. This resulted in a monograph published by the National Research Institute in Port Moresby under the title *Between Cash and Conviction* (VanHelden 1998b) and a summary report containing a number of recommendations for future work in the area (VanHelden 1998c).

SOURCES OF INFORMATION

Social analysis of the Bismarck-Ramu area started with a literature study and a patrol into the Marum and Ramu sections of the area by Colin Filer of the National Research Institute in April 1995. I started with my own patrols and data collection from July 1996 onwards. The scientific literature reviewed covered linguistic, geographical, agricultural, anthropological, historical, and socio-economic sources. This information was supplemented by a number of project reports, Rapid Rural Appraisal studies, newspaper clippings and information gleaned from the patrol reports by Australian colonial officers, which are kept at the National Archives in Port Moresby.

In conducting the analysis of the Biodiversity Program, its intervention in the Bismarck-Ramu area and its relations with local people, not only the mentioned literature and my field reports were of importance, but also the written texts of the project itself became a source of information. I was considerably aided by the fact the PNG Biodiversity Program is probably one of the most well documented interventions worldwide. From 1995 onwards, the staff of the Biodiversity Program

systematically recorded events, subsequently presenting project reports, papers and articles that discuss the programs interventions, methodologies and results in with openness seldom found. The run up to the Biodiversity Program and its first program interventions in Lak, for example, have been documented in a number of publications/reports, foremost by Filer (1991a & 1991b), McCallum and Sekhran (1997), Filer with Sekhran (1998) and McCallum (1996). The switch to a more participatory methodology is recorded in (McCallum and Sekhran (1997), the use of PRA techniques by Grant (1996), the methodology and outcomes of the community entry process by Lalley (1999), Ellis (1998) and Filer (2000).

Most of my own writing, not all of it published, has focused on the methodology of the SFS and its relations to biological indicators for protected area establishment (VanHelden 1997), the findings of the SFS itself (VanHelden 1998b and 1998c) and local motivations for conservation (VanHelden 1998a). After returning to the Netherlands, two papers were written on the Jimi Valley discussing the interaction between social structure and resource use (VanHelden 2000), and between social structure and business development (VanHelden 2001a). Apart from work based on the SFS, a number of papers have been gleaned from this study as it evolved. This resulted in a separate paper dealing with the principles of the Bismarck-Ramu community entry approach (VanHelden 2001b) as contained in chapter 5, and a paper based on the first interventions in the Jimi valley (VanHelden 2001c) along the lines of chapter 4. A consultancy job done for Conservation International allowed me to come to grips with PNG conservation legislation (VanHelden 2001d). Over a period of years, work done for ICCO, a Dutch co-financing organisation, has given me some insight in aspects of community-based forestry (VanHelden 1996, VanHelden 1998d; VanHelden and Schneemann 2000).

Next to the 'official' literature concerning the Biodiversity Program and the various sources used in the SFS, I have also extensively used information from a number of sources internal to the project. In the first place, there are several detailed patrol reports compiled by the program between early 1995 and early 1996 (CRC 1995 b & c and CRC 1996 a & b; Filer *et Al.* 1995; Hedemark *et Al.* 1997). These reports played an important role in analysing project-people interactions during the period when I was not yet part of the program. From July 1996 onwards, when I joined the program, the interventions by the community development workers in the area were recorded in so-called 'patrol reports' which give a detailed description of project activities in the field, people's responses and the subsequent analysis and decisions on the part of the project team. It was one of my first jobs to start the process of recording this information, a task soon taken over by the New Zealand conservation manager. In total this study contains the reports on 21 community development patrols (BRG 1996 a-c; BRG 1997 a-e; BRG 1998 a-g; and BRG 1999 a-f) and on 4 separate conservation patrols by the conservation manager of the Bismarck-Ramu teams (Chitoa 1998 a-d). All of these patrols were conducted between July 1996 and November 1999. It is especially the richness and detail of these sources, which in combination with my own information on the area, its

communities and many of the individual people mentioned in these patrol reports, has enabled me to put together this study. I have deliberately used extensive quotes from the various patrol reports, as I can not hope to present the flavour of events any better.

Next to these patrol reports, I have made use of a number of project reviews and project progress reports, the minutes of meetings and workshops held, monthly reports, internal communications, as well as letters and e-mails from a variety of sources. Access to this information was made possible because the Department of Development Sociology enabled me to visit the Madang project office in early 2000. By then the office of the Biodiversity Program in Port Moresby had been closed and its files were inaccessible as they were sitting in cardboard boxes and collecting dust in the new premises of the Office of Environment and Conservation. The files of the Bismarck-Ramu Group in Madang, however, contained much information on the evolution of the Biodiversity Program, and the staff was so kind to allow me to make copies of all relevant documents and communications.

These written materials were over time supplemented by a number of interviews, especially those held during my visit to Madang, which were in some instances supplemented with information by E-mail. In line with the verification principle, a number of chapters have been distributed among former colleagues in order to give them the opportunity to comment. The final interpretation and all errors of fact and judgement that this study contains obviously remain mine. I also realise that I have only been able to collect comments from several of my former colleagues and not from the Jimi and Ramu people described in this study. The gap in terms of communication, language and education was too wide to bridge.

Ethical, methodological and political questions

Studies as this present an ethical and methodological dilemma since the social scientists concerned must set about deconstructing project interventions of which they themselves were part. This leaves such analysts open to the accusation that they mix up the role of 'involved' member of the project staff and that of 'detached' observer. It also leads to the allegation that the scientists concerned, often anthropologists, build their careers by deconstructing and debunking the cherished myths of other people, while underplaying their own position in the 'developmentist configuration'. They thereby tend to omit their influence, strategic choices and possible flaws.

The only answers I can give to such comments is 1) to express my pride at having been part of the program described in these pages and to accept part responsibility for all that has happened; 2) to emphasise the fact that such studies can only be conducted with detailed knowledge 'from within' and like many development studies tend to benefit from the knowledge of hindsight; and 3) to extend an invitation to anybody inclined to do so to unravel the interests, cultures and myths of anthropological practice itself. The field workers of the Bismarck-Ramu project

were very much aware of the career interests that anthropologists may have. Long after I had left, a local query as to how and why 'anthropologists and social feasibility study experts' collect local stories and information was answered with the explanation that 'these people ... come into the area and listen to your stories, get the names of the sacred places or stories on how to plant taro and many more, write books and sell them to make money' (BRG 1999c: 13).

An additional issue of concern with this study is that it describes a series of ideas, which together provide the basis of the community entry approach of the Bismarck-Ramu program, but which continue to evolve up to the present day. This is a problem as my own data cover the period up to the end of 1999, while the thinking of the project has continued to develop. This is especially visible in the treatment of two main issues central to the Bismarck-Ramu philosophy. Whereas the program was at first rather radical in its rejection of economic incentives, it has in recent years come to look at the use of economic incentives as something which, provided it is 'processed' properly, may constitute an additional tool in its drive towards the empowerment of Madang communities and the conservation of their resources. The second issue has to do with its vision of local people as 'naturally' inclined towards conservation. Whereas this was originally an important assumption, it has in recent years gradually been nuanced to the suggestion that Melanesians may have a stronger affinity with land and resources than western people, and are thus more likely to engage in conservation by default. Thus when some of my readers find that I describe their views in rather stark terms, this may indeed be due to a failure on my part to adequately represent their opinions, but it may also be a result of the evolution that the Bismarck-Ramu approach is continuing to undergo.

I believe it may also be useful to state my own political views about conservation and development issues here. While I regard myself as an environmentalist who is fully aware that we are experiencing a global conservation crisis, and am personally in no doubt that valuable ecosystems are being degraded and species are going extinct, I still tend to side with people rather than nature. Being trained as a development sociologist and economist, I am concerned about those aspects of the conservation discourse and practice that treat environmental issues as if they are technical and scientific rather than political and economic matters. In writing the first chapter, which provides a background to present-day conservation discourse and the special position of PNG therein, I have become aware that the conservation debate is structured in a manner which generally speaking mitigates *against* the interests of rural people in developing countries. By employing the pressure cooker of a crisis narrative, emphasising the antagonism between nature and people rather than the differential perceptions and priorities amongst people, by pretending that conservation is science-based and thus value-free, and by giving too prominent a role to technocratic conservation managers in the implementation of such projects, we risk loosing sight of the human issue.

Even in the highly people-oriented conservation programs described in this study, conducted by professionals well aware of the need to focus on people rather than

nature, it is striking how time and again the people issue becomes buried under the technicalities of drawing boundaries on maps, the building of infrastructure, the conduct of biological surveys, the drawing up of social feasibility studies and the need to secure financing. One of the things that the Bismarck-Ramu project described in this study has taught me, is how hard it is in the daily hustle and bustle of project implementation to stay focused on people. This, however, is essential for conservation to succeed, because as Eidsvik (1980: 186) has written: 'If Man will not provide for the protection of Man, what hope do we have, that in the face of increasing scarcity, he will protect Nature'.

In the next few pages, I will first discuss some of the development literature on planned interventions to describe projects as 'arenas' in which a number of factions pursue a variety of personal and collective interests. I will also introduce the 'interface' and middle ground' concepts, before ending with an outline of this document.

PLANNED INTERVENTION AND THE SOCIAL SCIENCES

Theories of development intervention of apparently very different signature have more in common than we usually presuppose. Rather than emphasising the differences in the various theories of social change since the Second World War Long (1992: 18-20) identifies the paradigmatic similarities which the dominant development theories have in common. These theories, known as modernisation theory and its ideologically opposed neo-Marxist counterparts, have in common that they see development as emanating from the centre and expanding to the periphery in a linear and sequential movement punctuated by a series of development phases. These views also have in common that they regard the recipient population in Third World countries as inherently passive and in various stages of readiness to be encapsulated, inevitably leading to a loss of autonomy, the loss of 'traditional' forms of co-operation production and resource management and increased levels of socio-economic differentiation. This type of thinking leaves little room for the way in which various groups of stakeholders themselves interpret, modify, and reconstitute the social process of transformation. Grillo (1997: 21) notes that this perception of third world populations is grounded in a 'victim culture', which negates the wide variety of possible responses on the part of recipient populations.

These linear and top-down development models have strongly influenced policy formulation and project implementation. Planned interventions have a tendency to be perceived as politically neutral, scientifically grounded and are often based on a linear and mechanistic conception of the relation between policy formulation, implementation and outcomes. In the case of conservation interventions for example, the 'recipient' or 'target' population is simply made to accept the establishment of a national park. In practice, the pattern is usually that of foreign biologists pouring over maps to define the areas of high biodiversity and drawing the outlines of potential protected areas of stipulated size, shape and location. They

then turn their gaze upon local circumstances, listing threats in the form of population growth, local subsistence and cash cropping practices and the presence of industrial threats. Having defined both the problem and the solution, these experts subsequently move towards 'dealing' with local communities. In the past this often meant that local people were simply evicted, nowadays conservationists are in the business of designing integrated packages of development and conservation measures that rely on a combination of coercion and incentives.

Often these problem definitions and the solutions to them are shrouded in technical terms, presenting the proposed solutions as the only and inevitable outcome of a neutral scientific analysis. The perception of planned intervention as essentially a-political, is increasingly criticised by social scientists who study the ideological and culturally determined constructs underpinning western development (Ferguson 1990; Escobar 1995) and conservation interventions (Brosius 1999; Fairhead and Leach 1997; Hoben 1995; Zerner 1996). The fact that all of these interventions are inevitably based on theories of social change, grounded in a selective set of interlinked problems, values, priorities and solutions and based on a culturally and institutionally-determined praxeology makes them an integral part of cultural and political valuation processes.

THE PROJECT AS ARENA

Schaffer (1984) and Long and van der Ploeg (1989) have criticised the a-political and mechanistic notion of planned interventions by pointing out that not only the intervening agencies have an agenda, but that also local people, communities, pressure groups, and segments of the state actively pursue their own interests in the face of these interventions. These various interests and agendas do not necessarily converge with those of the intervening agency, leading to a negotiated and fundamentally unpredictable process of social change. In this view, planned intervention should not be seen as a single project that is being 'rolled out' along the lines of the project cycle, but rather as a continuously shifting bundle of often conflicting individual and collective endeavours, of which many have very little to do with the objectives that feature in the documents produced by the project implementing agency, or with the statements made by villagers during public meetings for that matter.

The realisation that in real life situations, policymakers, project personnel and local populations are locked in a continuous recursive process of interpretation, contestation, transformation and legitimisation, defeats the idea of a linear relationship between policy, implementation and development outcomes. All interventions, from the most modest and participatory attempts to influence people's decisions, up to the use of brute force, are necessarily resisted, mediated and transformed by the culturally determined interpretations and strategic responses of social actors. As a result, the study of intervention and social change can not do without paying attention to the internal and localised values, images and

experiences held by local people, as well as the orientations held and practices employed by the frontline project personnel. A detailed description of the ideas that underpin these interventions not only bares the implicit assumptions, values and priorities from which western conservation proponents operate, and how these differ from local perceptions of the natural environment, but also the strategic manner in which such images are presented to local people, donors and policy makers. It also shows how the project continuously selects new explanations to come to grips with what is happening, redesigning its interpretation of facts and priorities, and the nature of its practices in the process. Next to the 'multiple realities' that exist within a project there are also the 'multiple representations' that are produced for a variety of audiences (Hilhorst 2000).

Notwithstanding the continuous attempts on the part of policy makers to make sense of the situation, such programs evolve in a fundamentally unpredictable manner. Time and again project staff aim to develop modes of interaction with local people, step by step programs to develop a means of 'working together', and time and again things happen in totally unpredictable and unexpected ways. Thus whereas the implementation of policies is generally thought to lead to a number of pre-planned outcomes, this thesis will argue that such interventions constitute a muddled and complicated process of which the outcomes are more a matter of coincidence than design.

The increased awareness of the ability of local people to influence development and conservation projects has led to an amended view of development endeavours. In this view the intervening agencies and their target groups jointly *construct* or *produce* the outcomes of development initiatives through an ongoing process of negotiation and transaction. The realisation that project and people are jointly responsible for the outcome of such planned interventions may help to explain the enormous heterogeneity encountered in response to seemingly similar interventions. The resulting picture of planned intervention is one of individual and collective actors all with their own ideas, strategic goals and means trying to enrol each other into their private and collective endeavours. Such enrolment is rarely complete, often temporary, and may lead to spatially and temporarily distended networks of people and groups which pass on ideas, images and representations, while simultaneously 'translating' these ideas to optimally suit their needs and wants at a given place and time. The social processes and constellations that result, thus have to be seen as the continuously emerging and shifting properties of an overlapping network of actors, both collective and individual (Long and van der Ploeg 1989; Long 1992; Olivier de Sardan 1988).

In this view, project implementation should be regarded as an intensely social and political 'arena of struggle' among different interest groups (Bierschenk 1988; Crehan and Von Oppen 1988). Even if project and local communities agree to co-operate in a number of joint conservation and development activities, there will be a continuous struggle over the content of these activities and their relative priorities. Olivier de Sardan distinguishes the 'principles' of selection and appropriation in the response

of target populations to projects. Their usual behaviour is to dismember the package on offer and select those aspects which please, distort what has to be modified to be useful, and reject what is regarded as not useful or even threatening. He also notes that 'the more a project is intended to be integrative and coherent, the more it risks becoming dismembered' (Olivier de Sardan 1988: 220).

INTERFACES AND THE 'MIDDLE GROUND'

The points of interaction between different social groups and institutions where systems of knowledge, values, priorities and sources of power and influence intersect have become known as 'interfaces' (Long 1989, 1992, 2001). In line with the view of the project as an arena discussed above, it is especially at the interface between various stakeholders involved in a project, that opposing definitions, images and priorities become apparent. Thus while the very existence of an interface at least suggests that the various actors have an interest in communicating with each other, it is the interface itself that becomes the site of struggle and negotiation (Long 2001). This should not just be seen as a struggle between reified groups of people such as contained in notions of class, profession, ethnicity, or community, but rather as a process in which a variety of collective and individual actors interact.

Interfaces should not be understood as fluid and one-off encounters in which various actors bounce ideas off against each other, but tend to develop a logic of their own, setting boundaries between groups. It is through the practical encounters between various groups, each with their own history, images, knowledge, needs and strategic resources that patterns of interaction and the 'rules of the game' develop, turning the interface itself into an element that structures future encounters. Thus interactions between extension staff and farmers tend to follow certain patterns, which define how these meetings take place, how they are structured, who speaks and who listens, what information is deemed relevant and what not. Such encounters also tend to develop their own practices for handling opposing interests and perceptions. While an interface analysis focuses on issues of confrontation, social and cultural divergence, it is at the interface that donor agencies, project teams and local people may or may not establish some mutual understanding or 'middle ground'. The 'middle ground' concept developed by the historian Richard White (1991) refers to the 'the place in between' where various groups of people, often with different cultural backgrounds, through processes of negotiation, confrontation and innovation may succeed in establishing an understanding by which all involved hope to achieve some of their aims. Such middle grounds are essentially pragmatic, often temporary and jointly constructed adaptations 'that do not fit a simple rubric of domination, subordination and acculturation' (Conklin and Graham 1995: 84). In simple terms: a 'middle ground' is an interface 'that works' even if the co-operating parties are involved for very different, sometimes even contradictory, reasons. In White's (1991: x) more eloquent terms:

> 'On the middle ground diverse peoples adjust their differences, through what amounts a process of creative, and often expedient, misunderstandings. People try to persuade others who are different from themselves by appealing to what they perceive to be the values and practices of those others. They often misinterpret and distort both the values and the practices of those they deal with, but from these misunderstandings arise new meanings and through them new practices – the shared meanings and practices of the middle ground'.

Important to note in the context of conservation, which has a history of violence and suppression is that 'middle grounds' only arise by virtue of the inability of any of the involved parties to gain their ends through the use of coercion. How stable these 'middle grounds' are, is a different matter altogether.

A study of interfaces in the area of development and conservation interventions and the extent to which project teams and local people manage to develop a 'middle ground' implies the detailed study of the encounters between the various participants in the form of the local rural population, field staff, administrators and the various professional groups that constitute the project-implementing agency. As must be clear from conception of the project as an arena, such interventions are characterised by a variety of factions and thus by a plurality of interfaces. Recipient populations are often differentiated along the lines of gender, class, ethnicity, religion, social standing, kinship and territoriality, while executing agencies too are rarely the monolithic bodies that they are made out to be. More common, is that these agencies contain a number of competing problem definitions, priorities and courses of action. Oppositions within executing agencies may for example lie between different professional groups, between 'imported' westerners and 'local' staff, between bureaucratic factions within the agencies or between the hierarchical levels of the organisation.

The latter aspect for example, is illustrated by Quarles van Ufford *et Al.* (1988), who describe how policy goals change as they 'trickle down' the bureaucratic hierarchy towards their implementation in 'the field'. As successive elements of the bureaucracy receive their instructions and translate them into practices depending on their own perceptions, administrative needs and wants, the original policies of the top of the institutions become gradually transformed into practices which have little to do with the initial aims with which these goals were formulated. Especially the step from bureaucratic policy formulation to practical implementation 'in the field' constitutes a gap that allows ample room for modifications and conflicting interpretations. The project described in this study would break down because of the fact that the understandings of donors and the higher echelons of the programme administration proved incompatible with the ideas and practices employed by the field staff.

Conflicts between professional groups such as conservationists and development experts often arise over the relative importance of ideologies such as nature-conservation versus economic-development. The issues that both disciplines study, overlap to a great extent and although environmentalists and development experts

do not hesitate to use each others data for their own purposes, in practice a 'disciplinary bias' makes a meaningful integration of both professional cultures very difficult. Although the problems that they study are inextricably interlinked in day to day reality, environmental and social scientists speak fundamentally different languages, have different professional cultures and take different priorities.[2] This issue constitutes an important aspect of this study. For a project 'to work', it thus has to establish a range of 'middle grounds' across a number of interfaces, in which a variety of parties - both within the intervening agency, within the intervened population and between those two groups - come to a mutually agreed and pragmatic course of action which somehow benefits those involved. Fortunately, language is a flexible thing which may help to conceal the essential divisions between the negotiating parties.

LINGUISTIC AMBIGUITY AND THE 'MIDDLE GROUND'

Particular communicative problems and/or strategic opportunities may arise where two or more discourses are based on the same terminology even though resting on fundamentally different understandings of their content, value load and underlying assumptions, triggering a struggle about the meaning given to the terms and the practical implementation of the resulting activities. 'Development', for example, has long been recognised as an ambiguous and elusive concept. Frank (1987: 231) calls it a 'Trojan horse of a word' which is sufficiently vague and devoid of meaning to allow itself to be used by a variety of people and institutions whom each can fill her with their own meanings, intentions and agendas. The success of the concept of 'sustainable development', which has come to be used by both radical environmentalist pressure-groups as well as by relatively conservative development agencies, may also have much to do with its intrinsic vagueness and ambiguity (O' Riordan 1988).

Many apparently common-sense notions in development and conservation discourse lack a theoretical core, becoming 'convenient rhetorical flags under which ships of very different kinds can sail' (Adams 1990: 3). This holds true for notions such as 'conservation', 'participation', 'sustainability' and 'community' within the present debate on development and the environment. As long as these reified notions remain sufficiently ambiguous to incorporate a number of competing

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[2] Adams (1990: 8-9) for example, criticises the difficulty that many environmentalists have to understand that culture and ideology structure people's views on the environment (see for example Spinage 1998). Their continuous emphasis on the supposed impartiality of scientific 'truths' obscures the politically and culturally determined interpretation of data and becomes an obstacle to a common approach to understanding and addressing practical problems of poverty and environmental degradation. On the social science side the highly mechanistic views of economists, combined with the parochial and doctrinaire views of radical social theorists and the irrelevant detail of anthropological study have also been berated. 'While anthropologists perform archaistic studies of odds and ends of humanity ... authorities struggle with the problems of toxic wastes - with little help from social scientists' (Bennett 1990: 435).

understandings, or, in the process of being translated into another language loose their specificity, a sheen of shared meaning may remain in place. Once such abstractions are translated into a set of practical activities, however, differences in understanding erupt and become the subject of negotiation and struggle. As Lovejoy in (Harvey 1996: 118) explains 'The contemporary battleground over words like 'nature' and 'environment' is a leading edge of political conflict, precisely because of the 'incompletely explicit assumptions' ... which surround them'. In this sense, a variety of agenda's may fit under one ambiguous concept. Such alliances, however, tend to be brittle and temporary as they may fall apart when the rather vague notions on which they depend, have to be turned into real life practices, with all the consequences that these entail.

This study will argue that such a temporary alliance resting on a number of diverging narratives concerning the notion of 'conservation' constitutes the main outcome of the Bismarck-Ramu project discussed in this thesis. The main reason why two particular groups of people on the Ramu River and the project team entered into a joint endeavour under the notion of 'conservation', had to do with the fact that the resulting outcome was sufficiently open to create the 'expedient misunderstandings' (White 1991: x) necessary to attract both parties. To local people, the project became an ally in their attempts to keep highlands migrants at bay and to secure legal rights to land and resources. To the executing project team it confirmed the success of its participatory conservation strategy, while at the level of the program administration it facilitated an application for donor funds, as the program now appeared to meet the conservation goals defined by its donors. The question whether this indeed constitutes conservation in the sense intended by the donors and a discussion of the question to what extent such conservation on the Ramu River is sustainable illustrates the fragility of such alliances.

OUTLINE OF THIS THESIS

In March 1998, when I returned from PNG, I realised that I had studied the Jimi and Ramu people and their view of nature as part of my work for the Biodiversity Program, but that I knew very little about what 'conservation' means in the western world, where it comes from and how it has evolved. As a result, this study starts with a narrative or discourse analysis of the origins of western conservation thinking. Around the 1930s the various conservation ideas congealed in a preservationist narrative which rests not only on the assumption that 'wild' environments are the most valuable type of environment, but also on negative conceptions of local people and their practices. The second half of the chapter discusses the counter narratives that have been developing in the form of community-based conservation models from the 1970s onwards. With the decolonisation and the realisation that the newly independent states, were more preoccupied with the social and economic well being of their population than with the western quest to save wildlife, debates on development and conservation

became increasingly intertwined. At the practical level of the national parks the increasing conflict between the growing populations and national park managers stimulated a search for mechanisms which allow park managers to combine wildlife preservation with development activities, triggering a search for compensatory mechanisms and an interest in the notion of participation. It is in this latter narrative of 'community-based conservation' and 'integrated conservation and development' that PNG comes to play a role.

Chapter two describes how, notwithstanding its spectacular and highly diverse natural endowment, PNG has not stood at the heart of international conservationist concerns until recently. This is mainly as a result of its land tenure system which recognises the ownership rights over land and resources by local communities. Land owners in PNG have generally not been prepared to sell their land making the establishment of national parks impracticable. The intensification of forest exploitation at the end of the 1980s coincided with the establishment of the Global Environment Facility and the United Nations Conference on Environment and Development. The remainder of this chapter will discuss the attempts by the Biodiversity Conservation and Resource Management Program to establish a protected area in the Lak area in New Ireland Province with the help of integrated conservation and development methodologies. When the project failed to out-compete a locally operating timbert company, the lessons learnt from that experience provided a rationale for a new, more participatory approach to conservation in the Bismarck-Ramu area.

Chapter three and four discuss the Bismarck-Ramu area and its inhabitants, the Jimi and Ramu people. It also outlines the conflict between Jimi migrants and Ramu landowners in the Ramu Valley in which the Bismarck-Ramu project would come to play a role. The fourth chapter also looks at local resource management practices, arguing that biodiversity conservation as pursued by the Biodiversity Program is an alien concept to most people livng in the Bismarck-Ramu area. In the case of the Jimi Valley, it is difficult to see how a community-based, participatory conservation approach could ever be successful, not in the least because of the large population with its high economic aspirations, the prevailing patterns of competition and conflict, and people's instrumental attitude towards both nature and outsiders. For the Ramu people, there are a number of different reasons why people may profess an interest in conservation. These reasons mainly have to do with the fact that they see themselves being overrun by Jimi settlers and that they regard the establishment of a protected area as a buffer between their own communities and those of the settlers. An additional consideration is that these marginal communities fear being swamped by a number of mining and oil drilling projects. 'Conservation' thus becomes imbued with notions of territoriality, cultural identity and maintenance of the status quo, providing a basis for a co-operative relationship, a 'middle ground', between people and project.

Chapter five presents a detailed account of the first face-to-face interactions between project and Jimi people. The chapter describes how the project team presented the

project as an exchange of conservation for development. Although publicly welcomed, the team quickly became entangled in a series of conflicts with a bewildering variety of people around the organisation of its biodiversity survey. The resulting disappointment by the project staff with local communities was a consequence of the gap between the rosy-tinted and simplifying preconceptions with regard to local society from which the team operated, coupled with a tendency to take public statements at face value, and the reality as it was encountered. This chapter argues that a more realistic conception of the political and differentiated nature of communities and their leadership, an emphasis on the collection of socio-cultural data before starting project operations, and a more cynical attitude towards the statements made at public meetings, may help to prepare conservationists more adequately for their interaction with local people. The chapter also argues that local reactions to the project's intervention show a remarkable continuity to Jimi responses to the arrival of Australian colonial administration and that such responses are thus not so much driven by the nature of the intervention, as by the nature of Jimi communities and their drive to pursue status, security and economic well-being.

Chapter six analyses the new approach that was developed as a result of the negative experiences in Lak and the Bismarck-Ramu area. This new approach broke away from the ICAD approach used in Lak and the opening stages of the Bismarck-Ramu project, instead proposing a highly participatory project strategy based on ideas of empowerment and self-reliance. In contrast to the Lak project, this approach did not aim to 'sweeten' conservation by linking it with development services and income generating activities, but emphasised self-reliance and control. This approach suggests that communities should define their own problems and engage in natural resource management and development activities only because they themselves regard these issues as important. It thus defined the issue of sustainability from a managerial and biological issue centring on the defence of a protected area to a social issue in which communities jointly decide to look after their environment. This shift also meant a remarkable shift in staffing in the Biodiversity Program to a large extent replacing the biologists and conservation managers that had until then dominated the program with social scientists and community workers. This chapter also discusses the uneasy relationship between ideas of participation, self-reliance and conservation, arguing that there is something paradoxical in the idea of empowerment by outsiders, as well as in the idea of participatory conservation which stood at the basis of this approach. The chapter ends by arguing that the seemingly 'open-ended' participatory approach of the Bismarck-Ramu team was in fact quite highly structured as a specific worldview was being emphasised.

Chapter seven recounts how groups of PNG community development workers tried this new approach in the Jimi Valley, among the mixed Jimi-Ramu communities and among the purely Ramu communities living on the Ramu River. Not surprisingly, the new approach did not go down very well with the Jimi people. Whereas the

initial idea of exchanging conservation for development had caught their interest, they were now confronted with a shift in project philosophy that de-emphasised the importance of material incentives. Among the mixed Jimi-Ramu communities especially territorial and authority issues came to play an important role, as a variety of people tried to enrol the project in their strategic endeavours. The ongoing conflicts between Jimi settlers and Ramu landowners into which the project was drawn finally led the project team to abandon these areas as well. Among the purely Ramu communities, however, it was especially the territoriality issue which provided the basis for a co-operative relationship between project team and Ramu people. The Ramu came to perceive the project team and a potential ally in their conflict with the Jimi settlers and the establishment of a protected area as a means to keep the latter at bay. Over time, they complied with the requirements of the participatory philosophy, thus co-opting the project into their own strategic goals. Although all involved called this development 'conservation', what this meant in practice, whether the resulting 'middle ground' is not exceedingly fragile and whether anything is being protected are points of debate.

Chapter eight describes how the project got into trouble over the requirements for a continuation of donor funding. Gradually the Bismarck-Ramu project was torn apart between the conservation conceptions as they existed among its donors and the philosophy of the project staff, which emphasised community development over conservation. The administrators of Biodiversity Program emphasising the need to secure funding set about remoulding the project and local realities to suit the definitions of the donor, thus reproducing the mainstream conservation narrative of biodiversity under threat as a result of destructive local practices. Over time they developed a proposal which would probably have been acceptable to the Global Environment Facility, but which was as at odds with the community-based philosophy developed by the field staff. In the end the discursive gap between field staff, administrators and donors proved too large to bridge, leading to a breakdown in the project coalition.

The final chapter reviews the various interfaces at play within the Biodiversity Program, the key elements in the narratives that sustain these interfaces and the 'expedient misunderstandings' that allow for a brittle and probably temporary 'middle ground' between project team and people on the Ramu River.

Chapter 1

FROM STICK TO CARROT: CHANGING NARRATIVES IN INTERNATIONAL CONSERVATION

'The idea of nature contains, though often unnoticed, an extraordinary amount of human history'
Raymond Williams, Problems in Materialism and Culture.

INTRODUCTION

In the introduction of this thesis, I have argued that development and conservation projects should be seen as social 'events' that have themselves become an object of ethnographic analysis. One influential way of looking at planned intervention is to analyse such endeavours by means of their discourses (Foucault 1972); i.e. the way in which individuals and groups involved in development or conservation projects talk, write and communicate about that project and each other. According to this line of thought, 'development' and 'conservation' represent specific modes of understanding. These forms of knowledge and the attached practices are seen as part and parcel of the political, economic, institutional and historical contexts in which they are situated (Ferguson 1990). 'Discourses', or 'narratives' as they have been rephrased in the policy context (Roe 1991), and as they will be used interchangeably in this study, thus refer to the sets of preconceived ideas and images that both inform and legitimise specific policy interventions.

Narrative analysis is not just a useful tool to understand the way in which various groups of people and institutions ascribe meaning to the world, but also allows us to understand the essentially political nature of such representations. Every statement that we make is ultimately a representation of a particular worldview and therefore closely intertwined with issues of power and control. Some stories and explanations become dominant while others are suppressed, some questions can be asked, others can not. Discourse analysis thus provides a means to analyse the interconnection between the specific representations of a problematic and the political forces and

institutional interests behind that particular representation. In addition, the choice for a particular representation of reality is not without consequences:

> 'By writing stories about environmental change, we divide the causal relationships of an ecosystem with a rhetorical razor that defines included and excluded, relevant and irrelevant, empowered and disempowered. In the act of separating story from non-story, we wield the most powerful yet dangerous tool of the narrative form. It is common place of modern literary theory that the very authority with which narrative presents its vision is achieved by obscuring large portions of that reality. Narrative succeeds to the extent that it hides the discontinuities, ellipses, and contradictory experiences that would undermine the intended meaning of its story. Whatever its purpose, it can not avoid a covert exercise of power: it inevitably sanctions some voices while silencing other'(Cronon 1992: 1349-50)

In practice, the study of narratives and discourses refers to the way in which people and organisations communicate about a subject. It is a particular manner of defining the world characterised by its own concepts, linguistic conventions and underlying values and assumptions, thereby denoting a specific view on how reality is constituted. Meaning is not only embedded in speech or text, but is also embodied in organisational practices, technical processes, patterns of behaviour, forms of transmission, diffusion and teaching. A key issue in the study of narratives the analysis of the positions and viewpoints from which people speak and communicate, as discourses are irrevocably tied to the social position of speakers, the type of groups and institutions to which they belong and the social settings in which they operate. The study of narratives may reveal glimpses of the 'worldview' prevalent within that group, and the way in which its members legitimise their actions.

Apart from situating narratives within the institutions to which they belong, narratives are also discernible by reference to their specific 'topicality', which lies at the centre of communication. Different narratives and discourses elaborate different concepts and are underpinned by various sources of legitimacy. Development discourse for example identifies the appropriate and legitimate ways of thinking, talking and writing about 'development' within a social environment preoccupied with the organisation and study of social and economic change. It can be found in institutions such as development agencies, government bureaucracies, universities, and NGOs and legitimised by notions of 'justice', 'equality', 'self-reliance' and 'emancipation'. The discourse of biodiversity conservation belongs to another set of institutional groups, is centred on a different topicality and based on a different set of values, concepts and assumptions, with the procedures of natural science as its framework for discussion and source of legitimacy.

In a simple treatment of narratives these are thought to be singular explanations which are congruent with cultures, institutions or certain factions, leading to a reception of development projects as a clash between 'western' technocratic modernisation discourse on the one hand, and 'traditional' ideas about livelihoods

on the other (for examples of such binary treatment of interventions see Hobart 1993, Verschoor 1994, VanHelden 1998a). In many instances the western discourse is seen as the more powerful, overwhelming local institutions, people, communities, their knowledge and abilities, while enforcing a vision of people, nature, development and conservation which suits the need of the western interests that create these visions. Examples are Said (1994) who looks at the manner in which the non-western 'other' is being constructed in western policy and literature, Ferguson (1990) who describes how World Bank policies simultaneously construct and depoliticise their object of intervention, and Escobar (1995) who analyses the specific manner in which notions of 'poverty', and the 'third world' shape the practice of 'development'. In the field of conservation, important examples are the work of Fairhead and Leach (1997), Leach and Mearns (1996), Tiffen *et Al.* (1994), Stott (1999), Cronon (1992 & 1995), Hoben (1995) and Zerner (1996).

There are, however, also much more mundane reasons why planned interventions in developing countries tend to be decontextualised expressions of western culture. An important one has to do with the simple fact that such projects take place in a complex world characterised by political, economic and environmental uncertainty. In order to deal with this complexity and to design interventions, policy-makers and planners tend to draw up simplified images of their field of intervention which allow them to more-or-less plausibly describe what is going on, define a problem according to that description and secure political and institutional legitimisation for the activities that they employ. Often these schematic narratives develop into entrenched standard approaches to problems of a similar nature, leading Fairhead and Leach (1997: 35) to talk of 'off-the-shelf narratives' that are used 'to define ... problems and justify interventions'. It is this perspective, that will be used in the first part of this chapter to argue that international conservation policy exudes the characteristics of a dominant discourse. This so-called preservationist narrative is based on distinctively Anglo-Saxon and colonial notions of nature and people, is nowadays institutionally located within the international multilateral organisations, and embedded in the policy requirements that determine the funding eligibility of conservation projects.

I do realise that such an idealist and structuralist approach, which presents conservation and development discourses as sets of preconceived ideas which come 'crashing down' upon developing countries, is rather unsatisfying in a number of ways. In the first place, such an approach separates the ideas that people and institutions may carry from the practices that inform, modify and sustain these narratives. A number of what Leach (2001: 3) has called, 'more patient ethnographers' have pointed out that bureaucracies, projects and institutions are not monoliths that stand aside from the rest of the world, while Hilhorst (2000) has noted that each and ever intervention situation is characterised by counter discourses. In the second place, a representation of project agencies as collective actors in their own right, casts the actors that comprise these institutions as devoid

of consciousness, agency and power, thus also freeing them of responsibility for whatever these institutions do (Long 1992, Grillo 1997).

Unravelling the workings of international bureaucracy, however, requires what Marcus (1995) has called 'a multi-sited ethnography' which falls outside the scope of this thesis, due to the simple fact that the material contained in this thesis specifically deals with the interactions between the different actors involved in a specific project. Due to this focus, the considerations of the 'higher' levels of the conservation bureaucracy, especially those in the international arena are less accessible to ethnographic analysis. I have therefore made the choice to spend one chapter on the history of protected area establishment and the recent proliferation of narratives which propagate a variety of 'integrated', 'participatory' and 'community-based' styles of intervention as if they are detached from the practices that sustain these ideas. This provides a background to the remainder of this study which tries to untangle the day-to-day decisions, the various sources of meaning and legitimacy, the responses by local people, the administrative constraints and the importance of coincidence in the more detailed and 'patient' manner referred to by Leach.

OUTLINE OF THIS CHAPTER

This chapter starts by tracing the roots of western conservation thinking within the gradual shift from a strictly utilitarian view of nature towards a perspective that aims to reconcile utilitarian, aesthetic and moral notions. The environmental policies that follow from this view can be defined in terms of the opposition between conservation and preservation. Conservationists contend that the value of nature lies in its human *use* and that the environment should be managed as a resource *for* future human use, while preservationists aim to protect 'wild' nature *from* disruptive forms of human use.[3] The latter view would become the dominant narrative in national park management over time solidifying into a form of 'fortress conservation' (Hulme and Murphree 1999) which saw the activities of local populations as the main threat to nature. Following a discussion of the origins of the national park idea I will look at the implementation of the first national parks in British Africa where the opposition between nature preservation and the welfare of indigenous people has become most starkly visible. The focus here is on the varying conceptions of indigenous people that are used to legitimise conservation interventions.

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[3] To a certain extent, the terms 'conservationist' and 'preservationist' have become pejorative caricatures with conservationists stigmatised as those willing to sacrifice nature to economic interests, and preservationists stereotyped as aiming 'to lock away' resources at the expense of poor people in name of some upper-class ideal (Norton 1991 6-9). Notwithstanding these connotations, the terms serve a purpose both as historical categories in the discussion of conservation discourse and as ideal-typical extremes on a continuum of thought on the relation between man and nature.

Later the idea that nature only tends towards a mature and stable state when humans refrain from interfering with natural communities would reinforce the preservationist view. The view that *all* natural elements matter, not just for aesthetic and moral but also for utilitarian reasons, constitutes the main argument for the preservation of biodiversity-rich ecosystems. In recent years, however, there is a growing realisation that wilderness is a category of the mind rather than an existing reality, that people may actually contribute to the ecosystems and the biodiversity that we cherish, and that ecosystems do not tend towards equilibrium. Not the fact that people make use of natural resources, but also the question what environmental impacts these uses have, which form of nature we like best, how to manage behaviour and the distribution of the costs and benefits related to conservation are becoming important. Notwithstanding the debates triggered by 'new ecology', conservation policy continues to pursue the old idea of protected area establishment.

From the 1970s onwards preservationist policies diverged into a variety of more 'integrated', 'participatory' and 'community-based' approaches, aiming to take care of both nature and the people that suffer as a result of protective practices. This development was a result of the recognition that it is morally unjust to impose the costs of global environmental concerns on already poor people, and the growing popular resistance against environmental dispossession. The view, that social and economic issues as well as issues of participation and democratic control constitute an integral part of conservation policies is premised on a new set of images of indigenous people. On the most extreme opposite to policies predicated on the image of the 'destructive native', one finds scientists projecting on non-western peoples ideas of 'ecological nobility'. Neo-liberal approaches have tended to treat non-western people as rational and therefore responsive to economic incentives, recasting conservation management as the judicious application of both positive and negative inducements. This description of western conservation narratives and the varying conceptions of indigenous people serves as a background to the analysis of project-people interactions contained in this study.

SHIFTING CONCEPTIONS OF MAN AND NATURE

Western medieval science explained the physical world as a purposeful and divine organism in which all elements were tied together in a mutually dependent hierarchy infused with Godly design. In the 17th century, this outlook shifted towards a worldview that emphasised man's authority over the natural world and that valued nature in terms its utility to mankind. Seen from this angle, brute beasts, wild plants and uncultivated land were inferior to livestock, food crops and cultivable land (Cronon 1995). The utilitarian appraisal of nature also meant that the aesthetic preference went out to cultivated landscapes (Thomas 1983). This view also contrasted human rationality, the possession of a soul, and the capacity for moral responsibility with the irrational, perishable and immoral characteristics of wild

nature. People were uncomfortable with the 'animal' aspects of their bodily habits and by developing strict rules of social conduct emphasised the boundary between the intrinsic evilness of wild nature and the morality of human society. This view also allowed for the imposition of notions of 'savagery' on the foreign peoples with which Europeans came into contact through their colonial exploits (Said 1994).

The perception of the solar system as a divine watch governed by the laws of nature paved the way for the Cartesian separation of mind from matter, subject from object, and culture from nature. The development of the scientific method, in combination with the assumption of mankind's central place in the world, logically led from the aim to *understand* the laws of nature to the *use* of this knowledge in the subjugation of the natural world. Science became an instrument in the development of a free and just society in which civilised and modern people distinguished themselves by their power of reason, morality and utilitarian manipulation of the natural environment. The first 'scientific' attempts to manage nature took place in the field of forestry in the 18th century, when a concern with timber supplies took hold of western Governments.[4] From 1765 onwards, the development of the discipline of 'scientific forestry' engendered a transition from a 'laissez-faire' policy to the design of uniform and highly productive forest plantations (Beinart and Coates 1995, Scott 1988). The technique of 'conservation', as it became known, was driven by considerations of productivity and efficiency. Ideas of human development and nature conservation, thus both have their roots in notions of 'improvement'. The first in the improvement of the human condition, the second in the perfection of nature for human use.

By the end of the 18th century the development of the natural sciences provoked a closer sense of affinity with the 'brute creation' and questioned the idea that nature was merely there for the sustenance of man, gradually giving rise to a romantic movement which denounced the man-made urban and agricultural landscapes while viewing wild nature as a source of aesthetic delight (Thomas 1983, Cronon 1995). The two different ways of valuing the natural environment, one in terms of its direct use to mankind, and the other as possessing an intrinsic moral and aesthetic worth, play a key role in the history of environmental thinking. In the utilitarian vision, there is no contradiction between material and aesthetic considerations as nature subservient to society is per definition more beautiful than 'useless' landscapes. The Romantic tradition, however, forced people to prioritise between their material needs and their aesthetic preference for wild nature. This opposition constitutes one of the central ambiguities in present-day society

[4] Whereas historic studies of environmental policy have focused on changes in western countries, some suggest that the first conservationist management measures took place in the colonies (see for example Grove 1995 & 1997). These views present conservation as a product of the colonial encounter, but ignore the resource management practices that indigenous peoples may employ.

EARLY AMERICAN ENVIRONMENTALISM

American colonisation is largely framed in terms of the utilitarian view of nature, with European settlers aiming to convert the 'hideous and desolate wilderness' of the New World into a 'second England for fertileness' (William Bradford in Merchant, 1995: 140). The resulting frontier ethic, which emphasised individual enterprise and the God-given right of the settlers to civilise both America's 'wild' nature and its 'savage' population dominated until well into the 20th century. As in Europe this utilitarian view would be countered by a romantic movement that inspired people to *transcend* the utilitarian valuation of nature, instead valuing it on moral, aesthetic and spiritual grounds (Pepper 1984). Wilderness became 'an island in the polluted sea of urban-industrial modernity, the one place we can turn for escape from our own too-muchness' (Cronon 1995: 69).

From the mid-19th century onwards, the revaluation of wild nature led to a rising concern with the environmental consequences of economic development. The opening of the western frontier brought thousands of settlers, whose arrival saw widespread deforestation, the virtual eradication of the buffalo and the vast grasslands of the western plains ploughed up (Beinart and Coates 1995). These events changed people's perception of the balance of power between human society and nature. Whereas in the 18th century nature was seen as a dangerous force that needed to be conquered, nature now became a value that needed to be cared for (Worster 1994). The new valuation of wilderness gave the young nation a welcome theme of civic pride on which it could easily compete with Europe. Shortly after their establishment these national parks would become 'the cathedrals of the modern world' (Elliot in Thomas 1983: 269). By the early 20th century, wild nature symbolised a spirit of endeavour and strength with which the United States was gladly associated (Olwig 1995).

The process of urbanisation induced people to seek out commons, gardens and cemeteries for recreational purposes, in due course forcing every self-respecting town to lay out treed avenues, public walks, and parks as natural zones of recreation. In the 1830s the increasing need for recreation triggered off the first state involvement in site management, a decision which constituted a noticeable departure from the laissez-faire policies of the time (Shultis 1995). In 1832 George Catlin was the first to suggest the establishment of 'a nation's Park, containing man and beast, in all the wild and freshness of their nature's beauty' (in Colchester 1994: 1). The idea of a park itself was not new. Medieval Western Europe counted numerous private hunting reserves. In Britain where game used to be common property, the growing intensity of hunting triggered the establishment of trespass laws, gradually restricting the access to wild resources by local communities. The enclosures replaced the scattered mediaeval open-field system with much more profitable pasturelands, but also gave rise to the establishment of private parks, illustrating how the notion of 'park' has strong historical connotations with the privatisation of common property, the alienation of land and resources, and the eviction of local people. What was new about Catlin's idea was the pre-eminent role

of the State. His ideas first came to fruition in Yosemite State Park in 1864 and in Yellowstone National Park in 1872. Catlin's suggestion to include 'man and beast', however was rejected, and after their proclamation the Indian population was evicted from these parks, in a move that would from then on define national park management as a quasi-military operation (Kemf 1993).

THE DICHOTOMISED LANDSCAPE

By the end of the 19th century, the negative ecological consequences of untrammelled economic growth in the United States gave rise to an influential environmental movement. This movement incorporated both conservationists propagating a less wasteful and actively managerial use of natural resources and preservationists clamouring for the total protection of wild landscapes. Although conservationists and preservationists had their disapproval of wasteful economic development in common, and shared an anthropocentric and utilitarian viewpoint, they became increasingly divided over the question how natural systems could be most useful to humanity. While the preservationists argued that the enjoyment of undefiled nature presented a far greater worth than a utilitarian application of nature, in the view of Gifford Pinchot, the US chief forester:

> 'The first fact about conservation is that it stands for development. Conservation does mean provision for the future, but it means also and first of all the recognition of the right of the present generation to the fullest necessary use of all the resources with which this country is so abundantly blessed' (Pepper 1984: 82).

According to this view nature should be seen as a 'savings bank' from which one can every year take the interest while leaving the principal untouched, a view which is still with us in notions of 'sustainable yield'. This view warrants a strong preoccupation with the useful elements of nature, while all other species are either useless or competitors in what is essentially a zero-sum conception of nature (Demeritt 1998). Scott (1998) notes how a focus on the utilitarian aspects of the environment led to a change in vocabulary in which the generalised idea of 'nature' was replaced with the term 'natural resources'. Valued plants, trees and animals became known as 'crops', 'timber', 'game' and 'livestock', while competing species became known as 'weeds', 'pests', 'trash trees' and 'predators'. Over time a managerial and utilitarian approach to conservation became dominant, while preservationist policy, focusing on maintaining the aesthetic and spiritual values of wilderness became restricted to national parks.

In an in-depth analysis of the wilderness concept, Cronon (1995) argues that the idea of 'wilderness' influences our thinking about nature and mankind in a number of unexpected ways. In the first place, the notion of 'wilderness' is based on the opposition between mankind and nature, and by emphasising this antagonism tends to obscure the differences between people, their various needs and their perceptions of nature. This view also allows us to regard 'nature' as something that is 'kept' in

national parks, preferably in exotic tropical places. Nature is thus not perceived as something that surrounds us in our daily lives and is in need of daily care. In this manner, the inferred opposition between nature and society legitimises a flight from social and environmental responsibility (see also Guha 1989). The exclusion of humans from national parks through preservationist policies is also visible in the landscapes produced by preservationists policies, leading to a separation of 'landscapes of production' from 'landscapes of recreation' (Neumann 1995).

In recent years, a number of authors have argued that wilderness is a product of the western urbanite mind which does not exist in reality. In this view all eco-systems on earth are influenced and modified by human behaviour (Gomez-Pompa and Kaus 1992, Denevan 1992). Because wilderness does not exist 'in the wild', it was only when wilderness thinking as a culturally-determined perception of nature and society came to define environmental policies during the 19th century, that the spatial segregation of nature and society became a tangible reality. In this view the only 'wilderness' that we know is 'new' and an artefact of preservationist policy (Flannery 1994). National parks are thus not the pristine remnants of some pre-human environment and the natural opposite of contaminating urban-industrial society. They are a *product* of that very society and in many respects 'as artificial as a safari park in the grounds of an English stately home' (Marnham in Pearce 1997). The idea of wilderness as an uninhabited pristine, primordial and timeless space in which nature takes her own course, thus conceals the history of close human-nature interactions which have created the landscapes that we value (Headland 1997).[5]

Ironically, strict preservationist practices such as those imposed on many tropical peoples are not part of national park management in Britain and other European countries. Olwig (1995) contrasts the American situation with Denmark, which – as a small country – has fewer wilderness areas to set aside and, as a result, enforces strict rules on economic and urban development in the whole country. British national parks too did not take their shape through land alienation and the eviction of its users. Notwithstanding the enclosure acts, community rights to access and resource use were never fully extinguished. This led to a policy of landscape conservation rather than wilderness preservation, which allows hundreds of thousands of people to continue to work and farm in Britain's National Parks (Harmon 1991). Preservationist policy in contrast, became the dominant model for nature conservation elsewhere.

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[5] In recent years social scientists have questioned the modernist separation of nature from culture, instead analysing how nature influences culture and vice versa. An increasing number of scientists argue that nature and culture must be seen as 'co-created' rather than seen as opposed. Nature is 'produced' or 'socially constructed' rather than a simple and a-political material reality (Demeritt 1998; Escobar 1996; Evernden 1992; Katz 1988, Sismondo 1993). Latour (1993) calls for a 'symmetrical anthropology' in which nature-culture divisions have no place.

AFRICAN PARKS AND THE 'PRIMITIVE OTHER'

Rather than stemming from a concern with aesthetically valuable landscapes, the drive towards the establishment of national parks in British Africa was primarily connected with the British preoccupation with hunting. MacKenzie (1987) distinguishes a number of phases in the hunting development in Southern Africa. The first resulted from the desire for wildlife products, which formed a major aspect of the drive into Southern Africa. The availability of abundant wildlife resources facilitated and subsidised the development of new settlements, railways and mission posts. The agricultural and livestock-rearing communities that jumped up in the wake of the military campaigns emphasised the need to tame the wilderness and its inhabitants. Settlers regarded large sections of the local wildlife as 'varmints' aiming to eradicate predators, while government campaigns tried to eradicate wildebeest and other potential carriers of sleeping sickness (Beinart and Coates 1995). These measures, combined with the arrival of boatloads of new settlers and the improvement of firearms triggered a hunting binge which would virtually devoid large areas of Southern Africa from game by the end of the 19th century. By then the Blaaubok antelope was extinct, while the last Quagga, the yellowish-brown zebra of the Karoo region, died in the Amsterdam Zoo in 1883 (Fitter and Scott 1978).

In the second half of the 19th century, hunting became linked to a hunting ethic associated with British ideas of sportsmanship. Hunting was a form of recreation based on the idea that there was a fair chase between sportsman and game. It was seen as way of preparing for life in the British upper classes, as it honed military skills and built character (MacKenzie 1987). With the reduction in wildlife and the increasing human population, a struggle over resources ensued in which hunting by white commoners and Africans became frowned upon by the higher classes. Where in previous times, game was for the hunter and not tied to territory, trespassing laws were increasingly used to exclude these groups from hunting. The restriction on access to private lands gradually became reinforced by state legislation. In 1900 and 1906 respectively Game Ordinances in Kenya and Uganda turned all game animals into Crown property (Graham 1973).

From the 1890s onwards, wealthy landowners aiming to safeguard their hunting interests instituted the first private game reserves in Southern Africa, the Sudan and Kenya. In general, these reserves covered areas of little economic value as they were placed in malaria and tsetse infested country. The first outright national park in Africa, administrated by the government rather than private individuals, was established at Virunga in the Congo in 1925 by King Albert of Belgium (Fitter and Scott 1978). With the growing appreciation of wilderness, preservationist ethos would become part of the discourse on national unity in Southern Africa leading to a change in perception of game from being objects of the hunt to a symbol for the greatness of the new country (Beinart and Coates 1995; Carruthers 1989).

At the end of the 19th century the threatening disappearance of African game triggered international concern leading to the establishment of the Society for the Preservation of the Wild Fauna of the Empire (SPFE) in 1903 (Fitter and Scott 1978). In 1931, the SPFE investigated the African situation, recommending the immediate establishment of a widespread system of national parks. In 1933, this recommendation was endorsed by all European powers in possession of African colonies (Boardman 1981). Following this endorsement of national parks as the primary tool for nature protection it took until after World War II for the preservationist conception of conservation to become embedded in the international circuit of multinational organisations and NGO's located in Paris, the Geneva region, Washington and New York (Adams and Hulme 1998). Noteworthy in the international constellation of multilateral bodies dealing with conservation issues is the Global Environment Facility (GEF), a joint program of the United Nations Development Program, the United Nations Environment Program and the World Bank. Since its establishment in 1990, it has rapidly become one of the main funding bodies in international conservation.

After the second world war protected areas have been established an accelerating rate, with 100 established in the 1950's, 200 in the 1960's and some 330 in the 1970's (Eidsvik 1980). As a result of this effort, nine countries in Africa now have more than 9 percent of their land under strict preservationist regimes, while a country like Tanzania has as much as 13,5 percent of its landmass in national parks, covering an area as large as the joint territories of Switzerland, Slovakia and the Netherlands (Neumann 1997).

THE EXPANSION OF CONSERVATION-WORTHY NATURE

As the managers of the first African game reserves were initially preoccupied with game suitable for hunting, they not only restricted indigenous hunting activities, but also actively aimed to eliminate all predators competing over game. Such practices were standard policy in game reserves until well into the 1930s. The control of predators by the emerging Game Departments would be legitimised by highly anthropomorphic conceptions of wild animals. Elephants destroying local gardens were regarded as 'vandals' that had to be 'taught a lesson'. Lions harassing local people were typified as 'insolent' and military style campaigns were undertaken so as 'to instil some measure of respect for humanity in their now contemptuous outlook' (Graham 1973: 66). Animals such as baboons and wild dogs were simply dubbed 'vermin' and shot on sight.

Only gradually would an aesthetic revaluation of animals reduce the number of species in the category of 'vermin'. While in the national parks of British Africa the category of 'useless' or 'harmful' animals initially included lion, cheetah, leopard, hyena, wild dog, buffalo, baboon and crocodile, many of these animals would become increasingly scarce following the extermination efforts by wardens, settlers and tsetse control agencies. A changing perception of the aesthetic value of

predators and changing insights with regard to their place in 'the scheme of nature', would gradually come to warrant their preservation. Lions would in Kenya stop being seen as 'vermin' by the mid-1920s, while leopards emancipated from being pests as late as 1933 and only because they were thought to control bush pigs and baboons, reflecting notions of ecological balance. Cheetah, hyena and wild dog had to wait until well after World War II before they were considered preservation-worthy (Mutwira 1989). As late as 1954, a warden on an official visit to Lake Rudolph in Kenya described the good fun he had shooting crocodile (Graham 1973).

The discontinuation of indigenous management practices such as burning, herding, cultivation and woodcutting influenced the outlook of African national parks, turning the open savannah into shrub. As game became condensed and human populations and agricultural and pastoral practices ceased, the supposedly 'natural' state of the environment within the park boundaries was lost. Graham (1973: 215) describes the situation for the Murchison Falls in Uganda 'where the consequence of compressing elephants into restricted areas, aggravated by fires, has reduced most of the park to a uniform grassland that is as 'unnatural' as a field of wheat'. Consequently, aesthetic notions of flora and landscape increasingly attracted attention, eventually becoming an object of preservation in their own right. This was in many ways a logical conclusion of a gradual evolution in African park management from the conservation of a number of useful game animals into the wholesale preservation of biodiversity for the sake of recreational enjoyment and ecological balance.

CONTRASTING CONCEPTIONS OF THE 'PRIMITIVE OTHER'

Western interventions in the Third World are not only struggles over economic and military interests, but largely conflicts 'about ideas, about forms, about images and imaginings' (Said 1994: 7). In the area of development and conservation interventions, not only the construction of ideas of nature such as contained in the notion of 'wilderness', but also the preconceptions and images held of non-western people are of importance for the manner in which these interventions are shaped. Many of the practices employed by western colonial governments as well as by present-day development or conservation interventions are based on stereotypical images of the 'primitive other'.

Torgovnick (1990) traces the image of the primitive man back to the 18th century and notes that this so-called 'primitivist discourse' contains two fundamentally different images of non-western people; one of the supposedly good, harmonious, wise and nature-conserving 'native' and the other of the archetypal bad, backward, violent and destructive 'native'. By projecting both negative and positive stereotypes on other peoples, the West forges a contrasting idea of itself. Both stereotypes, which mirror the contrasting conceptions of wilderness, are continuously invoked as a means to justify and legitimise western interventions. Fabian (1983) has pointed out that the primitive other is not only defined in spatial terms as those people 'out

there' in the tropics, but also seen as belonging to another time, to the stone age, or some other pre-modern period. This 'allochronic distancing device' is part of the more common tendency on the part of western society to construe the primitive other and tropical nature in a way that a -priori defines its 'inferior', 'illegitimate' and 'destructive' or alternatively 'exotic', 'natural' and 'pure' status. These two contradictory conceptions of primitive people and their environment came to play an important role in national park establishment.

THE 'CARELESS' NATIVE HUNTER

The first, and dominant view, emphasises the intrinsic evilness of the wild environments of the Dark Continent, the intolerable heat, its terrible diseases and the dangerous animals. In an extension of this view, African people were branded as heathen primitives who failed to render nature productive, and who were a threat to scarce natural resources due to their intrinsically destructive habits. This negative view is still dominant in present-day environmental discourse. Leach (in Pearce 1997) notes how 'people have been reading the landscape backwards. Wherever there are some trees, a presumption is made that there once was, and indeed ought to be, continuous forest cover'. The explanation inevitably following from this presumption is that local people are responsible for environmental degradation. Such presumptions give rise to a series of tightly interconnected ecological, historical and political ideas, which leave little room for understanding local environmental dynamics. Research by Fairhead and Leach (1997 & 1998) in West Africa suggests that environmentalists have been locked into such preconceived ideas to the extent that they have failed to realise that in some case people may play a role in *creating* forests. Tiffen *et Al.* (1994) provide another example of research which negates the basic environmental 'truth', that there is a direct relation between population growth and a loss of tree cover.

Following the settler-initiated hunting binge of the late 19th century, the increasing restrictions on African hunting were legitimised by reference to the relative value of different hunting motives and techniques. At the top of the ladder stood the British sportsman, whom demonstrating his manhood in highly ritualised forms of sportsmanship (MacKenzie 1987). These sportsmen looked down on the African population, traditionally dependent on a dwindling animal population, and increasingly blamed for the reduction in wildlife (Adams 1990: 18). Such stereotypes remained dominant for many decades and are not restricted to Africa. As late as 1963, a handbook for Indian foresters noted that:

> 'Forest dwelling communities are invariably inveterate hunters and have in most areas practically annihilated game animals and birds by indiscriminate hunting and snaring. It is surely time to instil in the tribal mind a respect for the basic game laws of the country ' (Stracey in Tucker 1991: 50).

By restricting access to reserve areas, hunting by indigenous people became a criminal offence; its perceived difference from British sportsmanship legitimised by

presenting the hunting activities of the indigenous population as 'indiscriminate', and 'destructive', or as a laziness-induced attempt to avoid wage labour (Beinart 1989; Graham 1973).

Over time, national park management shifted from a focus on managing game for hunting, to the use of a jargon steeped in notions of collective responsibility. This allowed white settlers once more to oppose the supposedly destructive habits of local people to the moral superiority of their own practices, at the same time leading to a series of contradictory conservation measures. While the Game Departments culled large numbers of predators in military-style campaigns in order to preserve game suitable for hunting, rangers would actively disarm pastoralists at risk from those animals and prosecute 'poachers'. Few realised that explaining the importance of game preservation for future generations to local people was difficult with the gunshots of white hunters ringing in the background.

Wherever indigenous people resisted European civilising efforts, or where strategic and economic interests of white settlers and the colonial state were at play, these negative stereotypes legitimised military and economic interventions. The corollary of this categorisation of indigenous people in terms of their wild environment was that the borderline between the hunting of animals and the murder of Africans was disconcertingly narrow (See MacKenzie 1987). In the worst cases, such narratives were used to justify the virtual extermination of indigenous peoples thought to be beyond redemption. In other cases, these views would warrant the segregation of indigenous people from colonial society through the strategic use of the reserve-concept, suggesting a functional connection between 'native' reserves and nature reserves.[6]

Over time, the image of the 'destructive native' would be reinforced by a renewed interest in the well-known thesis by Thomas Malthus which asserts that the linear growth of food supplies as opposed to the exponential growth of populations inevitably leads to disaster. In the late 1960's population growth would become a public issue, with scientists such as Hardin and Ehrlich arguing that countries either had to take measures to limit population growth or would become subject to 'positive checks' in the form of famine, war and environmental degradation (Ehrlich 1968). However, not all despoilers are equal. Hardin en Ehrlich, for example, did not see the United States with its high levels of consumption and wastage as responsible for environmental degradation, but pointed the finger to those poor countries that - they asserted - were not taking sufficient fertility reducing measures. The resulting conception was that of a 'responsible' western world, taking the necessary measures to curb its human numbers, as opposed to a 'reckless' and ever-growing Third

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[6] Grove (1997), for example describes how in South Africa as early as 1853 a Royal Forest Reserve settled by African groups loyal to white settler interests was installed as a buffer against the incursions of Xhosa tribes. The occupants of the reserve 'to act as a sponge, absorbing civilisation from the white man and transmitting it back to the barbarous tribes' (Pollock and Agnew in Grove 1997: 105), while these reserves simultaneously allowed for the removal of unwanted elements from white settler society.

World population. Linked to the view of the environment as a common pool of resources under risk due to its open-access nature (Hardin 1968) these ideas led to what would notoriously become known as 'life-boat ethics' and the policy advice that western countries should terminate food aid to developing countries that were not taking sufficient measures to reduce population growth. The suggestion was that by allowing population to increase, the eventual die-off would only be much larger, while everybody on earth would be worse off due to the environmental damage resulting in the mean time (Pepper 1984). In blaming the third world for environmental degradation, Ehrlich and Hardin ignored not only an important set of behavioural and demographic facts, but also issues of social justice and the historical and geographical differences in access to resources and levels of consumption (Commoner 1975). In addition, these views treat humans as devoid of the reflexive capability that enables people to respond to their changing environment. Notwithstanding the strong reaction against these theories and especially the manner in which these are used as a crude blaming mechanism (Harvey 1974), they remain an integral part of present-day environmental discourse.

'NATURAL MAN 'LIVING AMICABLY AMONGST THE GAME'

The second view at play in primitivist discourse falls back on the romantic interpretation of 'natural man'. The romantic view of wild landscapes first found their social equivalent in the idea of the 'noble savage' brought forward by philosophers such as Rousseau. In the African context, this view projected the continent as the symbol of primeval nature, the very Garden of Eden. In line with this romantic conception of nature, Africans were looked upon as the ultimate 'natural' and morally innocent people. This outlook became especially important in the stereotypes developed concerning pastoralists and hunter-gatherers, which with their low-impact productive systems were thought incapable of degrading the environment (Neumann 1997). In policy terms, this implied that Africans had to remain 'primitive' to retain the intrinsic goodness associated with that state.

The view of the 'native living amicably amongst the game' (Hingston in Neumann 1995: 160) gained in importance during the international discussion over national park establishment during the 1930s. Although, in line with preservationist policy, it was thought that humans should preferably not live inside national parks, the colonial powers were initially not prepared to push for the total exclusion of local people. This decision was largely justified by reference to this romantic view of local peoples and the supposedly environmentally neutral behaviour of these peoples. On the extreme end, the views of local people falling within this narrative simply equated African people with wildlife. Thus in the case of the King Albert National Park the pygmies were 'left undisturbed' because '[they] are rightly regarded as part of the fauna' (in Neumann 1995: 154). In 1931, another colonial administrator suggested that primitive people added to the aesthetic appeal of parks:

> '[T]he pig-tailed [Maasai warrior] poised on one leg with a spear for a prop, standing sentinel over his father's cattle, is a picturesque sight, and it is fitting that this human anachronism should make his home in the same country as the rhinoceros and other survivors of a bygone age' (Sayers in Neumann 1997: 568).

In South Africa racist ideas justified treating Bushmen as fauna, leading to a policy which allowed the last group of bushmen to live as tourist attraction in the Gemsbok National Park (Gordon 1985 in Colchester 1994). In this manner, 'primitive' Africans were relegated to the pristine animal kingdom that existed prior to the age of mankind (Haraway 1984, Fabian 1983).

Indigenous people could stay within these parks as long as they were prepared to remain in their 'primitive' and 'natural' state, a notion termed 'enforced primitivism' (Goodland 1982). Cultural and economic change had to be frozen inside the park boundaries, the use of new technologies was disallowed and economic and material progress could only take place if groups were prepared to move to areas outside the national parks. This not only introduced the earlier mentioned dichotomy between 'consumptive' landscapes inside and 'productive' landscapes outside parks (Neumann 1995), but also introduced a rather schizophrenic approach to local people on the part of the colonial state. Those living outside national parks were considered backward and were subjected to development through the modernising policies of the colonial bureaucracy. Those within the national parks, however, were to play the role of the 'natural conservationist' and were to remain suspended in time and place.

A third stereotype of indigenous people at play in conservation debates constitutes the view of local people as 'fallen angels'. This view is based on the assumption that local people essentially live in harmony with their environment, but are forced to undertake degrading practices as a result of their incorporation into wider global society (Berkes 1999).[7] A corollary of this conception is the way in which community-based conservationists may conceive of local communities as either 'spoiled' or 'unspoiled', depending on the extent to which they had adapted to the modernising forces of capitalist society (Haraway 1984: 50; Neumann 1995). This view of local people is a variety of the stereotype of the 'good native'.

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[7] From the 1950s onwards a variety of anthropologists has argued that nature is kept in balance by the cultural practices of indigenous people (see the discussion by Scoones 1999). In Rappaport's view of the Maring in the highlands of PNG for example, rituals serve as a 'thermostat' keeping a precarious ecological balance intact. As ecological pressures in the form of overwork, garden damage due to the number of pigs being held, and population pressure mount, they gradually produce a consensus that allows the clan to take a ritually defined course of corrective action in the form of pig exchange, warfare and territorial expansion. In this neo-functionalist perspective rituals are part of a binary system which: 'switches on and off ... to correct the deviation of variables from their acceptable ranges' (Rappaport 1968; 234). These perceptions essentially fall back on the positive view of indigenous people. Political ecologists have adopted similar notions to argue that the culturally-defined homeostatic controls of indigenous communities are destroyed by the penetration of market forces pushing indigenous people into environmentally degrading lifestyles (see Brosius 1999 and Scoones 1999 for overviews).

THE EVOLUTION OF 'FORTRESS CONSERVATION'

Over time, the idea of indigenous people as 'natural' and as lacking the capability to impact upon their environment could not be sustained. Population pressure increased, the competition over resources grew, new technologies were introduced and it became clear that indigenous people both possessed the ability and the willingness to impact on their natural environment. Many groups simply refused to live by the standards that outsiders imposed on them. The rangers of Gemsbok National Park, who had previously 'allowed' the bushmen to pursue their traditional livelihoods as a sort of tourist attraction, now noted with disgust that 'their desirability as a tourist attraction is under serious doubt, as is the desirability of letting them stay ... in the park. They have disqualified themselves' (Gordon 1985 in Colchester 1994: 15).

Others, undergoing cultural change as they were exposed to wider society, actively adjusted their attitudes towards the environment. A recent example of such change in attitudes from South America can be illustrated by the debate between the anthropologists Posey and Parker on the supposedly conservationist predisposition of the indigenous Kayapo Indians of Brazil. While the two anthropologists are locked in debate on the conservationist meaning of the so-called 'forest islands' of the Kayapo, the latter have adapted their lifestyle to that of the rest of Brazil and are actively engaged in marketing timber, gold and medicinal plants. Today members of the 3,500-member group own cars, apartments, video cameras, television sets and three aeroplanes and wonder why they are being berated as 'immoral' by conservationists, when they simply wish to live like everybody else (Conklin and Graham 1995, Headland 1997).

Consequently the idea of 'natural man' living in a state of benign primitivism within a 'pristine' environment made place for the opposing vision of the 'destructive native' living at odds with his environment. In the realm of African park management these negative conceptions of indigenous resource-use would be contrasted to the activities of the white park wardens who increasingly came to be seen as the last line of defence for against an encroaching indigenous population. Where the ideological conceptions of wild nature and its indigenous people were initially conflated in a single value judgement, of wild nature and wild people either being 'bad' and in need of civilisation, or alternatively both 'good' and a source of inspiration, by the 1930s the views of nature and local population became disarticulated into an ideological formation which presented wild nature in Edenic terms, but which projected local people as the main threat towards the preservation of that very asset.

Over time, the explanation of degradation as stemming from the behaviour of non-western people came to dominate the conservation debate. This view gradually consolidated into a 'cultural blueprint' (Neumann 1995) aimed at segregating nature and people. This narrative and the a-priori prescriptions that it contains, preclude a more detailed case-by-case analysis of actual resource use by real people. The

influence of Western ideas and media and the increasing intensity of global communications mean that conservationist ideas have also become entrenched in the imagination of the urban elites and middle classes of Third World countries (Adams and Hulme 1998).

Over time, the managerial ethos of national parks shifted its focus. Rather than managing nature by hunting predators, park management was increasingly aimed at controlling the economic activities of the indigenous population and the behaviour of recreational visitors in order to keep human activity from disturbing the natural balance 'at work' within the park, gradually leading to the infrastructure and control measures which characterise present-day parks. The activities of people living inside or near national parks were increasingly restricted in order to preserve the perceived integrity of the wilderness inside the national parks. As human populations grew after the Second World War, this task would become increasingly daunting, leading to a border-management ethos replete with spatial concepts such as 'core conservation areas', 'buffer and transition zones', and 'wildlife corridors' and an increasing use of military-style surveillance, control and defence techniques.

BIODIVERSITY AND THE PRESERVATIONIST FRAMEWORK

The beginning of the 20th century saw the development of an ecological paradigm that provided the preservationist narrative with an ecological rationale. In the view of the ecologist Frederic Clements', interdependency and co-operation rather than Darwinian competition were the driving forces of evolution. Clements postulated that plants lived together in interdependent 'plant communities', which develop through a succession of vegetational phases to a 'climax state' of equilibrium in which no further evolutionary development occurs. If an outside force, such as a bush fire or a timber company interferes nature is set back into one of the earlier phases of development, from which it will again inexorably move towards the climax state. This led Clements to postulate the fundamental incompatibility of human activity with the needs of evolution. Nature only develops towards a climax state in the absence of human interference, while mankind can but satisfy its material needs by setting natural succession back (Worster 1994).

Aldo Leopold, an American forester and ecologist, was the first to make the climax state the benchmark for environmental management. Based on the repeated failure of managerial conservation in forestry and game management, he concluded that nature should be allowed to take care of itself. As he postulated' environmental management is right when it tends to preserve the integrity, the stability, and beauty of the biotic community. It is wrong when it tends to do otherwise' (Leopold in Takacs 1996: 203). Leopold was also one of the first to argue that species may provide ecological services in unexpected ways, arguing that questioning the use of individual elements of the natural system is silly. 'Who but a fool would discard seemingly useless parts? To keep every cog and wheel is the first precaution of intelligent tinkering' (Leopold in Worster 1994: 289-290). From the 1940's onwards, a

growing number of ecologists came to regard diversity of species as a value worth conserving in its own right (See Ghilarov 1996). A consequence of the succession view of nature was that more advanced and therefore more diverse ecosystems were thought to be more stable, with the tropical rainforest with its innumerable and dynamic interactions presented as the ideal and stable state of nature. In the 1960s and 1970s the notion of interdependency was further elaborated with the argument that evolution left alone would lead to ever-greater diversity, balance and stability, and that it through human activites that natural variability was reduced and ecological systems destabilised (Takacs 1996).

The concept of 'biological diversity' was thus hardly a new thing when it rose to prominence in the 1970's. Its ascendance, however, stemmed largely from a practical political problem that the American environmental movement was facing. Until well into the 1970s, species were the prime mover of environmental opinion, an approach also central to the US Endangered Species Act. As a result, the environmental movement had to frame battles over habitat in terms of the endangered species contained therein. Over time, however, conservationists came to realise that habitat uniqueness, measured in terms of endemicity and diversity, might provide a better measure for nature's worth. The problem with habitat, however, is that 'it looks like a green blob' (Janzen in Takacs 1996: 74) and lacks the charisma to muster public support. The concept of 'biological diversity' solved this problem by merging the totality of species, which live within and simultaneously constitute that habitat, into one concept.

THE EXTINCTION 'NUMBERS GAME'

Science takes a special place within the analysis of environmental discourses by virtue of its nature. In the past the scientific method was supposed to generate unquestionable truths. Wherever multiple views of reality existed, science could be invoked as arbitrator. The idea that the observational statements produced by the scientific method refer to some ultimate reality which exists independent of human perception is grounded in the modernist/Cartesian distinction between nature and culture, the observed and the observer, mind and matter. In the last couple of decades, however, science itself has become increasingly recognised as a social construction, built on images which we borrow from daily social life and which may clash with other sets of values and representations of reality (Sismondo 1993, Demeritt 1998).[8]

[8] It is for example, remarkable how often visions of nature are a reflection of society and vice versa. It is no coincidence for those looking at the history of the natural sciences that Darwin's idea of evolution through competition found its equivalent in 19th century social Darwinism and a laissez-faire attitude to government policy. It is similarly no coincidence that the organismic ideas of society as developed by Spencer found their ecological equivalent in the work of Clements, or that the Fordist approach to industrial production is reflected in the ecosystems view held by Tansley. All of these ecological views were held to be 'scientifically' valid at the time but were simultaneously impregnated by the dominant values and images of their time (Worster 1994).

As a result, our relationship with science has shifted from one of blind faith in the answers generated by cumulative scientific advance, into an 'interrogatory relationship' in which the findings of science are questioned, criticised and strategically deployed in common with other reflexively available sources of knowledge and meaning (Giddens 1994: 216). The 'answer culture' of science is retreating, not through the dissolution of science as a source of knowledge, meaning and legitimacy but through the multiplication of scientific fact. Scientific facts constitute an important source of legitimisation but are simultaneously subjected to counter-claims. Science thus helps us in constructing 'arguable worlds, but can not release us from argument' (Myerson and Rydin 1996: 213).

This situation is eminently visible in the crisis narrative by which conservationists claim authority over global nature, as the outcomes produced by the various scientific models vary so widely that estimates for the rate of man-made species extinctions are at best 'guesstimates' (Lawton and May 1995: v) which lie wide and far apart. Thus where Wilson (1992) suggests that we are losing 225,000 species per year and Myers (1979) even comes up with the unlikely rate of 525,600 extinctions per annum, other analysts suggest that maybe some 3000 species per year are going extinct, most of which are insects, fungi and bacteria 'which most people would not even hesitate to step on' (Hannigan 1996: 154). The problem to the outsider is that there are no firm grounds to choose between the various extinction scenarios, and the opposing suggestion that the extinction problem should not be allowed to impede the socio-economic development of poor countries. The difference between these representations, however, is the basis for recommending various all-encompassing national and international policies which exert high costs from already poor populations, or no environmental action at all. Even when biologists arrive at a consensus that we are losing several thousands of species a year, what this means to humanity, who is to blame, and what costs global society should impose to stem these extinctions, involves a political value judgement.

Environmental debates are thus not resolved by the proliferation of scientific fact, but consist of strongly opposing representations of reality, of whole 'moral universes' (Cussins 1988) in which culturally and professionally determined visions of nature, people, and science play a role. This reduces the vast majority of environmental communication to the use of politically strategic imagery in which simplified messages on the 'the problem and how it arose', who is to 'blame', 'the order of priorities', the 'necessary solutions' and the 'distribution of costs and benefits' are continuously projected. Next to the notion of crisis, such simplified preconceptions and assumptions are also visible in the ecological narrative that conservationists use to legitimise the establishment of strictly protected areas.

NEW ECOLOGY AND THE PRESERVATIONIST FRAMEWORK

The preservationist narrative is based on a number of crucial assumptions with regard to nature and the impact of human society, which together suggest that

protected areas are the best - if not only – way to look after nature. The first is the Clementian idea that nature in its most 'natural' and climax state reflects the highest levels of biodiversity. The second supposition is the idea that highly diverse ecosystems are more stable and balanced than less variable systems, while the third is that human activities degrade and simplify nature, thereby compromising diversity and balance. The combination of these three hypotheses logically leads to the argument that the best way to look after the environment is to safeguard large areas of wild nature separate from human society. Based on the notion of biological diversity as a measure of nature's worth, and the Clementian assumption that the most diverse environments are those least affected by people, a state of maximum biodiversity has thus become more or less synonymous to the older notion of 'wilderness'. The main difference is that the notion of 'diversity' pretends to have the quality of a scientific indicator (See Callicott *et Al.* 1999 for a discussion of the values inherent to the biodiversity concept).

The aim of protecting wild nature from human induced degradation is the logical consequence of this point of view, grounding the practice of protected area establishment in ecological theory, and associating biodiversity conservation with the preservationist narrative. Noss (1990: 49) for example, argues that biodiversity conservation provides a justification for the establishment of large wilderness areas, as 'wilderness and biodiversity need each other'. These areas are to serve as in-situ depositories of evolutionary processes.[9] The IUCN taxonomy of protected areas defines its three dominant categories of protection as areas that are established with the goal of maintaining biodiversity and natural formations in an 'undisturbed state' (Kemf 1993). Although most conservation biologists realise that the battle to conserve biodiversity will be won or lost through the active management of multiple-use lands in which protected areas can at best play a limited role, the underlying idea still remains that such an integrated policy is second-best. Consequently, international conservation interventions, especially those in developing countries, continue to focus on protected area establishment as the main means to preserve nature.

In recent years, proponents of the 'new ecology' have thrown into doubt the ecological tenets on which the preservationist project is based. In the first place, field studies suggest that diversity does not necessarily increase with different successional phases, thus doing away with the Clementian idea that the most

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[9] Some of the suggestions made by radical conservationists go very far. Snyder suggests that the human population on earth needs to be 'reduced' by 90 percent to allow room for nature, while Foreman argues that large parts of the world need to be 'cordoned off' for the same reason (in Guha 1989). Mainstream organisations too get carried away by grandiose scenarios. A recent report by the IUCN (1999b), for example, calls for an expansion of effectively protected forest areas with 50 million hectares (!) by 2005. Although this is to be done in a 'socially responsible manner', the report is dominated by the technical determinants of assessing threats to protected areas and implementing more effective management regimes. The fact that local people have much to lose by these policies, and that their implementation requires massive intervention in the affairs of independent countries is not even acknowledged.

mature ecosystems are also the most complex, diverse and worthwhile. The findings from 'new ecology' which suggest that ecological systems never achieve a balanced climax state but always operate in a state of disequilibrium (Botkin 1990, Zimmerer 1994), has important consequences for protected area and forest management. Not in the least because the omnipresent notion of 'sustainability' looses much of its meaning. Without some inferred 'natural', 'balanced' or 'climax' state that serves as an objective benchmark for environmental management, such policies are reduced to pursuing a set of professional and cultural values. Botkin (1990: 195 my italics), for example, notes that in order to calibrate one's environmental policies 'it is necessary to *choose* a time period that has the *desired* appearance'.

Secondly, there is the assumption that systems that are more diverse are also more stable. Ehrenfeld notes that because conservationists tend to make use of a utilitarian rather than moral arguments to convince public and policymakers of the importance of nature conservation, they are also provoked into 'exaggerating and distorting' the utilitarian values of wild nature (Ehrenfeld 1978: 193). One of the most important examples of such exaggeration is the diversity-stability hypothesis. This hypothesis has been under fire since simulations by May (1973) suggest that complex systems tend to undergo more extreme population fluctuations than simple systems. In contrast to the diversity-stability hypothesis, this suggests an *inverse* relationship between natural variability and eco-systemic balance. May's findings are supported by field studies that suggest that systems with high diversity, such as rainforests and coral reefs, are exceptionally vulnerable to human intervention, while more simple communities prove highly resilient and adaptive. Although there are indications that under certain circumstances natural diversity may enhance stability, such as in the case of grasslands recovering from drought (Tilman and Downing 1994), or in laboratory designed eco-systems (Naeem *et Al.* 1994), these explanations are context-specific and do not 'sell' as well as the generalised diversity-stability hypothesis. Consequently, conservationists have been loath to give up this attractive argument for the preservation of 'wild' nature.[10]

The third assumption underpinning protected area establishment, namely that people inevitably detract from nature, has been thrown into doubt by field studies which not only suggest that humans may contribute to the diversity of biological communities. Ehrenfeld (in Callicot *et Al.* 1999) gives the example of the Papago Indian Country of Arizona's and Mexico's Sonoran Desert where there are two oases only thirty miles apart. The northern one is fully protected as a bird sanctuary, with no human activity except bird watching allowed. All Papago farming that existed

[10] Sagoff (1985) notes that – at least until halfway the 1980's - the diversity-stability hypothesis was used as an argument in virtually all US conservation legislation. A recent brochure by the Ecological Society of the Americas also argues that species diversity confers stability on eco-systems. This to the dismay of many of the Societies' members who argue that this interpretation is unacceptably coloured by the personal values of the involved conservationists (Cf. Kaiser 2000). According to Stott (1999: 34) many ecological scientists prefer to maintain a variety of ecological myths 'as the collateral environmental benefits outweigh the scientific uncertainty'.

there since prehistory was stopped in 1957. The other oasis in Mexico is still being farmed. During their studies ornithologists found that two times as many bird species lived within the farmed oasis as in the officially protected bird sanctuary. Collinvaux (1989) also argues that species diversity is highest in localities where disturbance is frequent but not excessive.

A related issue, is the growing realisation that in many places the cessation of management practices and the concentration of game has actually altered the landscapes that caught the interest of conservationists in the first place. Where Clements brought forward a sharp distinction between the human and the biotic community, the ecosystems thinker Arthur Tansley would argue that there is no such thing as a 'natural' environmental state (Worster 1994). Following research in Britain, he came to realise that mankind had played an important role in the development of valued landscapes and that any rigid attempt to preserve these environments through a policy of non-intervention would lead to their degradation (Cf. Sheail *et Al.* 1997).

In this view, it is imperative that nature is managed in order to keep it in its desired state. Where such management ceases as a result of overprotective measures, landscapes may actually be damaged as a result of the very policies intended to preserve them. An example is Tsavo national park in Kenya which in the beginning of the 1970's was so densely populated by elephant that it stood out 'as a photographic negative of one's expectation of a park. Rather than an island of green in a wasted landscape, Tsavo appeared as wasted island amid a green land' (Botkin 1990: 16). There is also evidence that biodiversity may suffer from preservationist policies. David Western, Director of the Kenyan Wildlife Service, notes that 'pulling out the human component' from Amboseli National Park, led to 'the loss of half of the plant species' (Western in Pearce 1997; See also Western and Gichohi 1993 and Smith 1993). Similar findings for forests have led Wood (1995) to wonder whether these are not being 'conserved to death'.

The result of these issues is that the state of the environment which ecologists infer to be the most 'natural' and which serves as a benchmark for environmental policies is a normative choice based on a culturally and professionally determined view of nature rather than on indisputable scientific criteria. There is nothing within nature itself that allows us to conclude that one form of nature is more valuable than another. Man bestows value on its natural environment and visions of nature are inevitably influenced by social and cultural values (Demeritt 1998). Even the perception of extinction as something to be mourned or largely irrelevant is exactly that: a perception. Ultimately we choose the type of landscapes that we like, which then comes to serve as a benchmark for environmental policies. Approaches which view conservation policies as a product of positivist science, and thus as separable from political and social issues, only show that some conservationists find flora and fauna more important than human welfare.

The strategic use of scientific discourse as a means to further a set of cultural, professional and personal values has led Evernden (1992: 15) to call ecology 'an institutional shaman', that can be used to 'pronounce natural' whatever we want to see as natural, and which is 'being used as a blunt instrument to help implement particular life-styles or social goals'. Stott (1999) argues in similar vein that western conservationists use their science to impose a culturally determined view of nature on developing people.

THE CONTINUATION OF 'FORTRESS CONSERVATION'

Notwithstanding these debates, biodiversity conservation policies continue to be imbued by the usual Clementian assumptions and the models derived from island biogeography. Environmental policy makers brought up in the ideal of the dichotomous landscape, script the landscapes that they want to preserve as 'uninhabited', 'pristine' and 'wild'. The view of the 'sanitised landscape' (Zerner 1996) or the 'empty forest' (Chase-White in Myerson and Rydin 1996) simply ignores the fact that globally some 70 to 80 percent of all protected areas are inhabited (Colchester 1994, Amend and Amend 1992, Kemf 1993), and ignores the manner in which these people contributed to these landscapes. Conservationists continue to see local people as the source of the problem and they continue to premise their policies on the need to separate man from 'wild' nature through the establishment of conservation areas.[11] There are a number of reasons for this state of affairs:

In the first place, there is a time lag between science and policy-making. It takes time for the findings from 'new ecology', anthropology and archaeology to sink in. A related issue is that conservationists operate in a crisis management mode which makes revisiting the premises of ones approach dangerous. One may lose precious time by doing so. In addition, the generalised model of 'fortress conservation' (Hulme and Murphree 1999) has been institutionalised to the extent that conservationists are restricted by the preconceived modes of thinking that characterise the present international conservation institutions. These happen to be mainly located in a limited number of international institutions with a very similar analysis of conservation issues. Often such narratives not only exist in the minds of the involved policymakers, but are also embedded in legal and administrative requirements. Amend and Amend (1992) note how South American conservationists are often required *by law* to exclude people from protected areas, even when there is no evidence that the presence of these people is threatening to the environment.

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[11] The notion of the 'empty landscape' has had serious consequences for local people all over the globe, as it has helped to define land as 'up-for grabs', legitimising the dispossession of indigenous people by western settlers. Conservationists are only recently becoming aware of the historical, political and cultural connotations of their terminology. In 1995, the Ninth Conference on Eco-politics for example, accepted a resolution which called the term 'wilderness' unacceptable due to its connotation with the concept of *terra nullius* (Freeman 1998). Other organisations, oblivious to the political connotations of their jargon, redefine 'wilderness' in a technical sense and continue to use it.

Such laws and policy prescriptions thus continue to enforce preservationist intervention practices.

In the second place, there is fear. Many scientists fear that if people are recognised as part of nature, or if we deconstruct the conservationist narrative to show the cultural values inherent therein, such opens the floodgates to free for all degradation (Cf. Soulé and Lease 1995). In this view, it is politically more opportune to maintain a strict separation between nature and people, however artificial, and to fall back on semi-scientific notions of 'native' biodiversity, than to go into complex political debates about what to do with the environment with an array of political interest groups. The dual role of ecologists as both environmentalists and scientists also plays a role. In order to bring their personal values forward in the world, claim authority to speak on behalf of nature and grab the necessary attention to do so, conservationists can not do without their status as scientists, an emphasis on doom and gloom and the halo of expert objectivity. Agreeing that their views are value-imbued, risks reducing their status to that of just another special interest group and reduces their claim to make decisions about the use of other people's resources (Takacs 1996).

Thirdly and finally, there is complexity. Accepting that environmental issues are not a choice between the absolutes of pristine wilderness and human use, but a political and cultural preference for certain lifestyles, landscapes and environmental uses complicates conservation policy to a great extent. Managing resources in a natural and human world in flux, simultaneously dealing with local people, their definition of nature and what to do with it in a continuous political process of negotiation, coercion and compensation, is infinitely more difficult than a approach based on spatial zoning. Consequently, the conservation establishment continues to bring forward the old preservationist messages.

The remainder of this chapter describes how not the findings of new ecology, but in the first place the social consequences of preservationist policies, the process of decolonisation, and the increasing ability of indigenous people to strike back at conservationists are forcing the latter to change strategy.

NARRATIVES OF COMMUNITY-BASED CONSERVATION

After World War II, western concerns with the willingness and capability of the new post-colonial governments to establish new parks and maintain the integrity of existing national parks became an important issue. Burnett and Butler Harrington (1992: 160) suggest that the brunt of park creation in Africa was 'jammed' into the few years between World War II and the beginning of African independence and suggest that 'many of these parks were rushed into existence with little thought about their purpose, the integrity of their borders, or their consequences for local people' As before the war, international attention focused on Africa with its large charismatic species and rapidly growing human population (Boardman 1981).

Several international conferences on the future of national parks in Africa were held, aiming to influence the public opinion on conservation in developing countries. These conferences made clear that there was a wide gap between western conservation and African social and economic development priorities (Adams 1990). They also made clear that the establishment of national parks imposed serious hardship on local people and that where colonial Governments had generally shown little concern over the consequences of park formation for local people, the new democratically elected governments could not sustain such a myopic view.

Many people living inside and around protected areas not only suffer from a loss of resources and property as a result of conservationist dispossession but also suffer from the psychological, cultural and socio-economic impacts of forced relocation and the brutality of the wardens, police and internal security forces in charge of the protection of national parks (Colchester 1994, Cf. Peluso 1993). The ultimate example of the disaster that the fortress model of conservation can bring to local populations is illustrated by the plight of the Ik, a small group of hunter-gatherers living in the game riddled forests of the Kidepo valley in north-western Uganda. By the end of the 1960s, the Kidepo Valley was designated as a national park. Ignoring the fact that this small group of people lived in relative harmony with their environment, the Ik were evicted to a number of densely populated settlements where they were told to farm under the watchful eye of a local police post. Hunting and gathering, their main form of subsistence was now called 'poaching' and severely punished. The result of this displacement was a total loss of social values, norms and attitudes, large-scale hunger and starvation, prostitution, violence and neglect that heralded the end of Ik society and culture (Turnbull 1972).

Such evictions are not a thing of the colonial past. In Sri Lanka during the 1980s similar initiatives saw the Vedda people removed from their home territory, while 1988 saw a Masaai group evicted from their village near Ngorogoro Crater in Tanzania (Gray 1991). Feeney (1993 in Colchester 1994) describes the 1992 forceful eviction of 30,000 unsuspecting indigenous people living near Kibale Forest Reserve and the Queen Elizabeth National Park in Uganda as part of a European Community funded project aimed at creating an elephant corridor between the forest reserve and the national park. The project led to a further impoverishment of local people when they were evicted. The police action itself was characterised by the use of violence, the looting of property and the burning of houses and led to the death of several people. Such events are not restricted to developing countries either; Shkilnyk (1985) tells of the displacement and cultural destruction of the Ojibwa tribe in Canada.

These preservationist practices are usually legitimised by invoking an image of local people as being inveterate poachers whose destructive practices threaten the future of nature and wildlife. In reality, however, local people can not simply be scripted as 'poachers'. Zimbabwe's Northern Game Park, for example, mainly suffers from organised groups of Zambians crossing the border (Duffy 2000). In the case of Amboseli National Park in Kenya, local Maasai actively assisted in reducing

poaching and spearing during the early 1980s (Western 1994a). Such finesses are lost in the stereotype of the 'destructive native', which in the media becomes supported with the grim images derived from the intensive anti-rhino and elephant poaching efforts. In the first place, the facile opposition between the definition of local people as 'wildlife poachers' and game wardens as 'wildlife protectors' also conceals the fact that the anti-poaching squads and game departments themselves are heavily implicated in illegal hunting and the ivory trade (Duffy 2000, Gibson 1999). In the second place, it underplays the social consequences of the war on poachers that is being fought. According to Colchester, for example

> The Kenya Wildlife Service ... has since 1989 been involved in a virtual 'war' on ivory poachers and has summarily killed, without charge or trial, literally hundreds of indigenous people. Like wise in the Central African Republic, French soldiers have admitted to a 'take no prisoners' policy in eliminating poaching, even killing off wounded poachers brought down by their guns' (Colchester 1994: 24-25).

Duffy (2000) describes the Zimbabwean shoot-to-kill policy that saw 170 poachers killed, some of them summarily executed, between 1984 and 1993. This policy was legalised by a 1989 act that indemnified anti-poaching personnel for the consequences of any action carried out 'in good faith'. The parks department also set up a rewards system that paid rangers for the capture/killing of poachers. These actions were applauded by many western conservationists who conveniently forgot that the people in question were killed without trial.

The social costs of displacement, the behaviour of the game departments vis-à-vis local people, and the numbers of people killed without trial, have led many critics to argue that preservation-oriented conservationists systematically neglect issues of social justice. A number of commentators have pointed out that conservation efforts are often used as a cover for extending state control into rural areas (Peluso 1993, Neumann 1997). Environmentalists are obviously not unaware of these issues, but have tended to focus on containing the violent backlash that their policies triggered by intensifying their management and control efforts, rather than on questioning the policies themselves. From the 1970s onwards, however, it became increasingly apparent that resident populations were fighting back in a variety of ways, ranging from open revolt to the random killing of wildlife and incendiarism (Brown and Wyckoff 1992, Pimbert and Pretty 1995, Wells and Brandon 1992, Western 1994a).

Such struggles, combined with the growing call for justice by afflicted communities, the questioning of the moral right to inflict hardship on poor people without at least some form of compensation, the ascendance of NGOs focusing on human rights and the recognition that a policy of ever tighter controls was not sufficient, gradually forced conservation agencies to think about ways of integrating notions of human development with the conservation of nature.

THE MAN AND BIOSPHERE PROGRAMME

While the linkages between conservation and development problems were becoming increasingly obvious and politically sensitive, it was also becoming clear that environmental concerns required a more international approach. The global nature of environmental problems became a key point of discussion at the Biosphere Conference of Paris 1968 which had the merit to be the first international forum to assert that the conservation of natural resources should be achieved in conjunction with their use for human benefit. This constituted a paradigmatic departure from the preservationist model, which had driven post-war conservation (Adams 1990).

The year 1971 saw the establishment of the Man and Biosphere (MAB) programme which aimed 'to develop within the natural and social sciences a basis for the rational use and conservation of resources of the biosphere and for the improvement of the global relationships between man and the environment' (in Kellert 1986: 101). The programme consisted of a range of research and resource management projects aimed at preserving a cross section of world-wide environments (Batisse 1982). The MAB was given an exhaustive and open-ended series of objectives that allowed increasing attention to be paid to the interaction between natural ecosystems and socio-economic change. Project 8 covered conservation issues aiming to conserve 'natural areas and the genetic information they contain through the establishment of biosphere reserves'. The main criteria for selection of such reserves were the need to include as many different biogeographical areas as possible (Adams 1990).

At the basis of the biosphere reserve concept stood the idea that through multi-disciplinary research sustainable and acceptable forms of development and conservation could be identified and transferred to local populations. The assumption was that if local people were made aware of the importance of conservation they would readily co-operate in a joint project for the benefit of mankind. As Battise (1982: 107) wrote optimistically:

> 'experience already shows that when populations are fully informed of the objectives of the biosphere reserve, and understand that it is in their own and their children's interest to care for its functioning, the problem of protection becomes largely solved. In this manner biosphere reserves become fully integrated – not only into the surrounding land-use system, but also into its social, economic and cultural reality'.

The MAB concept also stood at the basis for the now increasingly common sense notion that local people should 'ultimately benefit from the protection measures and the results of research' (Batisse 1982: 108-09). What these benefits were to entail, who was to benefit and who was not, and what time horizon applied, was usually not stipulated and continues to be one of the key issues in community-based conservation.

Although theoretically attractive, the management models proposed by the MAB programme proved difficult to implement. Stakeholders with a variety of interests continued to exert pressure on the biosphere reserves in much the same way as they

did before on national parks. The newly established reserves in turn continued to impose limitations on the use of resources by indigenous populations, thus keeping the fundamental tension between the interests of local people and those of the conservationist constituency alive. The Biosphere Reserves were centred on a so-called Core Conservation Areas which became ringed by buffer zones of decreasingly restricted use, creating a 'bull's eye of preservation' (Katz 1998; 55). The interior buffer zones around the Core Conservation Area were generally designated for education and training as well as for environmental research, while a second outer buffer zone could be used for certain limited resource uses such as timber extraction, grazing and fishing (Batisse 1982). As Governments designated their existing parks as the core areas of the new MABs, the need to establish buffer zones led to a further alienation of land and resources thus hardening rather than softening the contradiction between local people and conservation interests.

This led to the paradox that while the establishment of buffer zones is generally justified by reference to the encroachment of growing populations, parks themselves also 'encroach' on local people. Buffer zone establishment extends the reach of conservationist control over the property of local people, continuing the process of alienation characteristic of national park establishment (Neumann 1997). Not surprisingly, people living inside and around national parks see the implementation and expansion of strict conservation regimes, even as part of the more considerate MAB strategies, as a choice in favour of flora and fauna and against local people (Kellert 1986). As a Malagasy colleague of Kottak (1999:27) remarked: 'The next time you come to Madagascar ... All the people will have starved to death, and a lemur will have to meet you at the airport'. Again, these issues are not restricted to non-western countries. Stoll-Kleemann (2001) for example, documents the widespread local resistance against protected area establishment in Germany.

Where the rhetoric of the MAB emphasised the integrated nature of economic and environmental interests practice remained preservationist in nature. Over time, however, the benefit of the MAB concept lay in the fact that for the first time conservationists had to start thinking about the welfare and rights of the people living inside and around protected areas. Increasingly conservationists became aware that it was the uneven division of costs and benefits that lay at the root of the conflicts generated by conservation interventions. As a result buffer zones developed from being physically delineated areas around the Core Conservation Areas, to zones in which the interests of the various stakeholders involved in protected area formation had to be combined in a manner acceptable to all. It is in this latter capacity that the experiences gained in buffer zones have laid the foundation for a flurry of community-based and integrated conservation and development projects. Although conservation proponents continue to defend the inviolate status of the Core Conservation Areas within the Biosphere Reserves, they have increasingly come to realise that national park management could no longer be approached as a purely managerial issue based on a process of spatial zonation.

Park management nowadays involves complex ecological, political, economic and social trade-offs in which a variety of stakeholders exert influence.

FROM BUFFER ZONE MANAGEMENT TO COMMUNITY-BASED CONSERVATION

Gradually, the dominant preservationist idea is being challenged by a view aimed at including local people in the management of natural resources. This perspective has become known under the various titles such as 'community conservation' and 'community–based conservation' which have a variety of 'joint', 'co' and 'participatory' management styles in common. All of these approaches, jointly dubbed the 'new conservation' by Hulme and Murphree (1999), pursue conservation goals by including, rather than excluding local people in decision-making. This does not mean that the preservationist ideal of 'setting wild nature aside' no longer plays a role, but it is at least a negotiated process in which local people have a say and may be compensated. The roots of this new vision can be traced to a number of developments.

In the first place conservation thinking is making a shift from the preservationist framework aimed at segregating humans from nature towards notions of 'eco-development' and 'sustainable development' which aim to integrate the needs of humans with that of nature. The call for sustainable development rather than national park formation, and a new emphasis on the conservation of biodiversity outside protected areas was - in Africa at least – aided by the recognition that reducing conservation to 'islands' in a sea of degraded landscapes offered no hope of survival of the large migratory species (Western 1994a). The same insight has led many densely populated European countries to integrate the requirements of conservation with human activities in a living multi-purpose landscape (Harmon 1991). In this perspective, the community comprising of local people and their resources has become the locus of intervention.

A second element leading to a renewed focus on the responsibility of local people in conservation comes from a shift in thinking on the role of the state and its public policies vis-à-vis civic society. Where until the 1970s the state with its national parks was seen as responsible for managing the public interest, the 1980s would witness an increasingly influential communitarian movement which shifted away from the view of the state as an omni-present problem-solver and provider (Etzioni 1993). Instead, individuals and their communities were to take charge of their own affairs, assuring accountability through local democratic, and often informal institutions. This view was reinforced by a number of neo-populist theories that emphasise the importance of popular participation in development and conservation interventions. At the basis of this new emphasis on community involvement in development policy and practice stands what has been called a 'moral economy' view of non-western communities (Scott 1976, see also Popkin's (1979) discussion of this perspective). This view represents the idea that indigenous people essentially tend towards social and environmental harmony, but as 'fallen angels' (Berkes 1999), are

pushed into degradation and social conflict by the imposition of inappropriate technologies, market-based pricing structures and unequal power relations.

Policy recommendations stemming from this analysis waver between the extreme of what Milton (1996) calls an 'anti-globalist perspective' propagating a complete decoupling from world markets and political systems, to an increasing emphasis on the use of participatory problem analysis and development. The former view, entailing a withdrawal into the boundaries of the community in order to restore previously used livelihood systems and the supposedly harmonious relations of the pre-capitalist community, is restricted to a number of activist groups and theorists. The use of participatory methods, however, has become central to virtually all present-day development and resource management interventions. The emphasis on participation is part of a wider change in development thinking which took place during the 1970s and to which community-oriented conservationists are also catching on. This is generally presented as a shift from top-down to bottom-up planning and implementation approaches; from an emphasis on standardisation towards increased attention to local diversity; and from a blueprint implementation approach towards a view of project implementation as a dynamic process (Esman and Uphoff 1984, Korten 1987, Chambers 1992). It is nowadays not only fashionable, but a plain necessity in order to secure funding to profess ample interest in the views and opinions of the involved 'stakeholders'. This general enthusiasm, however, hides a range of participatory practices (See Bass et Al. 1993).

A third cause for the increased focus on the role that 'local' and 'indigenous' people may play in the conservation of the environment lies in the strategic and symbolic coalition between local people, indigenous advocacy groups and the international environmental movement. Until recently, environmentalists saw the presence of people in valued natural environments as an obstacle to conservation, while the indigenous advocacy movements emphasising indigenous people's right to cultural survival and self-determination was not particularly interested in conservation issues. During the late 1980s, however, these two movements would find each other in a media-driven strategy, which coupled the image of indigenous people as 'guardians of nature' with the need to preserve cultures *in order* to look after nature. This shift was triggered by the rising interest in indigenous knowledge as a means to understand natural environments and the useful elements that these contain. Therefore, environmental planning became increasingly imbued with development notions emphasising social equality, good governance and the preservation of local culture.

An important side-effect of this approach was that it legitimised western environmental interventions in developing countries. Rather than being perceived as eco-imperialists intent on meddling in national affairs and dispossessing local people of their natural resources, environmentalists now at least had an ally in indigenous people. In addition they could take the moral high-ground by arguing that they were talking about human rights as much as about nature. To the indigenous advocacy groups, the projection of local peoples as 'stewards of the

rainforest' was a public-relations bonanza. Public opinion in western countries was greatly concerned with rainforest issues, but much less so with the plight of local people within developing countries. By coupling images of exuberant forest with the othering images of supposedly 'pure', 'exotic' and 'natural' body-painted indigenous peoples in feathered head-dresses public media attention was guaranteed. Both the human rights groups 'going green' as well as the environmental groups 'going native' had much to gain from this strategic alliance, even if their agenda's were not necessarily mutually compatible (Conklin and Graham 1995).

A fourth reason for the sudden emphasis on communities over state-machinery resulted from a shift in emphasis from a managerial approach based on a policy of prohibition, to a more economic approach to conservation. This latter view was first recognised in the World Conservation Strategy (IUCN/WWF/UNEP 1980) which emphasised the importance of local participation in protected area planning while at the same time stressing the need to make people benefit from conservation. Rather than emphasising the vague collective and long-term benefits from MAB establishment, this approach led to a search for mechanisms that would enable local people to make a living *from* conservation rather than having to bear the cost *of* conservation. This position was reaffirmed at the 1982 conference on National Parks in Bali and led to a search to establish effective linkages between conservation and development activities (McNeely and Miller 1984).

In 1985 the drive to make conservation-activities more people-oriented led to the establishment of the WWF Wildlands and Human Needs Program. This program aimed to establish 20 protected areas in developing countries where equal emphasis would be given to development and conservation aspects. The methods which have since evolved cover a range of operations and activities with widely different scales of operations, but have in common that they attempt to tie the development interests of local resource owners with the conservation interests of the donor. It is this gradual merging of conservation and development issues at the community level which laid the ground work for a new series of 'integrated' approaches to nature conservation and development.

INTEGRATING CONSERVATION AND DEVELOPMENT

The neo-liberal interest in development as a means to influence conservation issues has led to a proliferation of thought on the relation between conservation and development, resulting in a variety of policy recommendations in addition to the traditional preservationist and conservationist arguments. These old views would during the 1980s be complemented by views basing themselves on the role of 'the market' and neo-liberal pricing policies. In order to achieve public goals such as development and conservation this view argued that one had to start with 'getting the prices right'. Any policy opposing the direction indicated by cost-benefit analysis was doomed to fail. In this economistic view, conservation was typically a

skewed cost-benefit issue where local people were made to bear the costs of conservation, while the 'global community', tourists and the state reaped the benefit. If local people would benefit from protected area establishment than conservation measures could be freed from their sharp edges. It is this view which lay at the basis of attempts to make conservation pay.

Many of the first Integrated Conservation and Development projects (ICAD) aimed at finding suitable sustainable income-generating activities that could be undertaken within the buffer zones to alleviate human pressure on the protected area. The integration of conservation regimes with local development has over recent years increasingly led environmentalists to present protected area establishment as a form of development. A policy paper by the IUCN on the establishment of parks as depositories of biodiversity for example, argues that:

> 'Protected areas are not an end in themselves... Simply stated, they are tools for development – a special kind of development that respects both people and nature; a development conceived to meet the needs of today without sacrificing the potential for tomorrow' (IUCN 1999a:7).

Such statements are not just rhetoric, but have, with the development of ICADs become part of the 'toolbox' of present-day conservation. The question whether such methods indeed generate a level of income and services sufficient to keep local people from exploiting protected resources is subject to much debate and in any case highly context specific. The principle itself is under fire by those that argue that linking development and conservation near national parks only increases the rapidity of environmental exploitation.[12] This new conservation narrative revolves around the vision of poor people as economically rational actors. The view of non-western people as being essentially economically rational actors differs from the 'othering' strategies mentioned above. Whereas the images of the destructive or romantic 'native' are formulated in contrast to the western world, the image of the economically rational actor does not make a distinction between western and non-western people, simply assuming that all human behaviour is guided by economic principles. Although one can argue about its premises, in this sense the neo-liberal perspective is more mature. Notwithstanding the proclaimed universality of economic theory, the events recounted in this thesis suggest that - certainly in the opening stages - the success of community-based conservation interventions appears to have less to do with economic incentives, than with the ability to maintain social relations in a format that is recognisable and acceptable to local people.

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[12] According to this view, policies aimed at increased urban and rural welfare through an intensification of economic development are more effective in protecting the environment than the preservationist policies revolving around protected areas. Southgate and Clarke (1993: 165) for example, argue that in the case of the Amazon the focus on the possible linkages between conservation and development in the immediate vicinity of a limited set of protected areas is 'the worst shortcoming in the current campaign to save biological diversity' (see also Oates 1999).

With the idea that the state can influence behaviour by rewarding specific forms of behaviour also came the notion that people can be made to conserve their resources through the deployment of economic incentives and disincentives. The mainstay of this economistic view of conservation is that natural resources are there to be used, and that part of the task of environmentalists is to 'unlock' the monetary value of these resources by turning them into marketable, but sustainably-managed commodities. This 'use it or lose it' approach means that communities can be seen as business-units with their natural resources as their assets. It is this view of nature as a community-owned and exploitable resource, which has led to a raft of research into community-based forms of sustainable forestry, non-timber forest product use, eco-tourism, wildlife ranching, big game hunting and bioprospecting. While Escobar (1996: 47) argues that capitalism develops 'a conservationist tendency' in order to profit from the products and services of biodiversity, it is thus equally true that present-day environmentalists are actively developing 'capitalist tendencies' in order to make their case for nature.

The resulting 'conservation-with-development' (Stocking and Perkin 1992) or 'integrated conservation and development' approaches aim to develop income-generating activities that are predicated on the continued existence of a more or less undegraded environment. Such approaches take a variety of different shapes as they cover a range of operations and activities with widely different scales of operations and modes of participation. They have in common, however, that they tie the interests of local resource owners with the conservation interest of the donor. In practice this is done by developing conservation-related activities, which aim to meet the income-earning aspirations and other welfare objectives of the involved communities in such a way that destruction of natural resources leads to a loss of economic opportunities and services. The establishment of 'explicit linkages' between 'the planned realization of social and economic benefits by people living *outside* the park ... and the necessary behavioural response the project seeks to achieve to reduce the pressure *inside* the park' (Wells and Brandon 1992: x) lies at the hart of the ICAD concept. By forging linkages between environmental management and income generating activities, the economic benefits derived from an intact environment increase, thus reducing the incentive to seek more destructive development alternatives.

The growing importance attributed to the socio-economic aspects of conservation has also meant that conservation managers, biologists and ecologists have increasingly been confronted with proponents of the social sciences in the form of economists, sociologists and anthropologists, lawyers, and specialists in community development, training and communication. McNeely and Guruswamy (in IUCN 1999a: 9) note how environmentalists now have to share

> 'a larger and more important political stage with agricultural scientists, NGOs, anthropologists, lawyers, economists, pharmaceutical firms, farmers, foresters, tourism agencies, the oil industry, indigenous peoples and many others. These competing groups claim resources, power, and privileges through a political

> decision-making process in which biologists, local communities, the private sector, and conservationists have become inextricably embroiled.'

Co-operation between the managerially-oriented ecologists and social scientists is not always easy. Not only do both fields of study and practice consist of expert systems with their own rules of debate, concepts, language, training and culture, but also their focus is very different. Where conservationists tend to focus on the needs of nature, social scientists often aim to represent the interests of local people, thus reproducing the conflict between nature and people within the project teams responsible for the implementation of such 'integrated' conservation policies.

Notwithstanding the new tools and the resulting debates between conservationists and social scientists, the policy of separating of mankind from protected nature, continues to be the essential focus for most environmental agencies. The main difference with the past is that conservationists now combine a variety of tools in one intervention. Thus community-based conservation has not replaced national park formation, but is used in conjunction with more strictly protected regimes. Blue-print approaches have not been discarded, but are being 'softened' by allowing room for participation on carefully selected issues. Integrated conservation and development projects to stabilise or establish protected areas are an example of an approach which combines both preservationist and conservationist elements by aiming to maintain the inviolate status of its Core Conservation Areas, while dealing with local people through a number of integrated sustainable development activities, compensatory packages and co-management regimes in its bufferzones.

CONCLUSION

The introduction into the origins of western conservation thinking, the role of the colonial experience in framing conservation ideas, and the influence of the ecological sciences help to define the basic ideas behind national park management as they emerged during the 1930s. The perceived weakness of wild nature, the valuation of natural over man-made landscapes, combined with a negative conception of indigenous resource-use would be contrasted to the allegedly beneficial activities of the colonial administration. As a result, national park establishment is not only linked to western conceptions of man and nature, but also irrevocably linked to a history of class justice and racism, processes of land alienation and forced relocation, and the suppression of local livelihood practices.

Not surprisingly, the history of national park establishment shows that strict preservationist policies have mainly been implemented in societies characterised by a strong state. Typically, this has been the case in the United States, in Africa and in India where local populations have been evicted from vast expanses of land in order to make room for nature. Conservation interventions in these countries have generally been supported and legitimised by stereotypes projected on local people. This chapter has identified several of these stereotypes. The main ones are the

disparaging view of indigenous people, which brands their practices as 'inefficient, destructive and backward' and the romantic view of local people which regards them as 'natural conservationists' living in harmony with their environment. A variety of the latter type is that of the 'fallen angel'. This view reflects the idea that people used to live in harmony with their environment, and would again do so if only they could, but are pushed into environmentally degrading behaviour as a result of the imposition of market-based pricing structures and unequal power relations. A more recent typecast is the view of the 'economically rational native' which lies at the heart of recent 'use it or lose it' approaches central to ICAD methods. In many conservation programs, a number of these stereotypes are employed concurrently, as part of the implicit or explicit assumptions that underpin these interventions.

The process of decolonisation, the emancipation of indigenous peoples, the establishment of national and international pressure groups, new forms of communication, and an increasing emphasis on issues of democracy, good governance and human rights have increased the ability of local people to speak up against conservation interventions. Even where states - often with the support of the international community - are willing to implement protected area schemes, there is a growing awareness of both the cost imposed on local people as well as their ability to influence, modify and jeopardise these schemes. In order to soften the consequences of park establishment, and reduce the level of conflict around protected areas, an array of methods and concepts have been developed which have a focus on environmental education, compensation and participation in common. This way of looking at environmental management has been strongly influenced by the development debate where notions of 'community development' and 'participatory planning' find their mirror image in concepts such as 'community-based conservation' and 'participatory resource management'. In practice, the compensation given to communities living inside and around national parks takes the form of economic and social services which constitute a 'carrot' with which people are enticed to leave protected resources alone.

The shift from preservationist policies towards more relaxed notions of conservation involving issues of compensation, participation and co-management nowadays means that most conservation professionals managing protected areas find themselves using a variety of conservation instruments. The wielding of the 'stick' of state coercion on the one hand and the dangling of the 'carrot' of development-oriented activities on the other, have become complementary strategies in the toolbox of the modern environmentalist. In addition, present-day conservation interventions try to embed protected area management in the consciousness and day-to-day practices of local people through intensive environmental education campaigns, the establishment of sustainable income-generating activities and the development of 'para' research programs aiming to integrate western environmental expertise with local knowledge.

This 'new conservation' (Hulme and Murphree 1999) has also led to a shift in the types of professionals working on protected area establishment and management. Where in the past conservation was the domain of biologists, ecologists and conservation managers, usually opting for a rather technocratic, top-down and science-based approach, conservation nowadays also includes the activities and visions of anthropologists, community development specialists, economists and lawyers. The wide range of different practices that nowadays take place under the notion of 'conservation', and the variety of actors involved mean that such interventions are characterised by a variety of ideologies, narratives and professional and cultural views which may only become apparent in a detailed analysis of the day to day practices employed in conservation interventions. This study attempts to provide one such description.

As a final comment I wish to note that the various narratives of community-based conservation have thus not replaced the dominant discourse of national park formation but that elements of both community-oriented approaches are now often used in conjunction with more strictly protected regimes. Blue-print approaches have not been discarded but are being softened by allowing room for participation on carefully selected issues, and most existing national parks have now been retrofitted with some sort of community development package. Both the strict 'fortress-style' policies of the past, as well as the situation where the state only entices people into conservation activities are rare. Such a latter situation, however, is the topic of this study, as it is in the narrative of incentive-driven community-based conservation - without the possibility of using coercive measures - that Papua New Guinea plays a role.

Chapter 2

CONSERVATION WITHOUT COERCION: CONSERVATION POLICY IN PAPUA NEW GUINEA

INTRODUCTION

The past chapter has described international conservation efforts as an essentially political and cultural project in which conservationists tend to structure the object of their interventions in such a manner that the establishment of protected areas appears to be the only reasonable possibility to avoid the total collapse of global ecosystems. As I have argued, this dominant policy narrative is based on a selective set of assumptions, many of which are a source of considerable discussion. I have also argued that it is not so much the scientific debate, but the social consequences of protected area establishment, which have triggered a range of new incentive-driven, community-based and participatory approaches towards protected area establishment. In the remainder of this thesis, I will argue amongst others that the narrative of the preservationist program is not only incompatible with the way in which 'local people' in PNG perceive their environment, but also tends to have very little impact on the actual outcomes of these interventions.

As argued in the introduction, part of the unpredictability that characterises project interventions is the result of the responses by local people. Part of it, however, is also a result of issues playing a role on the side of the project implementers themselves. These issues are also political, but have more to do with the daily difficulties that policy makers and planners face in dealing with social complexity and unpredictability, how to legitimise interventions in the face of complex administrative requirements, issues of authority, accountability and control, and the personal need to maintain jobs, avoid a loss of prestige, build careers and safeguard institutional continuity. Once people involved in project implementation start communicating, not just their ideas of what constitutes reality, the culturally-determined perceptions of 'nature', 'local people' and 'what should be done', but also the micro-level strategic goals and representations become part of that process of communication. The choice of words, the idiom in which problems are phrased

and the images used constitute 'political' choices which allow people to influence and pressure each other in order to reach their goals. Such representations can thus not be seen as the decontextualised expression of a certain worldview, but have to be seen as inextricably linked to issues of power, sets of cultural practices and – in many cases - as a strategic tool.

One particular issue that may affect the choice for one particular narrative over others may have to do with the specific requirements of the institutions to which conservation practitioners belong. A well-known example of how projects create interpretations of an intervention situation to suit their administrative and political needs stems from the work of Hirschmann. Already in 1968, his *Development Projects Observed* argued that the manner in which such projects are being represented towards decision makers is highly selective and strategic. Hirschmanns 'hiding hand' principle describes the situation whereby project planners systematically underestimate the troubles that they are likely to encounter, while overestimating the benefits in order to get the project started. In some ways, such strategies are fortunate because they allow people to undertake projects that would otherwise never have come off the ground.

Whether these projects ultimately end up being failures or successes, depends on the question whether the project executing staff manages to find solutions to the problems they encounter during implementation. According to Hirschmann the extent to which project staff will invest effort into solving these problems in turn is largely determined by the degree to which the project has been 'caught' by the time these difficulties arise. Thus, project teams that have committed substantial funds, time, energy and personal and professional prestige will be strongly motivated to solve the problems that they are confronted with. Such teams may actually pursue projects well beyond what would appear rational to the outsider.

This chapter will argue that whereas the practice of 'fortress conservation' (Hulme and Murphree 1999) described in the first chapter represents one extreme on the continuum between incentives and fines, the other is represented by the situation in PNG where conservation interventions have largely come to rely on inducements and protracted negotiations with Papua New Guinean communities. The second half of this chapter will present the Biodiversity Conservation and Resource Management Program, provide an account of the experiences of its first Integrated Conservation And Development (ICAD) intervention in Lak in New Ireland and the manner in which the project produced a new intervention model for its second ICAD site during its withdrawal from the Lak area.

SETTING THE SCENE: PEOPLE AND NATURE IN PAPUA NEW GUINEA

Papua New Guinea covers the eastern half of the island of New Guinea. The mainland is bordered by four large and some 600 smaller islands, ranging from Manus to the north, to Bougainville in the far east. The mainland is shaped by the

collisions of the northward moving Australian tectonic plate with the Oceanic-Pacific plate pushing up the east-west mountain range that constitutes the 'spine' of the Island of New Guinea. Over millions of years the run-off from this steep cordillera, at its highest point some 4500 metes ASL, has created the vast floodplains of the Ramu and Sepik Rivers to the North and the Fly and Strickland Rivers to the South.

Papua New Guinea is home to some 4.5 million people. The population is officially growing at a rate of some 2.3 percent, but this is likely to be an underestimate. Population densities, on average some 10 person per square kilometre, vary widely. The highlands, parts of East New Britain and the Torricelli range being populated by more than 50 persons per square kilometre, while some coastal and lowland areas are characterised by population densities of well below 2 persons per square kilometre. These low density figures should not be taken to mean that parts of PNG can be considered uninhabited wilderness. All of PNG's ecosystems are impacted by human activities in the form of gardening, hunting, fishing, burning, and the cultivation of semi-domesticated food crops such as sago and pandanus nuts. Many of these activities have left clear marks in the landscape; others may be more difficult to see.

The most critical feature of PNG natural resource management is that land and resources are owned by a large number of clan groups. These tenurial rights over 97 percent of all land are recognised in the Constitution. A mere three percent is State-held. Customary tenure not only covers land and terrestrial flora and fauna, but also extends into freshwater and marine resources, covering beaches, reefs and fishing grounds. Only open seas, mineral resources and Government land – usually purchased during colonial times - are vested in the State. Land in PNG is essential, not only in the economic terms of subsistence and cash crop production, but also in socio-cultural and political terms, as a source of identity, unity, status and security. Also people living in modern urban centres, working in a rapidly modernising public and private sector, expect to retain customary rights to land in their place of origin, where most of them plan to retire and virtually everybody expects to be buried. The feelings that local people have towards land can be expressed in the dictum that not the land belongs to people, but that the members of a particular clan belong to the land. The land is permanent, while its occupants are only passers-through.

The Australian Colonial Administration treated the landownership issue rather carefully, generally accepting that people should retain rights to their land and resources. In principle land could only be leased by the State for specific purposes, when the landowners agreed, and when the ceding clan had land in surplus to its own subsistence needs (Clarke 1977). In general, groups have been reluctant to sell their land. Towards the end of colonial administration, it became clear that the difficulties encountered in alienating communally-held lands for public purposes constituted an obstacle to economic development. The 1963 *Land Tenure (Conversion) Act* allowed landowning communities to individualise their tenure by mutual

agreement in a bid to change the status of landholdings from common-held property, which could not be sold as it belonged to the community at large, to an individually-held asset which could be disposed off as the owner liked. A newly established Land Titles Commission became responsible for demarcating and registering titles to land. Few communities made use of these provisions. In places where they did, the appearance of a new body of law next to customary arrangements exacerbated existing land conflicts, while those that sold off land in the past used the act to reclaim lost property or push for additional compensation. Consequently, land issues are among the most highly politically charged conflicts in PNG (Filer with Sekhran 1998).

Although the *Land Act* formally allows for the alienation of land and resources in the name of the public good, such alienation has rarely occurred since Independence in 1975. Due to the politically sensitive and technically problematic nature of land alienation it is safe to say that the Government of PNG has no practical means to access, manage or exploit natural resources without the co-operation, and compensation of local resource owners. This tenure arrangement has great implications for both the provision of public services and private sector investors, as this power balance between communities and the state, implies that groups of landowners, and not the Government, are the first interested parties when it comes to negotiations concerning the use or non-use of natural resources. The realisation that clan groups collectively own resources and may use these as productive assets within the legal framework set by the state is also recognised in PNG business law.[13]

Filer (1997a) notes how landownership has not just become a political feature of the country, but has congealed into an ideological construct in which Papua New Guineans distinguish themselves from other peoples by virtue of their strong attachment to land. This ideology tends to deny the possibility that a Papua New Guinean can be landless, or for that matter, that land can be ownerless. The idea that each and every PNG citizen is always a 'landowner', combined with the notion of the sheer abundance of the country's natural resources, suggests that Papua New Guineans are at worst temporarily disenfranchised people waiting until their natural resources are converted into hard cash by outside companies. Based on this view, many rural groups in PNG are desperately trying to attract foreign investors to bring them the riches supposedly associated with landownership (see also Ballard 1997). The fact that in many instances people may be 'functionally landless' (Howlett 1973) as they have land of little practical value, does not fit this ideology.

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[13] The *Land Groups Incorporation's Act* (1974), for example, allows customary land groups to register their traditional social unit as well as their land, and resources by law. Once registered the group acquires corporate status with its natural resources as its assets, the use rights and dividends of which are still distributed as under customary law. The Act allows Incorporated Landowner Group to hold, manage and deal with its land and resources and provides a vehicle to deal with other national and international corporations (Holzknecht 1994). Similarly the *Business Group Incorporation Act* (1974) provides for the incorporation of groups of people who wish to conduct business in a unit based on clan ties and/or shared landownership. The act allows people to model their business groups on pre-existing social forms and is based on an ideology of kin relatedness and mutual aid (Brooks 1996).

A second issue that needs to be mentioned here is the raging debate over the land registration component the World Bank/ IMF Structural Adjustment Program. Part of this program was a 1995 attempt to improve the registration of customary landownership. The World Bank tends to regard customary landownership as a hurdle to development as unregistered land clan-held lands can not be bought or sold. This also affects credit provision to the rural sector, as land can not function as collateral either. The World Bank, by emphasising the need for land mobilisation in a draft document, underestimated the ideology of landownership described above, triggering co-ordinated protests across the country and riots amongst students in Port Moresby. A coalition of students, NGOs and influential politicians opposing the Structural Adjustment Program managed to depict the move as an attempt by foreign exploiters to register and alienate land from its customary landholders, thus destroying the Melanesian way of life, and triggering impoverishment for the masses that – it was suggested – were about to be dispossessed.

This depiction of the drive towards land registration as an outside attempt to increase Government and foreign control over natural resources ignores the fact that the strongest pressures towards land registration are coming from within the country. A number of provincial governments have actually made moves towards the registration of customary lands in order to stimulate smallholder cash crop development (Filer *et Al.* 2000). At the village level, however, pressures towards registration are primarily a result of growing populations, and the fact that landownership is increasingly seen as the last possibility towards development, either through enlisting an outside company to exploit local mineral or timber resources, or by making land productive through cash cropping.

These patterns are visible in the densely populated highlands, where, in contrast to the ideology of communal landownership which prohibits the sale of land by individuals, one may see coffee plots for sale. Jimi people from the Kol area are known to purchase coffee lands on the other side of the Sepik-Wahgi divide. They assert their ownership through a combination of forging social ties with local clan groups, while also registering their holdings if they can (VanHelden 2001a). My Simbu colleagues from the Bismarck-Ramu project would explain that in highly populated Kundiawa, arable land was now seen as individual property, carefully marked with hedges and fences and upon inheritance divided over the male offspring. Attractive plots on the highway, suitable for the construction of stores of coffee buying enterprises could be sold and bought. In this study, I found that even in the scarcely populated Ramu Floodplains, individuals as well as groups of people are actively trying to assert land claims in a variety of ways, one of them being an attempt to register land in their name. In fact, I will argue that the professed interest in conservation by a number of Ramu clans, is in the first place an attempt to regain control over land and resources.

The close connection between groups of people and their land, and the fact that the country is still largely forested has made outsiders susceptible to the romantic interpretation of Melanesians as 'natural conservationists'. The argument goes that

as these people are so dependent on the direct returns from their natural environment, they can not be anything else than conservation inclined. This perception is flawed in a number of ways. In the first place, it is fundamentally at odds with the way in which most Papua New Guineans perceive themselves and their environment. Papua New Guineans are in the first place gardeners who make a living by converting forest into farmland and who are proud of that capability (Filer 2000). They often prefer to live in grassland, maintaining it with the use of fire, and it is usually only under duress that groups of people move into the forest (VanHelden 2000).

In the second place, this view ignores the fact that Papua New Guineans have not yet had to prove their conservation mettle as they are only starting to experience serious environmental degradation. Until very recently, a combination of low population growth and limited technology has curbed the extent to which people could transform their natural environment. The fact that people have been unable to significantly degrade their environment in the past says little over what they will do in the future. Like most people around the world, Papua New Guineans are highly pragmatic people, who may very well sacrifice their environment if it gives them a chance to a better and more 'developed' life. The eagerness, with which many landowning groups commit their forest and mineral resources to exploitation, suggests that the presence of a conservation ethic among PNG landowning groups is an exception rather than the rule.

BIODIVERSITY AND CONSERVATION IN PAPUA NEW GUINEA

Due to its rugged nature, its high levels of forestation, its many different local environments and its long separation from other landmasses, the island of New Guinea is characterised by a highly diverse and unique ecological make-up. Estimates by the *Conservation Needs Assessment* (Alcorn and Beehler 1993) and the *PNG Country Study on Biodiversity Diversity* (Sekhran and Miller 1994) suggest that PNG harbours some 5-10 percent of global biodiversity counting among others some 20,000 species of ferns and flowering plants; 190 species of mammals; more than 750 different species of birds; 497 species of reptiles and amphibians: 3000 species of fish, and at least 200,000 species of insect of which most are still to be classified. Among all of these groups the levels of endemicity is very high, ranging from an estimate of some 7,5 percent for flowering plants to some 53 percent for birds and 81 percent for mammals. A total of 54 species are under threat and listed on de IUCN Red List of threatened animals with some 14 species classified as endangered and about 40 as vulnerable (Miller *et Al.* 1994). The PNG Department of Environment and Conservation (DEC) has listed 72 species as being endangered.

Notwithstanding its spectacular and highly diverse natural endowment, PNG has not stood at the heart of international conservationist concerns for several reasons. In the first place, the country was one of the last places opened up by colonial exploration, with parts of the highlands of PNG only becoming accessible to

outsiders as late as the 1950s. In the second place, for a long time PNG appeared not to have a serious conservation problem. Being a large country with abundant resources and few people, conservation was less of a priority to the colonial administration than the pacification and socio-economic development of the country and its people. At Independence in 1975, the Fourth Goal of the National Constitution, in a phrase which reminds one of Pinchot's definition of 'conservation', explicitly called 'for PNG's natural resources and environment to be conserved and used for the collective benefit of us all, and to be replenished for the benefit of future generations'. In spite of the constant invocation of this charter in policy debates, the relationship between notions of 'conservation', utilisation' and 'replenishment' remain as debatable as ever (Filer with Sekhran 1998).

In the third place the land tenure situation has seriously hampered attempts to establish national parks as there was no legal basis for the nationalisation of communally held lands that has characterised national park development elsewhere. Not surprisingly, PNG has a very limited system of protected areas established under three different acts on both customary-held and state-owned lands. These areas cover no more than 2 percent of the nation's landmass and are not representative of its diversity of landscapes, ecological systems and flora and fauna. The 12 national park areas established under the *National Parks Act* are generally rather small due to the cost of land purchase, poorly managed due to a lack of resources, and in many cases subject to conflicting land and compensation claims. Other mechanisms such as Wildlife Management Areas, established under the *Fauna (Protection and Control) Act* provide local groups with a mechanism to manage hunting activities in order to conserve local fauna. Such areas constitute the dominant form of environmental protection, covering 27 sites ranging in area from just two hectares in the case of Lihir Island to 590,000 hectares in the case of Tonda in Western Province. In the eyes of international conservationists, however, such areas constitute a low-level protection mechanism as regulations are generally limited to the protection of fauna and as the enforcement of conservation regulations lies in the first place with the resource owners and not with the DEC. A third legal mechanism, the *Conservation Areas Act* of 1978 has never been applied due to a combination of bureaucratic ineptitude and political disinterest (Whimp 1995, VanHelden 2001d).

Conservation issues have little priority among PNG politicians, who are pre-occupied with meeting the nation's development objectives and securing their own political future. In 1998 the DEC was abolished and replaced by an Office of Environment and Conservation, while its meagre annual allocations in the national budget are rarely fully disbursed. Conservation monies are largely derived from foreign donors and disbursed through the public sector. The mining companies spend sizeable amounts of money on environmental impact assessment and mitigation measures, part of which is used for biodiversity related activities (VanHelden and Bualia 1994).

The prevailng community-based tenure system implies that policy and legislation concerning land and resource issues can rarely be used as directive mechanisms. In the context of PNG land tenure, one can very well find communities managing their natural resources without the involvement of Government bodies and legislation. The option of forcing a community into conserving its resources in the interests of society as a whole, however, is not possible. In general, the Government of PNG and intervening conservation agencies can not hope to conserve nature unless they develop instruments that make conservation directly attractive to local resource owners. This political constellation also emphasises the need for a genuinely participatory approach in which local people's views of nature, the management of natural resources, and the often strongly-felt need for socio-economic development are from the start integrated into project design, planning and implementation.

A SENSE OF CRISIS: FORESTRY, DEVELOPMENT AND GOOD GOVERNANCE

After the Amazon Basin and Central Africa, PNG has the third largest remaining tropical forests on earth. As by far the largest proportion of terrestrial biological diversity is to be found in the tropical rainforests, the rapid conversion of forest habitat, and its limited capability for regeneration after logging (Vigus 1993, Saulei 1994) are thought to be the greatest threat to biodiversity in the country.[14] The concern with tropical forests is a recent thing. Until the 1970s, the clearing of rainforest was internationally seen as a good thing as it meant that otherwise unproductive land was being made available for economic development. Scientific opinion swung around in the late 1970s when the destruction of tropical rainforest became a prime issue in the species extinction debate. Only during the early 1980s, would rainforest become the dominant metaphor for biodiversity, becoming associated with notions of 'abundance', 'diversity' and 'vulnerability' (Hannigan 1996; Myerson and Rydin 1994; Stott 1999), and would the activities of forestry companies come to be seen as problematic.[15]

Until 1970, logging in PNG was strictly controlled. The Government purchased timber rights from landowners and then negotiated a Logging and Marketing Agreement with the permit-holding company on their behalf. From then onwards,

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[14] The threats to coral reefs systems, over fishing and oceanic pollution have been largely ignored in the early stages of the biodiversity debate (Mazur and Lee (1993). Recently, however, conservation concerns have triggered a proliferation of marine management projects.

[15] One of the less often mentioned reasons why tropical rainforests and the activities of logging companies may have gained such prominence in the biodiversity debate stems from the fact that conservationists like to present a clear-cut opponent against whom they can contrast their own ideas. The loss of biodiversity is the result of a diffuse combination of demographic, economic and spatial trends with few clear-cut hoodlums (Hannigan 1996). Forest operations and their proponents, however make a wonderful opponent. The graphic images of burning forest, the stark contrast between 'pristine' and 'logged' areas and the view of helpless nature-loving indigenous people being robbed from the resources on which they depend, by corrupt forest companies made the latter an ideal target for environmental concerns, allowing conservationist groups to contrast their own benevolent activities against the destruction wrought by the timber lords.

however, landowners were allowed to negotiate directly with the timber companies and developers would manipulate both the process of community decision making and government policy formulation in order to maximise their returns. The strategy of the timber companies is to establish patron-client networks with influential landowners, thus providing them with a local power base. Semi-literate landowners often do not realise the market value of their resources and do not have the skills to supervise the logging contractors, while logging companies increasingly make a habit of setting up puppet landowner companies in order to gain access to the timber resource. The clan leaders controlling these puppet companies are kept happy with jobs and incomes by the company in return signing the required paperwork to apply for a formal logging and exporting license with the forest administration. The government has a poor capacity to regulate the activities of developers operating in remote sites and even though technically the forest administration may refuse such licenses when not in accordance with the regulations of the successive forest acts, in practice the forest administration buckles under the pressure brought upon it by politicians and foreign companies alike.

The DEC ostentatiously involved in approving mining and forestry permits, is characterised as a joke, while other departments also fail in the execution of their duties. This leads to a situation in which

> 'the logging industry in PNG is virtually unregulated. The DEC does not regulate forest activity, it has no field capability. It is a lame duck. The National Forest Authority cannot be considered a serious regulator. It has no recent record of regulating timber projects, although it now has some presence in the field. The Internal Revenue Commission and SGS [a Swiss log export monitoring unit] present the only significant regulatory ability affecting loggers. Migration and visas, work permits, labor regulation and occupational health and safety are not serious impediments to loggers' (Brunton 1996).

In 1987, the Barnett Commission of Inquiry into the forest sector found that the PNG forest industry was 'out of control'. The lack of a functioning policy framework, the absence of adequate supervision over the interactions between resource owners and the timber companies, and the high levels of political interference in the issuing of permits led to large-scale environmental destruction in return for comparatively little benefits to resource owners and Government. In line with the view of habitat conversion as the greatest threat to biodiversity and the definition of New Guinea as one of the world's biodiversity 'hot spots' (Myers 1988), the forest industry was quickly defined as the villain in the play.

In response to the Barnett findings, the Government, with assistance of the World Bank, set up a Tropical Forestry Action Plan to review the sector in 1989. This in turn led to the National Forestry and Conservation Action Programme, aiming to bring about the sustainable use of PNG 's forest resources. In 1991, a new Forestry Management Act established the National Forest Authority comprising of a politically independent National Forest Board and a separate National Forest Service. A moratorium was imposed on all new timber projects, while the new

authority developed a set of forestry guidelines and a new forest revenue system. The latter was meant to increase royalties both to landowners and the Government. In its entirety, the set of forest measures proposed in PNG belonged to the most comprehensive and ambitious anywhere in the world. Their practical implementation, however, proved extremely difficult. Especially the notion of 'sustainability' remains elusive, with the forestry debate disintegrating into a 'numbers game' akin to that sketched for the extinction scenarios in the previous chapter (See Filer (1997b) and Tacconi (1998) for discussions of the widely varying PNG forest statistics). The main reason why the perceptions of the 'reality' of forest management lie so far apart have to do with the fact that the forestry debate is dominated by a number of different stakeholders, who each try to further their own strategic interests.

DIFFERENT STAKEHOLDERS, DIFFERENT CRISES

Filer and Sekhran (1998) distinguish six stakeholders in the PNG forest policy process – politicians, public servants, the forest industry, NGOs, donors and the local landowners. None of these interest groups is homogenous in make-up, outlook and policy perspective, turning the debate into a true pandemonium of shifting alliances and positions. Three groups, the donors, the logging companies and the resource owners dominate, with the first two factions essentially engaged in a 'tug of war' over the third. Thus, one finds the logging companies emphasising to resource owning communities that only forest projects can 'bring development' to remote areas, feeding into the frustration generated by the slow pace of development experienced by many rural communities. On the other side, the World Bank and the Australian donor agency AUSAid emphasise the need to exploit forest resources in a controlled, sustainable, and transparent fashion so as to maximise local and national benefits, while minimising ecological damage.

Politics in PNG are characterised by the fact that neither the State nor any other social grouping is able to dominate the country. Due to the land tenure system summarised above, the state has comparatively little influence over decisions made by resource owners and Government institutions and politicians are caught in the middle of the battle between exploitation and conservation. The corridors of power have themselves become the locus of struggle, pulling the state in different and often contradictory directions. This situation is illustrated by the bewildering variety of often conflicting positions taken by politicians, parliament and the bureaucracy vis-à-vis in the forestry debate. Successive Governments of PNG have been so divided amongst themselves and have had so little control over the statements made by various senior players and Government departments that over the years the Sate has even failed to keep up the pretence of speaking with a single voice. Consequently, the international community regards the PNG Government as a thoroughly unreliable partner that needs to be kept under pressure to comply with the minimum standards of good governance.

NGOs of a variety of backgrounds have generally being opposed to the logging companies but also protesting loudly against the structural adjustment policies of the World Bank and other international donors. Even though in these debates NGOs have tended to present themselves as *the* representatives of *the* landowners, such a claim is somewhat preposterous in a country with thousands of different clan groups speaking some 800 different languages and many distinct cultures. There is not such unity as *the* landowners of PNG. Between landowner groups, the differences are huge, depending on their geographical location and history, ecological endowment, cultural affiliation and the availability of services and income generating activities. Within communities people are divided along the lines of age, gender, educational attainment and political exposure. Many landowner groups are not able to agree among themselves by whom and how they are to be represented.

These various groups, although all involved in the forestry debate and all using a crisis narrative, do not share the same sense of crisis. During the 1990s, the Government became increasingly dependent on the revenues from timber operations with the share of forest revenue from non-grant revenues growing from less than 2 percent in 1991 to 10 percent in 1994 (Filer with Sekhran 1998: 51). Notwithstanding all the rhetoric on the need to serve the interests of rural resource owners, the State is capturing an ever-larger share of the proceeds from logging at the expense of resource owners' royalties. Whereas resource owners received some 11.6 percent of the final log price in 1982, this had dwindled to around 3 percent in 1995 (Ariku 1996). Successive cash strapped Governments have been reluctant to slow the approval of new logging permits by strictly implementing the guidelines or to suspend timber operations breaking forestry laws. As the financial crisis deepened, the main issue to successive Governments became to increase revenue in order to ensure political survival by 'fast-tracking' a number of large new timber concessions.

Whereas PNG politicians define the main issue as a lack of income, among donors the 1990s saw a growing concern with the wastage of valuable resources through a lack of control over forest operations on the income side and unwise government spending on the outgoing side. In a study conducted for AUSAid, Duncan (1994), for example, estimates that an economic surplus of about of Kina 225.5 million (about U$ 250 million) was lost by landowners and Government in 1993 and 1994 alone. This figure is comparable to 80 percent of Australia's annual bilateral assistance to PNG or 4.5 percent of GDP. The poor performance of the PNG State is among others visible in PNG's ranking on various development indexes. Where the country ranks 104th in terms of per capita income as is a 'Lower Middle Income Country', it occupies the 128th position on the Human Development Index which takes on board a number of social criteria to assess the state of human development (UNDP 1997) This suggests that development is not so much a resource issue, but in the first place a management and governance problem.

The NGOs and the resource-owning people that they claim to represent are also divided over the nature of the crisis that PNG is facing. While many national and

international NGOs are pushing a conservationist agenda to counter what they see as an environmental disaster in the making, landowners regard the lack of development and the decline in Government services as their main problem. To them, forest exploitation may constitute a strategy to get out of a state of poverty, as people desperately need services in the form of schools and hospitals, infrastructure that allows them to bring their produce to the market and some money in their pockets. A small gift of cash and the mere promise of more to come are often enough for rural people to support a timber company. In recent years, the perception that natural resource exploitation and thus landownership may constitute a short-cut to 'development' has grown, and land and its natural resources are increasingly valued insofar as their exploitation can provide financial rewards. This shift from use-values to market values is most clearly visible in the forestry sector in PNG, but in essence applies to all natural resources.

The timber companies, united in the Forest Industry Association, tend to strategically feed into the crisis narratives of landowners and the government, ascertaining that their industry can bring both development to rural communities, and make a substantial contribution to the always empty Government coffers. In some instances the Association may also revert to a crisis narrative, emphasising the fact that the industry is hardly profitable, in a state of decline and that – as a result - many opportunities for 'development' are lost. In 1995, I had the opportunity to witness a visit by the chairman of the Forest Industry Association and head of the largest Malaysian timber conglomerate in the country to the Department of Finance. He came to voice his concern over World Bank-supported moves to increase log taxes, repeatedly throwing his hands in the air while exclaiming that we policy makers had no idea of the 'sorrow of the forest industry'.

COMPETING OVER NATURE

As a result of the land tenure system, the exasperation among rural people with the slow pace of development, and the increasing commercialisation of the environment, the PNG environmental debate is dominated by conservation agencies and timber companies competing over the resources held by rural communities. The divergent interests of these outsiders can on the one hand be characterised by the stereotypical image of the corrupt, fast-talking logger and his cronies who helicopter into remote, poverty-stricken villages, offering money in return for signatures. These papers then allow the company to start the application procedure for a timber concession. (For a description of such an event, see chapter 7).

The pattern repeats itself all over the country, with local leaders being flown to the cities, wined and dined in order to obtain the necessary popular support. If there is vocal opposition within the community, gifts of money seep into the resource owning groups through patronage linkages, eventually swaying the momentum in favour of logging. The resulting timber operation is a quick and dirty venture, which provides a few menial jobs, substandard infrastructure and causes serious ecological

damage. After several years, the company departs, leaving a conflict-riddled community with a destroyed subsistence base behind. Ecologists fear that as the loggers 'eat' their way through PNG's forests irreplaceable ecosystems disappear and species go extinct. Forest companies in turn argue that especially a growing population combined with the practice of shifting cultivation is responsible for deforestation.[16]

In the view of the conservation establishment, the only thing able to stop this process are the concerted efforts of local and international conservation agencies. Their efforts tend to focus on biodiversity rich and thus usually forested areas by taking a two pronged approach. In the first place, they aim to reduce and improve forestry practices, in the second place they try to limit the negative impact of local subsistence and cash cropping activities. Like in development discourse, the narrative structure that supports these conservation policies is one closely resembling that of the archetypal folktale. Almost always there is a 'problem' or 'crisis' that is to be 'remedied' or 'prevented' through the activities of some 'policy', 'project', or 'hero' which overcomes a number of 'trials', 'constraints' and/or 'opponents' (Roe 1989).

THE ARCHETYPAL LOGGER AND HIS CONSERVATIONIST OPPONENTS

This view of the forestry sector has to be qualified in a number of respects, as conservationists tend to 'denaturalise' their opponents. This view is reinforced by a rather hectoring rhetoric (Stott 1999). To give an example from an e-mail forum dealing with PNG forestry and policy issues:

> 'Through their actions, this small band of marauding Asian logging companies are undoing hundreds of millions of years of evolution, threatening global planetary ecosystem sustainability, driving countless species to extinction, and dooming millions of inhabitants of tropical countries to abject, hopeless poverty. Advocates must conceive and advocate an end game that banishes the evil of cut-and-run predatory logging from the Earth' (Barry 2001).

Such oratory needs to be shaded in a number of ways. In the first place, it is important to note that the initiative for forest conversion lies not simply on the side of the logging companies. A growing number of landowner groups see logging as a short-cut to development and actively seek to enlist potential resource developers in their pursuit of development. To many regional politicians and Members of Parliament the only way to retain their position in the next elections is to bring large-scale 'development' to their rural constituencies in a short period of time. A logging 'project' is one of the few options fitting that requirement. Ironically, many

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[16] A survey of recent patterns of conversion in PNG, however, suggests that only 3 percent of all land brought under cultivation has not been previously used for agriculture and that the impact of shifting cultivation may be much more marginal then the forest industry would have it (Allen in Filer with Sekhran 1998: 29). Due to the amount of labour involved and the fear of unknown territory the Jimi people, for example, are generally reluctant to move into primary forest (VanHelden 2000).

conservationists, realising that there are few other income generating options in PNGs rural areas, are now themselves pursuing sustainable timber harvesting projects on a variety of scales in a 'use it or lose it' approach (Martin, 1997; Salafsky *et Al.* 1997/98; Sekhran *et Al.* 1996; TNC 1998; VanHelden and Schneemann 2000).

In the second place, timber operations in PNG are a high risk business with considerable sunk costs and widely fluctuating margins. Whereas in some years logging companies have made astonishing profits (Duncan 1994), in other years they have suffered badly from low timber prices, the vagaries of the weather, conflicts with landowners and endless political squabbles over permits, landownership and compensation packages. While conservationists tend to complain that working in PNG can be very difficult due to the often quarrelsome and fragmented nature of many communities; these same issues also affect the loggers. In the third place, the Chinese Malays driving sleek cars through Port Moresby associated with the logging business, are not representative of their countrymen operating the logging concessions. Most concessions are run by labourers recruited amongst the Serawak poor who are illegally landed on the shores of a country that they don't know, among groups of people that they don't understand and quickly learn to fear (See Cooke 1997 for a description of the variable relationships between loggers and local people in Lak).

On the other hand of the divide, one finds the well-meaning environmentalists and community-developers that aim to make rural people aware of the fundamental choices that they are facing. They do so in the firm conviction that if local villagers come to realise the value of their resources and *really* understand the consequences of a timber operation, they will inevitably do the right thing. Often these notions are underpinned by the images of Papua New Guineans as essentially nature-respecting 'natives' living in a primeval wilderness and at risk from being corrupted by outside influences. The view of the essentially nature loving community at risk from logging-related corruption and in need of environmentalist salvation blinds conservation proponents to the fact that Papua New Guineans are not conservation-oriented forest-dwellers but pragmatic cultivators, whose culture is based on their capability to convert forest land into fertile gardens and who take pride in that ability. In addition, it ignores the fact that rural Papua New Guineans are not content with their lot in life but suffer from strong feelings of relative deprivation, fearing that they are being left behind while the rest of society and the wider world advances without them.

The view of local communities as having a natural inclination towards conservation also conceals the fact that in the eyes of resource owning communities the conservationists themselves may not be so much different from the much-maligned loggers. Both conservationists and timber companies are outsiders aiming to use local people's resources in a manner that they deem appropriate. Both, in an attempt to achieve their respective goals, enter into negotiations with local communities, using a variety of arguments and incentives to make their case (VanHelden 1997).

Consequently, PNG resource owners are increasingly aware that the foreign interest in their environment constitutes a source of political leverage.

The environmental NGOs tend to fight on two fronts. They may hold the timber companies responsible for the environmental damage done to PNG ecosystems, and see themselves as allies and representatives of the local people, but do not like the international agencies much either. Especially the World Bank and its structural adjustment policies are seen to bring natural resources into the ambit of the market economy, thereby sowing the seeds of market-driven exploitation. Over time, radical NGOs have come to battle the whole constellation of big-bad-business, the multilateral organisations and the national government and its corrupt politicians. The highly antagonistic feelings between the environmental NGOs and the logging companies, and possibly also their different cultural backgrounds with western conservationists and their local PNG friends pitted against Asian loggers and their PNG allies, have precluded any attempt to work directly together with the timber companies.[17]

A POLICY SHIFT FROM STATE TO COMMUNITY

The growing recognition that the State of PNG is not just unwilling, but structurally unable to control the activities of foreign operators in the rural areas has driven environmentalists away from the policy-debate and the ongoing attempts to control logging though bureaucratic procedures. These groups argue that in a political environment where even the most powerful international donors fail to make a difference, and where the prime decision-makers over the use of resources live in scattered rural communities, it is more sensible to by-pass a corrupt and inefficient government all together. The struggle over natural resources between the environmental constituency and the timber operators has thus shifted towards the level of the rural community. While timber companies continue to throw money at communities and their leaders and systematically pressure local politicians and the National Forest Authority to approve the 'landowner requests' for a timber permit, conservation NGOs try to convince local resource owners that participation in logging ventures constitutes a short-cut to poverty rather than a short-cut to development.

With the increase in awareness raising activities in the early 1990s and the realisation that development opportunities and better services would not be forthcoming from an increasingly derelict bureaucracy, landowners began to show signs of fatigue with environmental proponents. Increasingly, rural resource owners argued that they understood the risks of logging very well, but that in their remote

[17] In countries such as Cameroon, Gabon and Congo the WWF, IUCN and the Wildlife Conservation Society aim to forge partnerships with the timber industry in an attempt to reduce the negative impacts of timber exploitation and hunting for bush meat. In the Netherlands too, environmental groups are increasingly establishing linkages with mainstream timber industry in an attempt to improve production processes.

location they had no other alternative to development. Rural people often simply refused to accept the idea that their present situation was much to be preferred over the offers of a logging operation As a result, a growing number of environmental groups came to the view that just 'raising awareness' was not good enough and that alternative income-generating options to logging had to be developed to make conservation palatable.

The experience with ICAD projects in Africa offered the theoretical framework for this approach, with the fundamental difference that whereas elsewhere ICAD methods are predominantly used as a means to reduce the pressure on existing protected areas, in PNG such methods were proposed as a means to establish conservation areas. This view became very popular in a short period of time. Where the Lak ICAD project would be the first of its kind in 1993, by 1995 there were no less than 10 projects of this type in preparation and/or execution, with a number of existing community-based conservation projects now redefined as ICADs (James 1996). As ICAD approaches now became seen as a means to make conservation economically competitive with logging, the political constellation of interests shifted to one in which the timber companies and the conservation agencies competed head-on. Both tried to put together the most attractive package of resource-related benefits, both attempted to convince local communities that their views were most valid in an effort to sway local people to follow their lead. It is this struggle between logging and conservation that would dominate the first project of the Biodiversity Program in the Lak area in New Ireland.

THE GEF/UNDP BIODIVERSITY PROGRAMME

The story of the Biodiversity Program begins in 1989 when, following the exposure of widespread malpractice in the forest sector of PNG, the World Bank sprung into action. Before forest conditions became an integral part of its structural adjustment programs to PNG, the main policy vehicle for the World Bank constituted the international Tropical Forest Action Plan (TFAP). This action plan aimed to curb tropical deforestation by strengthening forest policies in developing countries while supporting these with a number of specific project interventions. By the end of the 1980s, the TFAP came under criticism from commentators who meant that the only thing the plan established was a further commercialisation and exploitation of the tropical forest resource. No consideration was given to other use options, while the process was pushed along in a top-down and technocratic manner, paying little attention to the interests of local people and thereby failing to address the root causes of deforestation. These criticisms led to a growing attention to issues of participation and conservation in the early 1990s (Filer with Sekhran 1998).

To some extent, PNG became a test case, with its forest plan renamed into the National Forestry and Conservation Action Programme (NFCAP). This name reflected the fact that it was one of the first forest plans to include conservation issues and advocate the use of local communities as the basis for what was called a

'socially sensitive forest industry' (Mayers and Peutalo 1995). The PNG NFCAP as it developed between 1990 and 1995, consisted of a number of studies and project interventions, divided over four components. Two had to do with the restructuring of the forest sector and were located in the Department of Forestry, the third was aimed at conservation issues and was brought under the Department of Environment and Conservation (DEC), while the fourth, aimed at 'Promoting Landowner Awareness' was taken on by the German Development agency GTZ. In practice, the plan thus fell apart into four programmes, based at three different institutional locations and led by three separate consultants. Each programme in turn consisted of a 'bundle' of projects funded by a variety of donors (See Filer and Sekhran 1998: 108-109 Table 6.1).

In April 1990, the PNG NFCAP kicked off with a Round Table Meeting for representatives from the PNG Government, the international donors and local NGOs. One of the unexpected outcomes of this meeting was the conclusion that there was need for a separate Task Force on Environmental Planning to assess the conservation potential of those areas where biodiversity conservation and industrial logging interests were most clearly at odds. The conference also slated the Lak area in South New Ireland as an area of high conservation value and the Minister of Forests, under pressure from the international donors, not only imposed a moratorium on new forest concessions, but also declared the Lak area a priority conservation area (Filer 1991a). Not much later it became apparent that the designation of Lak as a conservation area was made despite the fact that the Department of Forests was also issuing a timber concession of 81,000 hectares to a local landowner company known as the Metlak Development Corporation (Filer 1991a). This permit gave the corporation the exclusive right to harvest and sell timber and other forest produce from the concession. As the Metlak Development Corporation did not have the capacity to exploit local resources on its own, it entered into a logging agreement with Niugini Lumber Merchants, a subsidiary of the Malaysian multinational Rimbunan Hijau. The start of logging operations in January 1991 was of great importance to local people who described it as 'a ticket to happiness' (McCallum 1996: 34).

These events prompted a response on the part of the conservation constituency, and in the year following the round table meeting, and after logging at Lak had commenced, an environmental task force made a foray into New Ireland to gauge local peoples attitudes to the idea that an international project using an appropriate 'benefit package' might assist them in halting large-scale logging. Notwithstanding the entreaties by the visiting conservationists, it became clear that the Lak communities were highly sceptical of their ability to deliver conservation–related development, with the social anthropologist on the team concluding that

> 'Our conservationist friends in the developed world sometimes seem to imagine that PNG villagers resemble the Indians in the Amazon rainforest- people living in simple harmony with Mother Nature, for whom 'development' is a menace imposed by outsiders. If these people went to Lak, they would be in for a great

> shock. It would probably be difficult to find another place in PNG where local people were more insistent on the need to have their trees cut down as soon as possible!' (Filer 1991b:71).

THE BIODIVERSITY CONSERVATION AND RESOURCE MANAGEMENT PROGRAM

These events were shortly afterwards followed by bid by the Department of Environment and Conservation to the Global Environment Facility for the establishment of an in-country biodiversity conservation program. The GEF was created in late 1990 to provide funding to environmental initiatives in four specific areas: greenhouse gases, biological diversity, international waters and ozone depletion. During its inception phase a heavy emphasis was placed on biodiversity related projects with not less than 18 out of 26 GEF funded proposals dealing with biodiversity at a total cost of some U$ 178.4 million (Reed 1993: 53). Many of these projects were aimed at establishing new protected areas in locations characterised by high biodiversity. Due to the specific nature of landownership in PNG it was clear to everybody involved in the planning of the Biodiversity Program that it would have to focus on the resource owners in order to achieve conservation. In 1992, the DEC's request for GEF assistance to the tune of U$ 5 million was approved.

The three 'Immediate Objectives' of the Biodiversity Program were 1) 'to establish two pilot Integrated Conservation and Development projects to develop innovative methodologies for the conservation of biodiversity'; 2) To provide institutional strengthening to DEC; and 3) to establish an institutional, legal, financial and policy framework for the expansion of PNG's conservation system (UNDP 1993). The first objective would get by far most attention and was aimed at establishing two ICAD sites; gathering basic data on these sites and their peoples; and establishing a planning and decision-making process.

Notwithstanding the realisation that people are important, the first three years of the Biodiversity Program were dominated by a rather top-down and linear vision of protected area establishment. The project document outlined the strategy of the Biodiversity Program as a series of steps, supported by an ongoing awareness programme. This sequence of steps, leading from the selection of an ICAD site, towards the assessment of local biodiversity and an analysis of the local social and economic situation. All of this was to result in the implementation of a package of integrated conservation and development activities to protect a conservation area. Because the development activities would be 'linked' to the maintenance of the conservation area, people would develop an economic interest in conservation, thus guaranteeing the sustainability of the protected area regime.

The whole process would be punctuated by a number of landowner forums during which local people could voice their concerns. The flow diagrams contained in the project document reduced the role of local communities to saying either 'yes' or 'no' at several points in time. The fact that people may actively modify and select specific elements of the package rather than simply accepting or rejecting the project's

suggestions, or play the game as long as it suits them, had no place in this vision (UNDP 1993: annex IV). The fact that the project was on the one hand basing itself on economic understanding of human behaviour, but at the same time financially not equipped to compete with the level of benefits distributed by the already present timber company was ignored too. In international terms, however, the explicit inclusion of communities in the program of conservation area establishment was a novel approach, as it reflected the realisation that conservation issues are as much about people, as they are about nature. The extent to which these representations were internalised by the project personnel is another question.

USING BIOLOGICAL OR SOCIAL INDICATORS FOR CONSERVATION?

Once the funding had been approved, the key issue became to set up office within the DEC and to select two project areas. Notwithstanding the start of logging operations in Lak in early 1991, the conservationists of the Biodiversity Program did not loose sight of the Lak area. In the same year, a coalition of Washington-based NGOs conducted the so-called Conservation Needs Assessment (CNA). The CNA produced a set of individual maps identifying the most species rich and ecologically critical areas of native flora, warm-blooded vertebrates, fishes, non-marine invertebrate fauna, freshwater wetlands and coastal and marine ecosystems. By overlaying these various maps, an overview was produced with allowed the CNA team to identify large parts of PNG 'highly significant' or 'very highly significant' in terms of biodiversity values.[18] This exercise confirmed both the Bismarck-Ramu area on the mainland of PNG and the Verron and Hans Meyer ranges on South New Ireland as areas of very high conservation priority for biodiversity conservation (Beehler 1993c: 204 and 209: Figure 11-3). The latter classification was made even though the same report also classifies South New Ireland as a 'major unknown terrestrial area' (Beehler 1993c: 196 and 207; Figure 11-1).

The CNA exercise culminated in a workshop at Madang in November 1995 at which the involved natural scientists, representatives of environmental NGOs and a variety of donors and managers were present. At this workshop, a gap in perception revolving around the use of biophysical versus social criteria for conservation area establishment became apparent. Sekhran (1996) elucidates this discussion by contrasting two possible patterns of protected area establishment. Although ICAD methods are based on the limited use of natural resources in order to establish linkages between conservation and development, they tend to copy the Man and Biosphere concept in centring on a core zone, in which human impact is minimised. The surrounding buffer zones may be used for income generating forms of low-

[18] According to the authors there was a remarkable level of consensus with regard to the identification of terrestrial sites of biological importance (Beehler 1993c; 206). This seems hardly surprising given that the areas identified by the CNA as having high to very high conservation priority covers almost 50% percent of PNG's total landmass and are unlikely to lie within relatively densely populated areas (see also Brown and Holzknecht, 1993: 73 Footnote 11).

impact land-use. The size of the core area needed for meaningful biodiversity conservation should according to the CNA assessment consist of at least 80,000 to 100,000 hectares (Beehler 1993a: 10, Beehler 1993b: 77). An area of such size is likely to be inhabited by a number of resource-owning groups who often show complex patterns of alliance, enmity and exchange. Conservationists aiming to establish one continuous conservation area will want all involved resource owning groups to jointly establish such an area, which can be very difficult in the fragmented social environment that characterises PNG.

In addition to getting people to co-operate, there is the need to distribute the uneven proceeds from various forms of resource management over all involved clan groups. This requires a transfer of incomes from those exploiting their forests in a profit maximising way towards those that conserve their resources in the name of the public good (Sekhran 1996). In essence, the conservation agency thus has to take on the role of the nation state by 'taxing' those that make a living through the exploitation of their forests, while 'subsidising' those that conserve biodiversity (PC Scheuer July 2001, see also Sekhran 1996). In theory at least, the nation state has both the legitimacy and means to do so, but a project agency dependent on the voluntary co-operation of all involved landowners, does not. Thus, those maximising the benefits from resource exploitation are unlikely to be willing to share their incomes with other groups. It is every clan for itself. This leads to the inevitable conclusion that in a fragmented social environment, with landownership vested in local groups, and in the absence of a strong and effective state, such co-operative and benefit sharing arrangements are unlikely to eventuate. The best possible circumstances that conservationists can encounter consist of a situation characterised by small and cohesive groups of people, with limited development expectations, who own vast areas of land and resources and are willing to engage in conservation activities because of economic, territorial or cultural reasons (VanHelden 1998a & 1998b).

A second, and different approach puts more emphasis on the social component of protected area design and takes local landownership and clan membership as its basis, asking each group of resource owners to apportion part of their landholdings to conservation through a process of land-use planning. The great advantage here is that groups do not need to work together to the extent required by the 'biological' model, and that complicated transfer mechanisms are not needed. The disadvantage is that the core area(s) of the conservation area become scattered and disconnected, while the much longer perimeter increases the risk of human encroachment. This latter situation is a foresight that does not please conservationists of the 'bigger is better' school.

This same issue came to a head at the CNA workshop, as the assumptions from which the foreign conservationists spoke clashed with those of the groups claiming to represent the interests of communities and landowners (Brown and Holzknecht 1993). The expatriate natural scientists assumed that:

> 'their own assessment of conservation values and priorities was an objective exercise based on detailed fieldwork; ... [that] it was up to the conservation planners... to make the 'tough decisions' and 'stirring calls to action' which would persuade other stakeholders to sacrifice the short-term benefits of development for the long term benefits of conservation; ... [and that] the planners and managers should therefore be responsible for the process of consultation with NGOs and local landowners, and for dealing with questions of social feasibility and political strategy'(Filer with Sekhran 1998: 114).

Opposed to this technocratic view, which put planning power in the hands of foreign biological experts, was the position of the local NGOs who argued that:

> 'local knowledge and practice was the only genuine basis for determining conservation values and priorities; ... [and that] instead of creating the right mix of incentives for other stakeholders, conservation planners should be providing the information and resources required for landowning communities to make their own choices' (Filer with Sekhran 1998: 114).

As a result, the NGOs argued that the dominant top-down planning approach based on biological indicators leading to the implementation of spatial management regimes as favoured by international conservation agencies, had to make way for indicators of the 'social feasibility' of conservation in specific localities. This view meant that the conservation debate in a clan-based landscape is not so much a question of the rights and responsibilities of local communities as holders of biodiversity which can be enforced by a coherent expert-led conservation strategy, but essentially about a variety of community motivations and priorities with regard to future resource management. In this view the state and the international conservation agencies, and the donors can only facilitate the choices of the resource owning communities by providing information on the consequences of short-term destructive development and – possibly - incentives for more long-term sustainable and conservation-oriented development.

The claim that such an assessment was not to be made by biologists, but provided a role for NGOs who regard themselves as representatives of the 'grassroots' landowners is fundamentally opposed to mainstream conservation practice which is based on a conception of conservation area establishment as an essentially technical and managerial intervention coming from above. This discussion obviously not only led the NGOs to question the use of biological research as a tool in conservation prioritisation, instead proposing a more community-based approach, but also contained a sub-text concerning the question as to who was to control the direction of the PNG conservation agenda: The alliance of natural scientists working for the national government, foreign donors, and international conservation NGOs who compromise the autonomy of PNG landowning groups in the name of conservation, or the communities who own the natural resources in question in the first place and the NGOs who claim to speak on their behalf (Filer with Sekhran 1998). This position assumes that NGOs are best positioned to judge the needs of local people.

The debate on how to merge the biophysical criteria used to determine the 'conservation value' of various areas with the specific social structure, motivations and priorities of local landowners, constitutes a recurrent theme in PNG conservation, and represents a clash between the biological narrative on conservation project development and that pushed by social scientists and NGOs. This debate, and the transition in thinking from biological to people's issues becomes clearly visible in the change in approach between the Lak project and Bismarck-Ramu ICAD projects. In the former the technical determinants of conservation as defined by outside experts and the strong wish to thwart a local logging company took precedence over local motivations and priorities, leading to a clash of agendas which finally forced the Biodiversity Program to give up the Lak project. In the Bismarck-Ramu project, a remarkable shift in strategy meant that people's ideas and motivations were given higher priority, ultimately leading to grave questions about the conservation content and sustainability of the project.

THE LAK INTEGRATED CONSERVATION AND DEVELOPMENT PROJECT

The approval of GEF funding for the Biodiversity Program in 1992 coincided with a request from the Metlak Development Corporation at Lak seeking technical and financial assistance to:

> 'Assist our local company with technical expertise to monitor and control the logging operation to ensure that minimal environmental damage is done... to establish a Conservation Foundation for the [area] thus generating economic activities centred around conservation.... [and] to obtain funding for a Wildlife Management Programme incorporating profitable environmental activities' (Waisale 1992 in McCallum and Sekhran 1997:19).

The letter, written by the Provincial Government Member for the Lak area and deputy chairman of the Metlak Development Corporation Management Committee, was passed on to the Biodiversity Program and became instrumental in legitimising the ICAD intervention in the Lak area. The purpose behind the letter was probably the simple desire to expand the number of economic options in the area in the hope of providing a source of development after logging would cease. This conclusion is supported by the fact that two of the three items described explicitly refer to conservation-related economic activities. Later the provincial member would explain that he was indeed driven by political and economic motivations:

> 'I brought them [the Lak people] logging, but we're not making as much from logging as we had hoped and the [environmental] costs have been too high. If I don't bring development then someone else will win the election - ICAD looks like the only real long term opportunity' (Waisale in McCallum 1996: 50).

Whatever the case, the Biodiversity Program interpreted the letter 'as a social invitation from a unified group of landowners eager to explore alternative methods of forest development' (McCallum and Sekhran 1997; 19).

The die was cast when the Lak site was also found to meet the criteria for site selection established by the Biodiversity Program. These criteria were that the proposed conservation area should contain high levels of biodiversity and offer scope for establishing a conservation area of minimally 80,000 hectares, that local communities should have 'an acceptable means' of collective decision making, and that the area had to be under immediate threat (UNDP 1993: 3-4). The CNA exercise suggested that the Lak area met the first criteria, while the decision-making criterion was covered by the letter of invitation and the very existence of the Metlak Development Corporation. The threats issue was obviously addressed by the ongoing forestry operations. The underlying view of local people was that these were maybe not intrinsically conservation-minded, but that providing them with the correct information and the right set of incentives would certainly lead them to choose for conservation rather than logging.

Intimations that the project was overly optimistic and highly selective in its reading of the local situation, and explicit warnings that the Lak population and its politicians were guided by short-term interests and in favour of logging were ignored (Filer 1991b). The suggestion that only a significant investment in development activities could sway Lak public opinion in favour of conservation (Filer 1991a), the fact that the formation of such a development package would take precious time, while forest harvesting was ongoing, and the fact that the invitation by the Metlak Development Corporation and the provincial member represented an apparent conflict of interest with their self-evident involvement in the forestry operations did not deter the project team either. On the contrary, the mandate to develop innovative methodologies was interpreted to mean taking a 'principled' stand by implementing the project in an area where logging was ongoing. The choice for the Lak as the site of the first ICAD project

> 'was a deliberate move to 'take the fight to the enemy' by taking the local politician's words at face value, and seizing the opportunity to mobilise a re-enlightened community against the forces of darkness which it had previously been so eager to embrace' (Filer and Sekhran 1998: 248-9).

It was a choice through which the project manoeuvred itself in a situation of all or nothing. The only way to win was to compete head-on with the logging company for the favour of the local population. 'If conservation interests had triumphed over those of conventional logging, the victory would have been complete' (McCallum and Sekhran 1997; 52).

THE STRUCTURE OF THE BIODIVERSITY PROGRAM

From April 1993 onwards, while in Lak Niugini Lumber Merchants continued its harvesting operations, in Port Moresby the Biodiversity Program took shape. The emphasis on the natural sciences described earlier is visible in the make up of the expatriate project staff. The Program, led by a New Zealand Conservationist, was to recruit a conservation manager for each of its ICAD sites and had positions for a

project biologist and a resource economist. A Conservation Resource Centre to house the program was established, equipped, and staffed as a separate unit within DEC's Nature Conservation Division. The latter was located in a rambling building, suffering from a chronic lack of funding, often even lacking the most basic amenities such as working phones, electricity and water. In contrast, the Conservation Resource Centre of the Biodiversity Program was located in a small but well-equipped office next door. Its telephones, faxes, photocopiers and computers worked and other amenities that included air-conditioning and coffee, made it a pleasant place to work. During the design of the Biodiversity Program, the DEC had committed itself to providing basic infrastructure and amenities but the department would regularly fail to make the required funds available. The UNDP, however, had to get a job done and the money spent, and thus, against its own rules, simply paid for the office utilities of the CRC. Given the situation in the Nature Conservation Division, it is not surprising that the expatriate and DEC staff attached to the Biodiversity Program in Port Moresby, including myself when I was there, preferred to operate from the CRC. The notable exception being the American project biologist who set up office within the Nature Conservation Division itself.

Within the CRC itself, DEC's role was limited. The expatriate staff dominated, while the stroppy PNG counterpart to the chief technical advisor went on Masters training for a period of two years. He was replaced by a much less forceful person. The result was that the Biodiversity Program operated as a self-contained unit rather than as part of the DEC. This situation led successive review teams to conclude that the linkages with DEC were poorly developed and that the aim of enhancing DEC capacity was not being met. When a new chief technical advisor came in by the end of 1996 things appeared to improve somewhat in this respect. As with most of such programs, the idea was that after the termination of the program, the DEC would absorb the CRC as a well functioning unit tasked with the further development of the ICAD strategy in PNG. Given the structural lack of funds and the lack of DEC 'ownership' over the Biodiversity Program, however, the official 'handing over' of the centre simply meant that the CRC was stripped of its assets and closed.

The administrative burden on the Biodiversity Program was further exacerbated by the complex institutional structure of the project. Even though the project was funded by the GEF, which at that time had the UNDP, the UNEP and the World Bank as implementing organisations, it was to be executed by yet another UN office, in this case the United Nations Office for Project Services (UNOPS). The UNOPS, with its headquarters in New York, executes and monitors donor funded projects, including those of the GEF. In PNG, as elsewhere, the UNDP Country Office acted as its agent. While the UNDP Resident Representative and his Deputy were officially only to act on behalf of the UNOPS, in practice they micro-managed the project, thus constituting an additional administrative and political layer between the UNOPS and the CRC. In doing so, they not only made very sure that every possible rule in the book was strictly followed, but also became an obstacle to the implementation of the Lak Project.

The resulting delays constituted a major source of conflict between the first Chief Technical Advisor of the Biodiversity Program and the UNDP Country Office as the former was continuously unable to respond to the urgent needs of his staff at Lak. The UNDP Country Office management, however, felt that he did not abide sufficiently strictly to UN financial rules and tended to refer to him and his project staff as a 'bunch of cowboys'. In practice, the administrative burden imposed on the Biodiversity Program and its staff at Lak, the lack of communications and the continuous sense of crisis under which the project operated, forced local staff to prepay all daily project expenses out of their personal accounts. A June 1995 Project Review Mission concluded that 'the Programme Management was ... made unnecessarily difficult by inflexible management procedures stipulated by UNDP'. This conclusion was reiterated by the next mission in November 1996 (PRM 1996: 10 & 25).

The gap between the perception of the project among the higher levels of the UN and the actual situation on the ground can maybe be most aptly described by the anecdote of a visit by the responsible project manager from UNOPS in New York, who upon arrival in Lak exclaimed that he 'could not believe the UN were implementing a project in a place where there was no flush toilet'.

Implementing the Lak project

The start of actual project activities in Lak was delayed until in early 1994, a conservation manager and a resource economist were brought on board. By March 1994, the first PNG staff members were based in Lak, a year later followed by an expatriate conservation manager and his wife who set up camp in the area, oversaw the construction of a local base and conducted negotiations on the cessation of logging. By then, however, logging had been ongoing for some three years and the only way to stop the operations was to identify a number of breaches of forest legislation, which would subsequently empower the landowners to terminate the contract.

Early work by the Biodiversity Program, however, was not focused on negotiations with local people but on conducting a so-called BIORAP, a multi-disciplinary Rapid Biodiversity Survey of local nature in order to get on the ground confirmation of Lak as a an area of significant biodiversity. The focus of the Lak project lay on the Weitin Valley that runs between the Verron and Hans Meyer ranges, which the CNA had identified as an area of very high conservation priority. Although logging on the valley floor had already advanced 22 kilometres land inwards, the Valley was still thought to be of biological significance and was to constitute the core of the projected conservation area. To its surprise, however, the BIORAP concluded that Lak biodiversity was much lower than expected. While McCallum and Sekhran (1997: 26) note that the team leader 'quickly moved to allay fears' that the project had been poorly sited, many years later an observer would state that 'based on the levels of biodiversity of the area' the Biodiversity Program 'should never have been

there in the first place'. At the time however, basing himself on the high numbers of endemic species found, and the fact that the interior upland forests of Lak 'are among the most complex, highest and least disturbed of any in the PNG Islands Region' (Beehler in McCallum 1996: 31), the BIORAP team leader recommended the development of an integrated land use plan for South New Ireland which was to 'include a conservation area composed of the upland interior of this southern mountainous bulb of the island' (Beehler in McCallum 1996: 62).

The fact that that the *interior upland* forests of South New Ireland were defined as the prime conservation object of the Biodiversity Program, throws up the question to what extent this upland area was indeed under threat. Logging was certainly taking place and was being conducted in a manner which led a visiting forester to state that 'this is the worst example of tropical forestry I have seen anywhere in the world' (Arentz in McCallum and Sekhran 1997: 25). The question of importance however, was to what extent these practices were affecting the hill resource. The Papua New Guinea Logging Code of Practice for example, stipulates the operational guidelines under which logging can take place. The main limitations include a prohibition on the harvesting of trees under 50-centimetre diameter at breast height, a ban on logging on slopes steeper than 35 degrees and above 400 metres, and the duty to observe 50 metre wide corridors on either side of a watercourse. Thus, where the floor of the Weitin Valley was largely logged even before the project team entered the area, the hill forests were intact. Even though the regulations of the PNG forest laws are routinely broken, it is technical and financial considerations usually keep the higher slopes from being logged, unless techniques such as helicopter logging are be used. Helicopter logging, however, is out of the question due to the costs involved.

It appears to have been a classical case of the situation described by Hirschmann (1968), where once projects have invested time, resources and prestige, there is no way back. The show must go on, even if it involves downplaying relevant information. Had the BIORAP indeed concluded that the Lak area was not sufficiently rich in biodiversity to warrant further action, this would not only have affected the status of the involved institutions and individuals, but also cast a shadow over the 1992 Conservation Needs Assessment which up to this day continues to be used as a main source of information for protected area siting. As a result it appears that the Lak project was in the first place driven by the wish to make a statement against destructive logging than by the need to safeguard an area of significant biodiversity from being wiped out. [19]

Following the BIORAP and the start of an awareness campaign, the Biodiversity Program proceeded to construct a base in the vicinity of the projected conservation

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[19] One of the more indirect reasons why the Lak lowland forests were also deemed important, stems from the fact that these gain increasing conservation significance as many of the remaining lowland forests in the New Guinea Islands region are logged out (McCallum and Sekhran 1997). This, however, is no argument to specifically target the Lak area.

area. As the project required a formal lease arrangement before construction could start, a difficult and time consuming process in PNG at the best of times, the establishment of the base took large amounts of energy and time. UN guidelines, tendering requirements and administrative procedures, an inefficient Department of Lands and the need for multiple surveying visits all hampered progress to the great frustration of the staff. In the 1995 Project Progress Evaluation Report, the Chief Technical Advisor stated that the building of the Lak Base had

> 'without question, been the most frustrating and unnecessarily time-consuming component that the project has undertaken. As much as 80 percent of the delay can be attributed to a lack of understanding, within the UNDP and OPS administration of the unusual logistical, climatic and other difficulties that are a normal part of putting together a construction programme in an isolated part of rural PNG. Both project and field office staff have experienced unnecessary bureaucratic hindrance during the tender process which resulted in a contract, at considerably inflated rate, being issued to the company that the project staff recommended to the UNDP (...) in April 1994. Construction work commenced in March 1995' (CRC 1995d: 5-6).

In the status bar where a choice could be made between satisfactory or unsatisfactory, the chief technical advisor ticked the former box with the footnote that: 'the status-assessment is based on the current situation, not the process that led to the issuing of the construction contract'.

In hindsight, it is unclear why the Biodiversity Program bothered putting in a base of such magnitude. It probably simply followed international conservation practice where conservation managers, after defining the conservation area of their choice construct infrastructure in order to manage the place from there. The Biodiversity Program started its base site selection and construction process almost immediately after the start of the program in January 1994, well before its was clear that a conservation area could indeed be established, and even before its staff was on strength. In addition, the building program did not benefit local communities in any way. Where projects such as the EU eco-timber project in Kimbe built comfortable low-cost housing using local materials and labour and thus spreading the benefits of its presence among local people, the Biodiversity Program built a U$ 350,000 base for which most materials were shipped in from Rabaul.

THE DYNAMICS OF PLENARY MEETINGS

All the time that the team was assessing biodiversity and busy constructing the base, logging was continuing. In response, the project team undertook an ongoing awareness campaign to inform local people of the dire consequences of the timber operations, simultaneously attempting to define other, less destructive income generating activities. What became clear to the project once the staff was on the ground, was that notwithstanding the letter sent by the Metlak Development Corporation, they were far from welcome. Many people were receiving benefits from the timber operation and quickly came to see the ICAD project as a threat to

this source of income. As McCallum and Sekhran (1997: 27) noted, the project 'had entered a highly charged and immensely complicated cultural, economic and political environment in which its direct competitors for the forest resource, Niugini Lumber Merchants, had obtained a significant head start'.

Over time, local communities would shift their affiliation from Niugini Lumber Merchants to the project as their forest was progressively being logged. Those still waiting for forest operations to take their trees and receive related royalty payments were dead against the ICAD project, while those that had seen their areas of forest logged out or that owned forest on inaccessible slopes, supported the conservation project as a potential source of income now that logging payments had ceased. As one of the Lak logging camp managers formulated it 'Really, I'm all in favour of the ICAD.... I just think we should have logging first and then worry about conservation later' (Peini in McCallum 1996:7). People did not realise, or at least did not want to acknowledge, that conservation and forestry were mutually exclusive activities. A large group was thus characterised as 'fence sitters' that adopted a wait-and-see attitude to both project and logging company. Thus while some 80-85 percent of the local population supported the project, a similar portion of the community may have supported the timber company (McCallum and Sekhran 1997).

The difficulty in assessing the real position of local people and communities became apparent during the deliberations between local people and the project team. In October 1994, the project team conducted the first of four large community forums. At this occasion some 180 landowners, representatives from the local and provincial government, the Metlak Development Corporation and the Biodiversity Program were present. The forum, a rather formal affair, produced a set of unanimous resolutions, which included an immediate attempt to cancel the logging agreement, the development of alternative income earning opportunities and the establishment of a Conservation Area. Notwithstanding the unanimous acceptance of these resolutions, this and subsequent plenary forums failed to create a unified stance among the involved communities. While the team saw these forums as examples of its participatory and people–oriented approach, both the levels of participation expected from local people and the way in which these happenings were organised throws up a number of questions.

In the first place, the level of popular participation in problem definition was limited. The project put local people in a position where they either had to choose for a continuation of the timber concession which was providing them with an immediate source of income, or opt for the ICAD method promising to develop future sources of income. Both alternatives were defined and managed by outsiders, with the difference that the logging concession was the result of an 8 year campaign by local landowners to bring the company in (McCallum 1996). In contrast, the conservationists came largely uninvited. Whereas the main problem for local people, a 'lack of development and services', was directly addressed by the timber company with its handouts of money, the provision of jobs and the promises of more to come, the ICAD project defined the problem as 'a lack of conservation'. It then tried to

make conservation activities acceptable by linking them to 'development', in the process also redefining 'development' for people. Thus, where the people in Lak saw development as the receipt of 'free money' and the provision of goods and services, the Biodiversity Program talked about health, education, and community-development.

In the second place, such public settings are rarely a good means to assess the 'real' thinking of people. Mosse (1994) for example, notes that participatory methods and consultations emphasise the importance of 'informality'. Notions of informality are, however culturally constructed and context-specific and what appears informal to a westerner sitting on the floor of a bush material school may from the community's point of view be a highly formal activity, for which people have come together from long distances. In addition, people may be reluctant to speak up against project personnel for fear of jeopardising their chances to benefit from project activities. Such public events thus tend to emphasise the general over the particular, while also suggesting a common interest among those present rather than highlighting the diversity of interests among them. In many communities an ethic of solidarity prevails in the face of outsiders, giving the project team the impression of a united community (See for example Bierschenk *et Al.* 1998, Pottier and Orone 1995). Already in September 1990, Filer noted that

> The strange thing about New Ireland, in comparison with many other parts of the country, is that it is very hard to tell what anyone really thinks about anything. To put it crudely, New Ireland is a place where everybody claims to be acting on behalf of someone else, where no-one really trusts anyone to act on their behalf, but no-one is prepared to say so publicly, for fear of being disrespectful. New Irelanders excel in the virtue of politeness, but the virtue of politeness can easily turn into the vice of dishonesty (Filer 1991b: 71).

The team, however, took little time to understand the dynamics of social control in such plenary meetings, simply taking the things that people said at face value. The fact that the resolutions of the first forum were taken unanimously, while it was already clear that the communities were very divided over what to do, should have rang a bell. Instead, it was taken as a measure of the project's initial success. Five days after the first forum, a group of villagers argued that they felt pressured into agreeing with the tabled resolutions (McCallum and Sekhran 1997).

THE 'SHADOW PLAY' OF PARTICIPATION

A common, but naive view of participation, centres on the illusion that when both intervenors and the recipient populations are able to express their views and priorities, such leads to a solution for the differences in opinion and interests that characterise conservation interventions. The fact that the stakeholders involved in participatory project development, may 'agree to disagree' is seldom recognised. The implicit assumption is that 'participation' reconciles incompatible explanations of reality and allows conflicting interests to somehow be massaged away. A simple

reason for this state of affairs is the fact that both the intervening conservation agency and local people have a stake in keeping up the appearance of mutual co-operation. For the project team, it is almost impossible to acknowledge to its donors that the gulf between local interests and that of the project is too large to be bridged. The admission that it has not been able to bring the importance of conservation across and that it has not built the rapport with local people on which 'truly' participatory projects are supposedly based, has the connotation of failure, damages careers and harms the institutional interests of the involved organisations.

To local people, the reason for perpetuating the illusion of mutual co-operation lies with the fact that project interventions virtually always bring some form of jobs, incomes, and opportunities to the target area. Even when local people have no intention whatsoever to comply with the demands of the project, there is much reason not to state such in an outspoken manner. Better to play the game of participation, in the mean time tapping into the resources and opportunities that the project's presence may bring. In addition, many communities have an ethic that forbids public conflict or disagreement. The resolutions of the first Lak forum with its unanimous and far-reaching decisions were only attacked afterwards.

The result is a sort of 'shadow play' in which both project and people have an interest in not breaking the illusion of co-operation and participation. It results in a conspiracy of silence, which is only broken when the differences between people and project and within communities themselves become so glaringly obvious that they can no longer be ignored. It is only then, that local people tell the project to get lost or that project teams are forced to concede defeat. This is what happened at Lak, where the early warnings that the views of local people were not compatible with the development of a conservation area and the cessation of logging were ignored. The project team instead tried to polish these differences away through a combination of environmental awareness raising activities, promises of goods and services and a number of plenary meetings. People avoided having to make decisions by 'sitting on the fence' simultaneously supporting two mutually incompatible proposals. Project team and people thus played the 'participation game' until the resource targeted for conservation had been degraded to the extent that the project's failure could no longer be suppressed.

PATRONAGE, EXCHANGE AND SOCIAL RELATIONS AT LAK

Even though the issue had been raised from the start, only over time did the project come to realise the extent to which local support both to logging and conservation rested on the extent to which these initiatives provided immediate incomes. Local landowners actively played the timber company and the ICAD project team off against each other in attempt to both maximise returns from the presence of these two competing initiatives and to determine which of the two contained the 'best deal'. Niugini Lumber Merchants knew how to play this game. It provided funds to the directors of the Metlak Development Corporation with whom it had the logging

agreement, it paid royalties to local landowners, and maintained an extensive network of patronage relations within the Lak communities and the provincial government.

In contrast, the Lak project was approached from a biological and rather technocratic angle. The initial focus of the project lay on collecting data on local flora and fauna, the construction of a base and an environmental awareness campaign. A large number of foreigners would visit the area, conduct various studies, but in general have little contact with the local population, as their focus was on biodiversity, not people. Already during the first forays in New Ireland by the environmental task force, Filer (1991a: 20) noted that

> 'Short visits to obscure places by large and diverse groups of experts are not a cost-effective way of achieving the aims of the Task Force. Too much time is spent in first-calls hotels and chartered aircraft: too little is spent with the land-owners whose needs and views are critical to the outcome of the exercise'.

The issue of conservationists spending too little time with local people, and having too little interest in people's perceptions of the world around them, their history, the way in which social relations are struck and maintained and a certain reflexivity on how local people might perceive the project and its staff, is one that recurrently pops up in the history of the Biodiversity Program (See chapter 5).

Cooke (1997) suggests that part of the reason why the company may have been more effective than the project in linking up with local people had to do with the fact that the staff of the timber company engaged in culturally appropriate patterns of social exchange. Whereas westerners tend to make a distinction between gifts, perks and bribes, to the Lak people all of these have in common that they signify a social relationship between the donor and the recipient. The Lak project staff, however, was not in a position to 'give things away', as they were on one hand restricted by the accountability procedures of the UN, and on the other saw the donation of social and economic services as a final, rather than a first step in their dealings with local people. Where the Lak people would look upon the exchange of gifts as a material token of an underlying social relationship, and would see the absence of such as a denial of such relationship, the project staff saw the development of income generating activities and development services as the final outcome of a business-like agreement between project and people. Before the flow of development related activities could start, people would have to sever ties with the timber company.

While the logging company thus continued to provide gifts and incomes and had established strong patronage relations with a raft of local people and their politicians, the ICAD team mainly lectured. The Biodiversity Program conducted numerous studies and provided leaflets on the dangers of logging, but it did not offer any immediate source of gifts or income to local people. It was, however, this aspect which dominated project-people relations and which, notwithstanding the ICAD principles underlying the Lak intervention, would prove to be a key weakness in the team's approach. Whereas the Biodiversity Program had U$ 5 million to

spend on the project team, consultants, studies, transport, and could afford the construction of a base, it had nothing available to offer to local people. The Final Review Mission in 1998 noted this discrepancy when it noted that:

> 'The Project document states "a range of benefits will be provided to landowners in return for development rights forgone in conservation agreements. These benefits may include, but are not limited to: health services, education and training services, employment, agricultural development programmes, business development programmes, resource management decision-making forums, boundary identification, resource monitoring and management systems", yet though output 1.4 provided for the implementation of "ICAD benefit delivery methods", apart from a U$ 66,000 allocation for a consultancy to investigate economic development options there was no financial provision at all for economic or social development'(PRM 1998: 11-12).

As a result of this strange situation, the Biodiversity Program was not only unable to forge socially meaningful relations with the Lak population, but also structurally unable to compete with the benefits distributed by the loggers. In late 1994, the Metlak Development Corporation baited the program by suggesting that

> 'the project demonstrate that there is sufficient investment capital to immediately facilitate the sustainable forestry initiative: and that the ICAD-sponsored sustainable forestry initiative run in tandem with the Niugini Lumber Merchants logging operation to allow landowners to compare the benefits of each before committing to one or the other' (McCallum and Sekhran 1997: 30)

The project saw this comment as inspired by logging proponents, and dismissed the question by arguing that it was clearly impossible for two incompatible approaches to operate in the same area. The question, however, went straight to the heart of the problem: To development-oriented people, desperate for income from just about any source, the project team represented a lot of talk but little substance.

ESTABLISHING CONSERVATION-RELATED DEVELOPMENT

The project team, realising that it would have to offer people something if it were to compete with the logging company, soon started to look into local options for economic development. Here they were hampered by the same constraints that local people had been experiencing in their attempts to garner development. Lak is a remote area with little infrastructure, few services and few income-earning possibilities. Its communities are fragmented and its labour force is largely unskilled. Marketing facilities are non-existent. A 1994 economic assessment revealed that a number of small-scale activities such as nut harvesting, crocodile and insect farming, pig and chicken husbandry and fishing could possibly provide some income, but that only a sustainable form of timber production had any chance of competing with the logging operation in terms of incomes. This defined the D of ICAD, and led the Biodiversity Program so vehemently opposed to logging, to try to develop its own timber enterprise.

During 1995, the project team developed an impressive number of initiatives in its efforts to dislodge the logging company. Central in this attempt stood the development of a Lak Conservation Area Sustainable Forestry Project and a related Carbon Initiative. The sustainable forestry project was an attempt to combine the planned conservation area with an income generating enterprise that could compete with Niugini Lumber Merchants. It aimed to selectively harvest trees using reduced impact logging techniques. Aim was to generate additional profits by entering into downstream processing and by marketing the resulting produce as 'eco-timber'. A financial analysis suggested that with an investment of some 1.5 million dollars a profitable exploitation of the Lak resource was possible (Sekhran *et Al.* 1996). As the project did not have these funds available, and was not certain that the financial bottom line was sufficient to meet the expectations of the Lak population, a second rather revolutionary proposal was developed. This proposal centred on the fact that the forests in Lak could not only provide a product in the form of timber, but also render a service in the form of carbon sequestration. This environmental service could potentially be turned into cash through the 'Joint Implementation Initiative' of the United States. The Joint Implementation Initiative is an outcome of the Framework Convention on Climate Change which allows greenhouse emitting industries in western countries to undertake mitigating activities in other countries than their own. Thus for polluting industries it may be more cost effective and technically more feasible to support the conservation and rehabilitation of tropical forests in order to offset their carbon dioxide emissions, than to take technical measures in their own plants. This mechanism has led to the development of an international trade in carbon rights, whereby polluting industries invest in certified carbon offsetting projects.

The Biodiversity Program, with the help of a Los Angeles-based carbon broker prepared a proposal for Lak in which the area was presented as a carbon uptake area due to its levels of conservation, the use of reduced impact logging techniques and the development of fast growing enrichment plantings. The argument was that without the project the carbon uptake capability of the area would be severely compromised and that the Lak project should therefore be certified as a carbon sequestration initiative. Based on the estimates prepared by the brokers and the Biodiversity Program carbon dioxide savings of some 3.78 million tons over a period of some 60 year could have translated in an investment of some U$ 2 to 4 million, sufficient to develop the LCASFP (McCallum and Sekhran 1997, Sekhran *et Al.* 1996).[20] This proposal was pre-approved by the Joint Implementation Initiative.

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[20] It is highly questionable whether such an endeavour would be self-financing. The attractive idea of a 'ethical' timber company financing community development, sustainable forest management and/or conservation area maintenance has been tried out in a number of forms in PNG and the Solomon Islands. None of these projects has even come close to reaching financial break-even, and many have had to be heavily subsidised for extended periods of time (See (Martin 1997; Salafsky *et Al.* 1997/98; Sekhran *et Al.* 1996; VanHelden 1996; VanHelden 1998d, VanHelden and Schneemann 2000).

THE END GAME

As time wore on, the project team and local people entered into a gridlock. The Biodiversity Program tried to convince people and the Metlak Development Corporation that they should cancel the logging agreement with Niugini Lumber Merchants. The Lak people in contrast, found that it was time that the Biodiversity Program proved its point by bringing some form of conservation-related 'development'. During 1995 the project tried to break the resulting deadlock by developing an Early Rewards Schedule worth U$ 150,000, which promised people the immediate implementation of a large number of small community projects upon termination of the logging agreement.

Notwithstanding a recommendation at a third community forum to terminate the logging agreement, the directors of the Metlak Development Corporation refused to effect this decision and the stalemate continued. By November 1995, the Biodiversity Program had to conclude that the Weitin forest resource had become insufficient to support the sustainable forestry project and that its only option was to withdraw from the carbon initiative. For a while it would continue its attempts to convince people to terminate the logging agreement. Local people in turn, saw their suspicions concerning the project confirmed. They had since the first sorties in 1990 argued for tangible 'developments' and only received words. The high levels of expenditure by the project on infrastructure were not given much credit as these costs had generally not produced substantial individual benefits. Logging in contrast had. McCallum (1996: 38) notes how the 2130 individuals that make up the Lak population received a total of some Kina 400,000 (approximately U$ 500,000) in royalties between 1991 and 1995. This 'veritable fortune' led to a 'noticeable decline in the quality of food gardens' as people preferred to buy rather than grow their food, and a neglect of the few existing cash crops. There was no noticeable investment in other income generating activities. He also notes how

> It is difficult not to make value judgements in this regard. In 1994, [he] observed entire logging cheques spent on beer consumed in 3 - 4 day drinking bouts. Common 'investments' included 4 wheel drive vehicles - of the nine new vehicles [he] observed in 1994, all but 2 had been wrecked by 1995. At a meeting in Bakok Village in 1995, land owners said ... 'we got paid over K 100,000. When asked where it was now, the community responded *'pinis. mipela wastim pinis. nogat olgeta nau'* (It's gone. Its wasted. Its all gone - there's nothing left) (McCallum 1996: 38).

In May 1996, the DEC and the UNDP together decided that the project should be terminated altogether. The decision to end the project was communicated at a fourth and final community forum in August 1996, after which field operations ceased. During 1997, international log prices collapsed, making many logging concessions unprofitable and leading Niugini Lumber Merchants to close its Lak operations.

The game was not over because the resource which the Biodiversity Program had been aiming to conserve had been destroyed, but especially because the resource which was to constitute the basis for the project's sustainable forestry operations

had been logged out. The irony of the Lak project is that in actual fact, the hill area which had the conservation focus of the project, was never under significant threat, but that due to its ICAD methodology and the view of forestry as the only viable economic activity in the area the project had run out of options (McCallum and Sekhran 1997: 40). With the benefit of hindsight, it appears that the Biodiversity Program should have ignored Lak altogether as the conservation of its hill forests will probably take care of itself.

PROCESSING THE LAK EXPERIENCE

Planned interventions, such as that implemented by the Biodiversity Program in the Lak area, are justified and legitimised not only by the a-priory intervention strategies contained in project documents, but also by the periodical evaluation of the programme themselves. Thus, the BIORAP with which the Lak intervention commenced served to legitimise GEF expenditure by suggesting that nature in the area was indeed worth conserving. More general project evaluations, based on a methodical and retrospective analysis of the programme intervention, will not normally consider a project 'successful' unless the objectives stated at the outset have been achieved. In the case of the Lak project, the main objective of establishing a conservation area had not been met. Yet, even a 'failure' can provide the rationale for a reformulation of the programme in order to have another shot at achieving the original aim. Long and van der Ploeg (1989: 234) suggest that

> 'Failure is seldom a reason ... to halt a particular intervention policy. Normally 'failures' are the starting point for the elaboration of the next round of interventions. One could even argue that a certain degree of 'failure' is strategic in the reproduction of intervention itself. Irrigation schemes, integrated rural development programmes, or extension programmes can in fact go on for decennia, since every four years (or whatever time span is planned for periodic evaluation) it may be concluded that the established goals have 'not yet' been reached, or that new problems ... have arisen'.

Following the Lak debacle, however, the Biodiversity Program was not in a situation where a mere modification of its project strategy was enough to justify another round of interventions. The game was over.

The simplest thing that the staff of the Biodiversity Program could have done under these circumstances was to maintain their presence at Lak and sat the program out until April 1998 before admitting defeat. To their credit, however, this common sense strategy, was not deemed acceptable by a majority of the staff who felt that they were wasting precious time, energy and funding. The decision to withdraw, a politically difficult resolution which had to be negotiated with the UNDP and the Government of PNG, and is at odds with Hirschmanns (1968) observation that projects tend to continue at all costs once serious investments have been made. It is also at odds with prevailing project practice in many development bureaucracies where spending money is a more important indicator for project success than actual

achievements on the ground. As the former environment officer of the UNDP country officer notes:

> 'donors are mainly concerned in smooth operations, successful or not, and the need to report to HQ that the funds were spent. It is ironic that one of the biggest criteria for evaluation of a donor programme is the delivery of programme funds – not the success achieved on the ground. This leads to a pressure to push poorly designed projects, or projects which are not "owned" by the stakeholders, through the system, just to spend the funds' [Scheuer to VanHelden 12 August 2001].

Whereas it took some time before all staff of the Biodiversity Program accepted that a withdrawal from Lak was the best possible course of action, over time the question how to explain this withdrawal gained importance. From halfway 1995 onwards, when the project team saw the likelihood of a termination of ICAD operations at Lak increase, a gradual process of digesting the Lak experience began. This process was politically sensitive for a number of reasons. In the first place it had to prepare the ground for a withdrawal from Lak, while at the same time avoiding the possible conclusion that the context of PNG land tenure, combined with the entrenchment of multinational logging companies, made biodiversity conservation impossible in those areas where logging operations had access, and unnecessary in those areas where they had not. In the second place, there was the implicit question as to who and what was to blame for the course of events in Lak.

The question how a withdrawal from Lak could be best explained led to some discussion between those in favour of a careful and relatively open analysis of the Lak experience with the aim to do things better in the second ICAD site, and those that feared that such exposure would damage their careers. Those in favour of analysing and publishing the Lak experience, especially the resource economist of the Biodiversity Program and the environmental officer of the UNDP Country Office, were aided by a 1995 Project Review Mission. This mission, having its doubts with regard to the manner in which the Lak project unfolded suggested that 'Lessons learned at Lak and other ICAD initiatives need to be evaluated prior to the adoption of a strategy for ICAD 2 implementation' (PRM 1995: 3-9). By the second quarter of 1996, the Lak conservation area manager and the resource economist were given the go ahead to produce a so-called 'lessons-learnt document'. In this they were aided by their interactions with a new community development trainer recruited for the Bismarck-Ramu project, who provided a more self-reflective perspective on the Lak experience, by arguing that projects trigger unrealistic expectations due to the way in which the project presents itself. In practice, the analysis of events at Lak, the examination of the first interventions in the Bismarck-Ramu area, and the development of a new community-oriented strategy would take place concurrently (See chapters 5 & 6).

This combination of considerations led to a brilliantly executed operation in damage control, in which the Lak project was projected as the 'pilot project' and 'experiment' which it originally was, while at least part of the blame for the project's failure was

placed on local people (see below). The key objective of the Biodiversity Program had been 'to establish two pilot Integrated Conservation and Development projects with the aim to develop innovative methodologies for the conservation of biodiversity'. In practice, the Lak team had focussed on the first half of this objective assuming that success in establishing the conservation area would have rendered its methods innovative. In the evaluation of its experiences, however, the team focussed on the second half of this objective, redefining the essential output of the project from establishing a conservation area to generating a number of valuable lessons. Two years later, the final evaluation mission would recognise this switch when it suggested that

> 'to reflect the course taken by the Project, it would be appropriate to rephrase Immediate Objective 1 [from "to establish two pilot Integrated Conservation and Development projects to develop innovative methodologies for the conservation of biodiversity" to] "to develop innovative methods for conservation of biodiversity and establish pilot ICADs"' (PRM 1998: 36).

The transformation in the treatment of the Lak project from a concerted drive towards the establishment of a conservation area in the face of a logging operation, towards that of a 'trial project' had been prepared by a July 1995 Project Review Mission (PRM). This mission paved the ground for this shift by arguing that

> 'in the event that the Lak ICADP is scaled down or abandoned, it is important that it be seen as an experience, a trial, and not as a failure. The knowledge thus accumulated will be of great value not only for the development of the second ICAD site and other ICAD initiatives in PNG, but also on a broader international scale' (PRM 1995: 3-6).

The interpretation of the experiences at Lak would eventually find its most tangible result in the writing of a lessons-learnt document called *Race for the Rainforest: Evaluating Lessons from an Integrated Conservation and Development 'experiment' in New Ireland, PNG* (McCallum and Sekhran 1997). The document explicitly adopts the strategy prepared by the PRM as becomes clear in the foreword by the UNDP Resident Representative:

> 'Because the Lak Project was an ICAD project, it focused on development initiatives such as the design of a sustainable forestry project, however, because a commercial logging operation was already under way, the resource base for the sustainable forestry project diminished rapidly. Hence the project turned out to be unviable and did not result in the establishment of a conservation area. Why therefore, is the Lak project considered as having been successful? The answer is simple: the programme was expressly mandated to experiment, design and trial innovative methods for gaining landowner support for conservation initiatives. In the case of Lak the experimental result may have been negative, but the outcome has been positive. The principal positive outcome of the Lak project is that invaluable lessons have been learned'(Witham in McCallum and Sekhran 1997).

The failure, denied in the foreword of the official UNDP document, is however, prominently displayed in the title of a MSc thesis written by the Lak conservation manager: '*Analysis of an ICAD Failure: lessons for conservation managers*'. While the failure to establish a conservation area was transformed into a number of successful lessons has been described, the question of how the project dealt with the question who and what to blame for Lak events remains to be dealt with.

SHARING THE BLAME OF FAILURE I

Schaffer (1984) suggests that policy documents always contain a variety of 'escape routes', which in the case of unforeseen events allow project proponents to shift responsibility for a project's failure. A well-known example of such a device is the separation of policy making from policy-implementation, allowing policy makers to blame project failure on the poor executing abilities of the field staff, while the latter may argue the impossibility of this task due to incompatibility of the designed policies and the context in which they were to be implemented. The manner in which the emphasis with the first objective of the Biodiversity Program shifted is another. Some of the most common blaming mechanisms focus on abstract but usually negative qualifications of reifications such as 'administrative structures', 'governments' and 'political systems' which are being branded as 'corrupt', 'inefficient' or suffering from 'a lack of political will'.

According to Schaffer (1984: 182) such statements hide that in fact that in reality there is 'a scatter of conflict and wills', which may be inconvenient for some, but not for others and which help to explain the specific outcomes of policy. The notion of a 'lack of political will', for example, hides the fact that apparently there are political forces within the project implementing process which have prevented the project from achieving its aims. Such sweeping statements avoid having to make the analysis as to why this was so, and how such resistance can be overcome in the future. The use of such 'escape routes' therefore does not lead to solutions as they 'do not lead to a working out of how the actual is to be coped with, or to taking it seriously' (Schaffer 1984: 184). Such mechanisms provide a rationalisation for failure, which shifts the blame away from the involved practitioners towards unforeseen events, a lack of information, opposing negative forces, the character of segments of the implementing apparatus or the specific socio-cultural traits of the recipient population. This latter aspect would come to play a role in the first explanations of the Lak failure. Only latter would the initial frustration with local society be transformed into the lessons contained in *Race for the Rainforest.*

By the beginning of 1996, the Biodiversity Program was increasingly frustrated with the lack of commitment on the part of the Lak landowners. Decisions to cancel the logging agreement were not effectuated and became apparent that local people largely preferred to receive logging–related royalties than having to work on a long-term sustainable development alternative. Not surprisingly, the specific traits of Lak society came to be seen as one of the main reasons for the project's failure. This

becomes especially visible in a number of internal documents used for a 'review of options in Lak' at the end of 1995 and a 'strategic planning workshop' in May 1996. The latter document lists under the heading 'Motivation, Attitude and Cultural Considerations' the following aspects which were found to be detrimental to successful project development:

> 'Motivation: Motivation to work, particularly amongst Lak men, must be described as low. Men devote most of the day to customary activities and local politics and little physical labour is done...
>
> Custom: Everyone in Lak devotes enormous amounts of time to customary activities, the purpose of which is to maintain and further the status of ones clan, and in the case of men, oneself...
>
> Politics: Politics play a crucial role in determining people's allegiances to various activities and projects, most notably the ICAD project. The ex-Provincial Member was a staunch supporter of the ICAD Project and was the catalyst of the selection of Lak as the first ICAD site. The candidates he defeated in the last provincial elections see it as their responsibility to destroy activities that he may bring to Lak in the hope of undermining his status and political power...
>
> Customary jealousy: Lak custom dictates that men must go through certain rites of passage in order to progress through the ranks of customary hierarchy and power.. If an entrepreneur becomes too successful he may be seen to be exceeding the entitlement of his customary ranking and the community will begin to work against him... The obvious fault in this system is that it completely stifles entrepreneurs....
>
> Living for the short term: ... The back bone of conservation theory is based on the premise that we should take actions now that will safeguard the future of those yet unborn. In Lak these attitudes do not prevail. Typically it is the older members of the community who desperately crave development so that they may amass as much wealth as possible in the short term to spend before they die. The attitude to their children, and to future generations, is one of 'let them make their own way ... and take their own chances'.
>
> High expectations: Expectations in Lak are unrealistically high. These expectations stem from the perception of development as cargo, ignorance of the modern world and a failure to appreciate the value of money. The unrealistic expectations held by the people of Lak are potentially the most damaging cultural aspect to the future of the project.
>
> Failure to accept responsibility: ... People do not, not even after the extensive awareness campaign, accept that the ICAD project is their project, working for them to guarantee their future. Most people still view the project as a separate entity and often to ascribe to it a familiar status, e.g. a new church or a new kind of company. These attitudes are proving difficult to change and will prove difficult to eradicate completely. Examples of these attitudes are found in the theft and vandalism of ICAD project and Metlak equipment and machinery as the offenders do not appreciate that they are harming their own interests. ... The failure of the people to accept some responsibility for the development attempt

> and to link it directly to themselves, plays an important of this problem '(CRC 1996c: 4-7).

These attitudes, in combination with the difficult economic environment in which the project had to be developed and the presence of the logging company with its corrupt practices, patronage relations and 'easy money', made it difficult to achieve conservation success.

The above summation reveals a number of implicit assumptions and expectations with regard to local society with which the project team entered the Lak area, and which later – to its frustration - proved false. The most obvious among these is the idea that people will be conservation inclined if they are provided with the 'right' information and incentives. The view of ICAD as a business-like relation not only assumes that project and people have the same mode of establishing social and economic relations, but is also implicitly based on the assumption that communities are not made up of a series of disparate factions and individuals, but act in a unified and collectively accountable fashion. As is clear from the above, this rosy picture could not be sustained in reality and was over time replaced by a more negative conception of local culture.

The fact that the project had failed to take sufficient account of local culture meant that the team accepted blame for not investing more time and effort in assessing the social aspects of protected area establishment. The selection of the Lak area had been made on the basis of biological and political criteria without paying sufficient attention to the socio-cultural landscape and the warnings of the visiting social anthropologist. As *Race for the Rainforest* notes: the Biodiversity Program had 'seriously misjudged the complexity of the social, political and economic landscape for biodiversity conservation' (McCallum and Sekhran 1997: 51), and thereby its ability to dislodge the logging company. As a result of this analysis, the Biodiversity Program concluded that future ICAD projects should select their area of work on the basis of combined social and biological criteria, and that a separate social feasibility study was required to assess the 'conservation disposition' of local communities. Important to note, is that the program did not review the tenets of the ICAD approach itself. *Race for the Rainforest* for example noted that education on issues of development and conservation was of great importance, but 'an education programme alone will be insufficient. Material incentives will also be required' (McCallum and Sekhran 1997: 60) . It was thus a matter of doing the same thing better. Only later would the ICAD approach itself become a point of discussion.

An issue which was not mentioned in *Race for the Rainforest*, but which obviously played a key role in the Lak failure, was the fact that even though the Biodiversity Program aimed to establish conservation areas through what was essentially a conservation for development transaction, it simply did not have the funds to develop meaningful development activities, leave alone activities of the size required to compete with the logging company. Thus whereas the Lak project had placed itself in a crisis situation in which it had to make immediate and substantial

offers to local communities, the Biodiversity Program by nature of its design was simply not equipped to execute its own project philosophy. In the light of the limited availability of resources it is thus not surprising that, whereas in the Lak project the D of ICAD was defined in terms of income-generating activities, the project philosophy in its second ICAD site would come to centre on a definition of development as a form of 'self-help' which required much lower levels of capital investment.

The idea to write these lessons up as suggested by the PRM, was in many way quite revolutionary as very few projects present their operations in such a candid manner as the Biodiversity Program did. The report was generally well received and has become something of a classic in international conservation and development circles over the past couple of years.

INTRODUCING THE BISMARCK-RAMU AREA

By the end of 1994, as the tension in Lak was increasing, the Biodiversity Program started to select a second ICAD site. After some considerations, which will be discussed in chapter 4, it chose the Bismarck-Ramu area on mainland PNG as the site of its second ICAD intervention. The resulting area of interest straddles the border of Western Highlands and Madang provinces, and encompasses a northeast-oriented square of roughly 325,000 hectares. This area includes the largest possible altitude interval in Papua New Guinea, from 60 metres above sea level at the Ramu River to the 4500 metres high peak of Mount Wilhelm and contains most major Papua New Guinea vegetation zones. Its geographical differences allow - from south to north – for three main divisions of the area, each with its own physical and human geography.

The Jimi Valley lies between the Sepik-Wahgi divide and the Bismarck Range and is shaped by the Jimi River that rises in the Mount Wilhelm massif and drains into the Sepik Basin. The Upper Jimi Valley is populated by some 7000 inhabitants who mainly speak a variety of the Waghi language. The relatively high population densities and the rough and steep terrain limit the land use options available to the local population and here are signs that the area is entering a process of degradation because of shortening fallow periods. The local requirement for cash is growing rapidly. Cash is not only necessary for supplementary foodstuffs, medicine, and school fees, but also the more traditional obligations of bride and compensation payments have become monetised. Especially those people familiar with the lifestyle in the Waghi Valley have come to regard access to cash as a way to solve many of their problems. At present, cash is mainly earned through coffee, peanuts, the few Government jobs available, and migration labour. Further into the Upper Jimi the growth of cash crops is hampered by a lack of infrastructure.

The Bismarck Range forms the administrative boundary between Madang and Western Highlands provinces and is mainly characterised by a large number of deep

faults, intersected by numerous large rivers. The fall is covered by forest and has an extremely high range of different ecological systems. The area is virtually uninhabited, but used for the planting of pandanus nut, betelnut and fruit, hunting, trapping and fishing. A number of makeshift shelters and garden houses lie along the footpaths that lead down towards the Ramu floodplains. At the end of the sixties exchange started taking place between the Jimi and the Ramu people resulting in downhill migration by some 400-500 highlanders and increasing intermarriage with lowland peoples. The 'giving of women' to the Ramu groups is the main legitimisation used by various groups of Jimi settlers for their presence in the Ramu Valley and in contradiction to the dominant practice of virilocal residence in the area. The Ramu people, having experienced how intermarriage with the Jimi settlers encourages them to settle on their lands, have been trying to adopt a policy of non-marriage in order to prevent further encroachment.

The Ramu floodplains vary in width as the river meanders through it and are dominated by swampy vegetation and wetland forest interspersed with sago palms. Other areas are permanently dry as they lie above the watermark and are covered in primary rainforest with an abundance of wild pigs and birds. Apart from the recent influx of Jimi settlers into the Foroko-Brimde not more than about 200 Ermerum and Musak speaking people live in five or six small bush camps along the Ramu River. Sepu is the most important settlement. Tension between the Ramu landowners and Jimi settlers is constant. The Jimi settlers see themselves as superior to their hosts and complain that the Ramu people are lazy, inhospitable and unorganised. While the Jimi are more or less sedentary horticulturists, who will move only when confronted with insoluble problems in the form of tribal war and epidemics, the Ramu people have a more nomadic disposition and a more rapid pattern of relocation. The Ramu people supplement their hunting and gathering with produce from their small gardens on the river banks. Apart from the possible construction of a road towards Foroko-Brimde and the rumoured arrival of logging companies, the most important change to the area comes from a nickel-cobalt mine which is being constructed in the Bismarck ranges to the east of the project area, and a oil drilling venture to the north of the Ramu River.

CONCLUSION

This chapter has built on the previous chapter by discussing how PNG, as a result of its specific land tenure situation, takes a peculiar place in the conservation spectrum 'between stick and carrot'. Notwithstanding its high levels of biodiversity, the Government of PNG and foreign conservation agencies lack the legal tools to enforce conservation mechanisms for the public good. The only way to go about conserving nature in such a situation is to make conservation attractive to the rural communities that own that nature. One such attempt constitutes the use of the Integrated Conservation and Development methods as a means to create protected areas. In doing so, conservationists have placed themselves in a position of direct

competition with the forestry companies operating in PNG. Both vie for the natural resources held by local communities, and both try to convince the involved stakeholders that their activities are important for a range of reasons. This discussion, and a examination of the debate over the combination of social and biological criteria used for siting potential protected areas, serves as a background to a description of the Biodiversity Program and its first ICAD intervention at Lak in New Ireland province.

The Lak project was from the start approached from a biological and technical angle. The initial interventions focused on collecting biological data, the construction of a base and an attempt to convince local landowners of the importance of conservation, rather than focusing on the ability and willingness of local communities to absorb and carry such an undertaking. Not only did the project collect little socio-economic information, it ignored the warnings on the predisposition of local people towards logging by a visiting anthropologist. The choice for this area was a political one as it was deliberately decided to implement the first ICAD project in an area where logging was ongoing. This focus was maintained even in the face of indications that the resource was not of the biological significance initially assumed. It also appears that the hill forests, which were the focus of the project's conservation efforts were never under serious threat. Only when the lowland resource necessary for the sustainable forestry project which was to support the conservation area dwindled to the extent that an economically viable ICAD operation became impossible, and the chance to defeat the loggers was gone, did the Biodiversity Program withdraw.

Obviously, the ICAD project team was aware that the Lak landowners held the key to a successful implementation of the project. The Lak community, however, was not expected to define the project according to its own needs and insights, but was simply presented with the choice between two ready-made options; logging or the ICAD concept. Both of these options, logging as well as the ICAD project, were defined and propagated by outsiders. On the one hand, there was the Malaysian logging company with its 'easy money' and its patronage relations. On the other hand, the abstract ICAD alternative with a promise of future rewards and the predictions of doom and gloom if logging would continue. In the middle, stood the landowners and their politicians. In hindsight, it is easy to argue that the communities, their big men, and the involved provincial politicians had already to such an extent become entangled with the timber company that it would have taken a Hercules to cut this Gordian knot.

During the course of the project, the visions of local people held by project personnel would shift. Whereas initially the project team saw people as essentially inclined towards conservation if provided with the right incentives, this would later shift to a less positive view which emphasised people's short-term thinking, their lack of organising capability and their 'cargo mentality'. Anthropologists working at Lak however, have suggested that the project personnel tended to approach local society in economic terms, failing to establish meaningful social relations. The logging company in contrast, was well entrenched through a variety of exchange relations.

Even if the decision by local people to pursue conservation or logging had been made on purely economic grounds, it is unlikely that the project would have succeeded. Where logging paid immediate dividends, the project by nature of its design lacked to funds to pursue the 'D' of ICAD.

A description of the respective social organisation in the Jimi and Ramu Valleys, Jimi migration patterns and the difficult relations between these two groups in the Ramu Valley is the topic of the next two chapters. These set the stage for the social and territorial conflict in which the Bismarck-Ramu project would come to play a role.

Chapter 3

FRAGMENTATION AND COMPETITION: A DESCRIPTION OF JIMI SOCIETY

INTRODUCTION

This chapter[21] provides an ethnographic overview of the Jimi people living in a highly competitive, exchange-based and existentially insecure social environment. The Jimi are highly competitive people, that continually strive towards establishing the most beneficial set of social, political and economic relations. A description of social organisation, leadership and co-operation makes clear that notwithstanding the segmented social organisation with an apparently clear-cut division of tasks and responsibilities, Jimi communities should not be seen as homogenous and discrete entities. The continuously shifting patterns of co-operation and conflict between and within the various social units, the important role of local big men and their clan groups jockeying for position vis-à-vis one another, and the increasingly individualistic attitude of the Jimi people constitute a confusing environment for well-intending 'community-based' development interventions.

I will dwell in some detail on the importance of kinship and marriage-based exchange relations. In the Jimi valley social relations simultaneously underpin and become expressed through economic transactions. Exchange and trade are an expression of the affiliation between two groups or individuals in which the quality of the gift 'indexes' the quality of the underlying relationship. Also present-day forms of economic co-operation such as found in the coffee trade and migration patterns are generally based on pre-existing social relationships. Where there is none, people make an effort to create one. While exchange relations with kin and in-laws are guided by moral considerations and reciprocal duties and expectations,

[21] This chapter is based on *Between Cash and Conviction* (VanHelden 1998b). Material contained within it has also found its way into VanHelden (2000) and VanHelden (2001a).

relations with outsiders are notoriously unstable, easily sliding into deceit, theft and violence. The argument that the Jimi exploit their relations with outsiders in the form of strangers, the state, churches, companies and nowadays projects and the state, in an instrumental and opportunistic manner is illustrated by looking at the ways in which Jimi people responded to the arrival of the Australian administration and the missions in the 1950s. The Jimi people were far from passive as they 'underwent' colonisation, but actively exploited the opportunities offered by the new colonial order, enlisting the administration and the churches in their attempts to further their security, reputation and opportunities for trade. A similar attitude to the interventions of the Bismarck-Ramu ICAD project and the gap with the response expected by the project team is the topic of chapter 5.

In this chapter will also look at the Jimi incorporation in the cash economy. Whereas the aim to maximise personal and group reputation has remained intact, the nature of reputation building projects has shifted. Reputation and leadership, previously connected to a number of personal attributes and the ability to manipulate exchange relations, are now being partially replaced by a new emphasis on cash and formal politics. At the same time the post-colonial decline of Government services has led to strong feelings of inferiority, prompting the Jimi to try harder then ever to capture what they see as 'their rightful share of development'. The disappointment with the state, and the new emphasis on cash has also had its impact on the way in which local people perceive the environment. Rather than being a source of subsistence production, the natural environment is now increasingly valued in terms of the cash incomes that it may generate. As a result of these issues Jimi images of 'development' emphasise a complex combination of group status, individual achievement, cash incomes, and a highly political view of the development process.

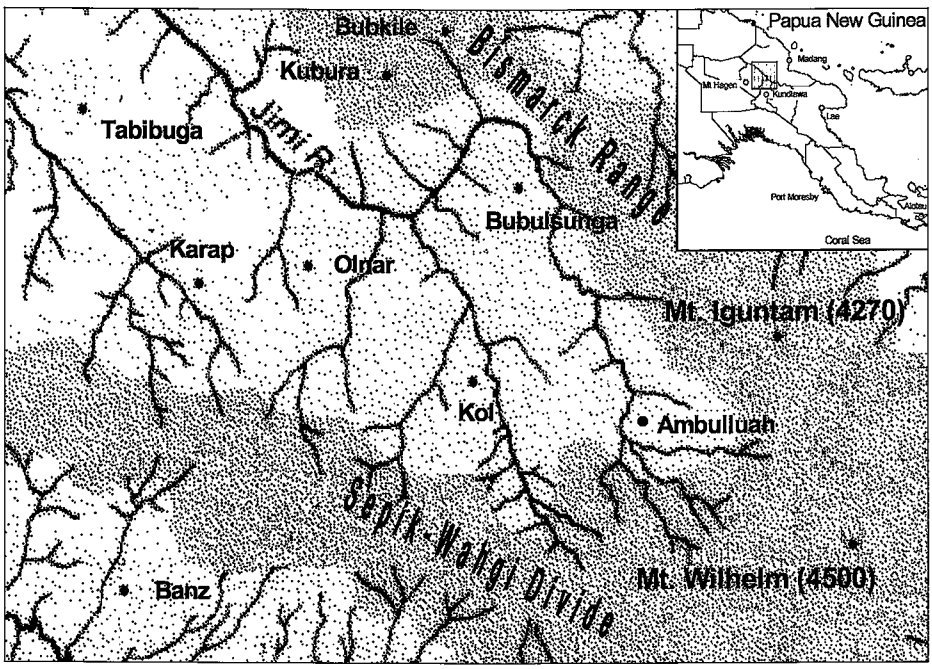
A DESCRIPTION OF THE JIMI VALLEY

The Jimi Valley is largely shaped by the Jimi River which rises in the Mount Wilhelm massif and which drains to the north-west. In the Middle Jimi, the river has carved out a large valley between the Sepik-Wahgi Divide to the south and the Bismarck Ranges to the north. The 2,500 to 3,500 meters high Sepik-Wahgi Divide is the watershed of mainland PNG with the rivers in the Wahgi Valley draining on the south coast while those in the Jimi Valley drain to the north. The Jimi Valley is about 72 kilometre's long and on average 13 kilometres wide (I. Hughes 1977: 67), but the upper part is hardly recognisable as a valley due to the deeply incised rivers which are separated by high mountains. Settlements usually lie on top of these interfluvial mountains in an altitude band of 1600-1800 meters ASL. The Jimi River runs between 600 and 800 meters below them. The landscape becomes less broken as one travels downstream and as the valley gradually widens out. The Upper Jimi area between the settlements of Kol, Bubulsunga and Bubkile is the subject of this study.

The geographical areas, in which the people of the Jimi Valley live, have often been given names relevant to that particular spot by patrol officers who built a rest house

there or by the missionaries that settled in the territory of a clan. In a few cases, the government or the mission had an airstrip built. These strips still offer the easiest way into and out of the area and are used by the smaller third level airlines operating small aircraft. The most important settlement is Kol, which lies in a broad valley at the end of the road to the Wahgi Valley. The village contains the District Office, a grass airstrip, a small clinic, a community school and two mission posts. The gardens of the local population are located on the mountain slopes above the clusters of houses along the river.

FIGURE 3: MAP OF THE UPPER AND MIDDLE JIMI VALLEY



Further into the Jimi Valley, but still within the rim of the Bismarck Range, one finds Bubulsunga and Bubkile, two other villages of importance for this study. These settlements are located in the same altitude range of about 1600 to 1800 meters but are perched on the ridges overlooking the gardens and the Jimi River. These settlements, consist of a number of hamlets inhabited by the members of a variety of patrilineal and patrilocal clans and sub-clans. In pre-colonial times each clan in the Jimi had a dance ground for its ceremonial prestations, usually covering the little flat ground available. These grounds now serve as airstrips or marketplaces and have been used to construct schools, churches or health posts, thus becoming the combined administrative, economic and ceremonial centre of social life. Most other settlements in the Upper Jimi are small hamlets or compounds composed of the

male members of a sub-clan with their wives and children. Domestic groups usually include a man and his wife or wives, their children and possibly sisters, elderly parents and other dependants living in. In 1980 the Upper Jimi counted some 6,982 people, resulting in a gross population density of about 19.1 persons per square kilometre (Joughin and Thistleton 1987: 17). This figure does not reflect the fact that the Jimi Valley is an extremely rugged place with steep slopes and high mountains. Montane forest is used only for hunting and gathering, while lower areas suffer from endemic malaria. These constraints reduce the area suitable for human habitation, to an altitudinally compacted settlement zone between 1200 and 2000 metres ASL. This zone is heavily impacted by subsistence activities, consisting of secondary forest, woody garden regrowth, planted trees and small patches of tall grassland. Due to population pressure and shortening fallow periods many settlements show signs of increasing erosion. There is little wildlife left in the Jimi Valley and people walk for hours to go hunting in the Bismarck Fall.

Infrastructure in the Jimi Valley is very limited. There are two small airstrips which offer the easiest way in and out of the valley but the cost of flying is high. The road from the Wahgi Valley is often impassable due to land slides and does not cross the Jimi River leaving a large number of villages such as Bubkile and Bubulsunga without road access. Travel within the valley takes place on foot along a network of steep and slippery footpaths that make for backbreaking work when carrying coffee, pigs or large string bags of sweet potato. Several walking routes run towards the Wahgi and Simbai Valleys and across the Bismarck Range towards the Ramu valley. Government services in the Upper Jimi are poor. The few community schools and health posts are in a state of disrepair, understaffed and generally without educational materials or medicine. There is no electricity, no piped water supply and there are no telephones in the area. A single police officer based in Kol is expected to keep law and order. The lack of infrastructure and education and the absence of the most elementary medical services constitute a source of complaints.

Kol and a number of settlements on the road count a half a dozen trade stores that sell basic commodities, foodstuffs and some clothing. Outside these there are a number of tiny trade stores. All villages have market days at which people meet, socialise and sell their produce. Often there are more than one market location and several market days in each village, reflecting the fact that each clan group has its own set of social and economic relations. Economically people in the outlying communities of the Jimi Valley find themselves in a double bind. On the one hand, they have fewer opportunities to earn money and receive lower prices for their produce than the people on the road do, while the prices they pay for basic commodities are much higher due to the transport costs. This may partly explain the reluctance of Government officers to live in remote areas, where they not only feel geographically, socially and institutionally isolated, but also feel that seclusion in their pockets.

SOCIAL ORGANISATION IN THE JIMI VALLEY

The Jimi people know their valley and its river by a number of names such as 'Kopon', 'Kon' or Konu' or - more recently - 'Jimi'. The Middle and Upper Jimi area contains four main language groups: Maring, Narak, Jiwaka and Kandawo. As in most of PNG, the borders between these languages are rather fluid. Jiwaka, standing for the 'Jimi, Wahgi and Kambia' is the dominant language used by the Upper Jimi population. The Jiwaka speakers of the Upper Jimi identify themselves with their southern neighbours in the Upper Simbu and Lower Wahgi Valleys, at the same time emphasising their distinctiveness from the Narak speakers to the west. Several commentators mention the extensive trade relations that the Jimi people had with the Wahgi and Simbu people before, and during the period of first contact (Burton 1989, I. Hughes 1977, Healey 1990, Richardson 1958/59, Reay 1959).

The Upper Jimi Valley boasts an elaborate segmentary lineage organisation of a similar nature as that first described by Evans-Pritchard (1940) for the Nuer (Cf. Kottak 1994). The largest social units are clan-clusters consisting of associations of exogamous patrilineal clans with extensive intermarriage relations, which in turn are made up of sub-clans and patrilineages. There are 5 Jiwaka speaking clan-clusters in the Upper Jimi of which two, the Pala and the Kema are of importance for this study. Over time these clan-clusters have lost their unifying character and the association between the constituent clans 'is purely in people's conception of the past and has no significance for contemporary action' (Reay 1959:25). The role of clan-clusters and clans as political and ceremonial units appears related to population growth and group size. With the doubling of the population, the bonds of solidarity between the clans of a clan-cluster weaken.

The patrilocal clan, counting several hundred people, is the central political, territorial and ceremonial unit. Every clan is tied into alliances with other clans through intermarriage, political co-operation and exchange. Membership of a clan confers the right to the use of land and resources, but also the obligation to defend that land and the interests of the group. Beneath clan level the sub-clan is largely independent in the forging of marriage links and the conduct of ancestral ceremonies. Every sub clan in the Upper Jimi has a sacred grove called where pigs are sacrificed to the ancestors. These locations can be seen as clumps of bamboo remaining on otherwise deforested slopes near the village and are often marked by clusters of large pines and plantings of *Cordyline fruticosa*. Unlike the clans of a clan-cluster, the sub-clans of a clan do not intermarry. Often sub-clans have designated areas within the clan territory which they regard as their own and where they will concentrate their gardens. The name of a clan or sub-clan may be the eponymous name of its founding ancestor, the name of the place where he or his descendants lived, or the name of plant or animal (O'Hanlon 1989). The names of clans are usually made up of people's names which have the suffix 'ka' or 'kan' indicating a 'root' or a 'line' of descendants: e.g. the 'Maip-ka', the descendants of Maip. Sub-clans in turn are made up of a number of distinct patrilineages.

Jimi kinship terminology makes a distinction between matrilateral and patrilateral relations in the first ascending generation. This serves to separate those with whom one is related through the fathers side and shares one territory, from those with whom one is related through matrilateral ties and does not share territory. From the second generation and upwards a system of bifurcate merging terminology is used in which no distinction is made between mothers and fathers side, a process termed 'genealogical amnesia'. In Ego's generation a distinction between patrilateral parallel cousins and cross-cousins is made. This serves to emphasise the agnatic nature of the local clan-group to which Ego belongs, as all ones paternal cousins live within the same clan-locality, but also gives Ego a set of affinal relations in the clans where his mother's sisters have married (Lowman 1980). Consequently, each individual has a spread of close relatives outside the localised agnatic clan, while marriage relations provide people and groups with a set of extra-local exchange linkages allowing for the exchange of land, labour and products, and the option of refuge in case of trouble.

MARRIAGE RULES AND THE POSITION OF WOMEN

Marriage rules in the Upper Jimi Valley are best understood in terms of a number of prohibitions. Firstly, in line with the perceived blood-relatedness of the localised clan-group and the rule of exogamy, one may not marry within one's natal clan. Secondly, one may not marry into the natal clan of one's mother and thirdly, one is prohibited from marrying first cousins. Most marriages in the Jimi are monogamous, a norm emphasised by the churches, but many men like to have more than one wife as it serves as an indication of wealth and position. In the past men and women lived in separate houses, but nowadays people live in nuclear families, with only a few elders retaining their separate housing. Marriage patterns are politically sensitive for two reasons: In the first place the spatially dispersed affinal networks that result from marriage rules are of importance in extra-local trade and migration networks and provide allies in case of conflict and a refuge in case of disaster. In the second place the exchange of brides is seen as a way of managing the relative size of their clan groups. The fact that the groom and the bride play a minor role illustrates that marriage is in the first place an expression of a relationship between two clans.

The social position of Jimi women, is generally characterised by hard work, poor health and widespread domestic violence between man and wife and between co-wives. Highlands society is characterised by high levels of sexual antagonism. Like in all of rural PNG, the mortality among women is high. This is predominantly a consequence of the reproductive role of women, their social position, and their tasks in daily life. The risk involved in giving birth is huge, with one in 17 of all PNG women dying as a result of perinatal complications, a figure comparing with a rate of one in 1500 in developed countries (UNICEF 1996: 64). Women in their reproductive years are usually either pregnant or lactating which has a negative

impact on their health status. Women are by virtue of their social role as caretaker of children, pigs, the sick and the dying also more likely to be exposed to diseases. Finally, the hardships of married life lead a number of women to commit suicide (Buchbinder 1973, Lowman 1980, Wood 1980, Johnson 1982). Women play a key-role in the production of pigs and food, assets which constitute a crucial element in the forging of stable social and political relations between clans. As a result, polygynous marriage makes up an important element in the investment strategies of status-oriented males. Although women also contribute to the cash incomes of the household, they often have little to say over the way in which money is spent. In Bubkile, for example, one woman told me that if she were to control some of the proceeds from her coffee, she was better off selling it at a much lower price to the village buyer, than allowing her menfolk to sell it for her.

The virilocal marriage pattern dominant in the Jimi Valley, implies that women become part of their husband's clan upon marriage. The women marrying into a clan are thus generally strangers to one another as they come from a variety of natal clans, a situation in which their status as woman, wife and clan-member is dependent on their fertility and the extent to which their productive labour contributes to the exchanges of their husband and his clan. It is through their husband that Jimi women have access to land, security and standing. This dependency is most clearly visible when a woman's husband dies or migrates, leaving the woman to head the household behind. The woman's natal relatives live far away, and she may find herself on her own in her husband's clan. Given the division of labour in the highlands, which requires men to clear the gardens and women to do the planting, households headed by single women have difficulty in obtaining sufficient support from male relatives. A Jimi man at Bubkile explained to me that in the view of the dead husbands brothers, widows are 'beggar women' who continually have to ask for support.

Kolma, describes the situation when his father left to work on the coast in order to pay for the school fees of his children:

> With the father of a home away, most men would not bother to chop wood for a woman unless he was a direct relative of the woman. Otherwise, there would be 'talk'... A similar sort of taboo extends to public pig killings, ceremonies and the like. Since it is the men who will decide whether to butcher a pig or not and after its killing who gets the choice pieces, we had three years of neglect when pig killings happened (Senge Kolma 1997).

Even if single women get support from their husbands relatives, Joughin and Thistleton (1987:78) note that they may have to give out a disproportionate share of the final garden produce. In case of population pressure, widows are the first to find their access to gardening and coffee land restricted. This may force them to seek a situation of comparative security, either by returning to their natal clan, or by re-marrying within the clan of their late husband.

THE IDEOLOGY OF GROUP FORMATION

From the perception of local social structure as stemming from a group of ancestral brothers it follows that the men of a clan and sub-clan regard each other more or less as 'brothers'. The emphasis on brotherhood between the male members of a clan is not only symbolised by the sharing of a common ancestry and the practise of exogamy, but also reinforced by an ethic of mutual support in which clan members are expected to support each other at all times. Fighting within the clan is to be limited to the use of fists as manslaughter would threaten the unity of the group. The brotherly solidarity between clan members stands in contrast to the social distance created by intermarriage. The denial of direct kinship not only enables exogamous marriage, but also emphasises the fact that the two intermarrying clans may very well fight, a view expressed in the often heard dictum '*mipela maritim birua*' ('we marry our enemies'). The act of bridal exchange thus 'indexes' the separate identities of the two exchanging groups, defining the agnatic clan group are those with whom one *shares* bridewealth payments and receipts and can not fight, while classifying clans with whom the group intermarries as those with whom one *exchanges* pork and women and may fight (LiPuma 1988: 119).[22]

The contra-position of brotherhood and intermarriage becomes most clearly visible when the sub-clans of a clan identify themselves less and less as 'brothers', a process often triggered by an increase in physical distance between members of the same group following population growth, epidemics, tribal warfare or intra-clan conflicts. Given the role of adversity in the process of fission, Barnes (1962) calls it a process of 'catastrophic segmentation'. Once the two groups are thought sufficiently distant from each other, they may start to intermarry, transforming the relations between the involved sub-clans from that of a waning brotherhood into one of brother-in-laws. The reverse, a process of fusion is a common strategy for clans and clan-clusters which are in a state of decline due to falling population numbers. Such a fusion takes place when two groups, previously engaging in marriage come to perceive one another as brothers rather than in-laws. In that case the two clans become the component sub-clans of a newly formed clan, while the original constituent sub-clans come to act as patrilineages. The new unit is often named by combining the names of the two clans. The fact that kinship and group structure is largely ideological rather than strictly descent–based, facilitates the absorption of non-kin. In the Jimi Valley, the undiscriminating kinship terminology beyond the second generation, masks the fact that affines and allies, as well as adopted children and even whole sub-clans can be assimilated into the existing clan through the sharing of land and food.

The social units that made up Jimi society are thus not static but continuously in change, allowing room for the flexible interpretation of social structures and the

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[22]Affinal relations are friendly, with especially brothers-in-law having close relations. Men are generally allowed to refrain from fighting when hostilities break out with the clan of their in-laws (Lowman 1980; O'Hanlon 1989).

rules and regulations regarding alliance, marriage and exchange. Structural change is linked to demographic change as security, wealth, and status are closely related to clan size. The unequal demographic development of different social units leads to disparities between groups of the same segmentary status and affects the ability of the smaller clans to defend their territory and meet their exchange obligations. The obvious fact that larger groups rear more pigs, marry out more women, produce more food, earn more money and therefore gain in status and security, thus encourage clans to have many children (LiPuma 1988, Cook and Pflanz-Cook 1988, VanHelden 2000).

It is the task of the elderly men to keep count of the numbers of women 'given' and 'received' in order to make sure that the demographic balance between groups remains intact. If one group were to attract substantially more women than its neighbours this would skew future population numbers, offsetting the precarious social and political balance, and constituting an existential threat to the clans that lag behind. A number of allied clans in the Bubkile area for example, recently decided to only marry amongst themselves, as they felt they were 'giving away' too many women and feared that neighbouring clans would increase in size at their expense. The modern equivalent of this drive towards an increase in population is the realisation that Government services will mainly be aimed at populous areas. Therefore, many clans regard the growth of population as a way of 'pulling in' much needed infrastructure and health and education services. Population growth, however, is stemmed by demographic, epidemiological, and ecological forces and, before the Australian imposed pacification, by military conflicts.

The contradiction faced by social groups in the Upper Jimi is that, while a growing population improves the group's status and its ability to deal with external threats, this at the same time increases the risk of internal conflicts that comes with the growth of both human and pig populations, declining natural resources and increasing disease pressure (Rappaport 1968). Conflicts increase the risk of a break-up of the clan. Fission, however, would again increase the external threats faced by the resulting smaller social units (LiPuma 1988: 140ff). The pattern of increasing population both fuelled by and promoting success in warfare, followed by resource pressure, defeat and social decline is what Lowman (1980) calls 'the structure of impermanence' that underlies pre-colonial Jimi society. The colonial administration froze the existing clan boundaries, discouraged tribal fighting, and addressed major health problems, thereby reducing the volatility that marked Jimi social structure in pre-colonial times.

THE CLAN/LAND COLLECTIVITY

One of the most important features of the patrilineal clan group in the Bismarck-Ramu area is that it constitutes the collective which owns the land and its resources. Landownership and clan membership are two sides of the same coin and while people may state that they 'own' the land, it is not uncommon either to hear the

view that the land 'knows' them. The view that people belong to the land, rather than the reverse also implies that a single owner cannot dispose of land and resources, as such action violates both the unity of the group and its relationship to the land. The main vehicle for the transfer of ownership/use rights within the clan is through patrilineal inheritance, and the most common form of private property comprises the trees which men and women plant during their life for coffee, fruit and nuts, firewood and housing. Game does not belong to anybody specific, but the right to hunt on clan land lies with the clan and, in the case of specific hunting and fishing localities within the common pool of resources, with individuals. Once game is caught, alive or dead, it belongs to the hunter, just as domesticated animals belong to their owner. Anybody cutting trees or grass, or hunting, fishing or trapping without permission of the landowners is trespassing and liable to pay compensation for damages done.

The distinction between full ownership and temporary usufruct is expressed in the fact that clan membership bestows the right to 'talk about' the land in public. As we will see in the section on the absorption of non-kin this distinction is not clear-cut but socially and temporally defined. Inter-clan politics also play a role. Giddings (1984: 152) for example, remarks that the recognition of ownership rights by third parties is often dependent upon the granting of usufruct rights. By bestowing use rights on other people, the owners actually define themselves as the primary right holders and are implicitly recognised as such by those that benefit. The reverse case, where a land-owning group refuses to allow a group in need to use part of their land, may lead the latter to deny the ownership of the former and take it by force.

Whereas use rights are bestowed by the land-owning clan, ownership rights are often also asserted by referring to past use. Thus, people will claim to be the landowners, to a certain area *because* they planted trees and gardens there, and because they buried their dead in such-and-such a place. Use and ownership rights thus reflect a range of different social relationships and are subject to differing interpretations. As relationships change over time, so may use rights. A man may ask a friend, an in-law, or an exchange partner for the right to temporarily use certain resources, or to accompany him on a hunting trip so as to legitimise his use of that area. In case of emergencies whole clans may be granted residence rights by allies when seeking refuge. On an individual level, men may leave their place of origin because of a lack of land, ongoing conflicts, sorcery accusations, or the expectation of a better life elsewhere.

THE ACCEPTANCE OF MIGRANTS

The position of a migrant is initially not a very secure one. He cannot assert rights to land or resources, is often not familiar with the clan's dialect and history, and is without support in times of conflict. Any serious digression, such as adultery, theft or violence, may see him expelled or even killed. In practice the migrant is supported by a local 'sponsor', an in-law, a trading partner, or a local big man who

wishes to expand his support base. This sponsor supports the immigrant until he has built up sufficient credibility with the local clan group, a process that may take many years. As the years go by, the migrant takes part in clan affairs, ranging from the day-to-day sharing of food and tasks in gardening, house building and hunting, to defence activities and more ceremonial activities of paying bridewealth and contributing to pig kills. Whereas the original migrant will never be regarded as a full clan member and his children may be put in place by reminders of their 'foreignness', grandchildren and subsequent descendants become accepted as full members. Children of migrants identify themselves by the clan name of their 'host clan'. With an increase in their status as full members comes a gradual increase in rights to resources (LiPuma 1988).

Several factors facilitate the acceptance of a migrant. These include the relative abundance of natural resources of the host clan, its demographic situation and the qualities of the immigrant. If there is still ample gardening and hunting land available to a clan, and it has not all been carved up into individual plots and limited hunting zones, than there is little difficulty in accepting an additional migrant and his family. Nowadays it is not only the relative abundance of natural resources that may induce a man to follow his wife's kin, but also access to the wider cash economy, education and health services. Following road construction into the Jimi Valley in the 1970s a large number of people with marriage connections with clans living nearer to the road, moved in to participate in the market economy and to enjoy the improved access to services. Land near the road has since become scarce, and land-related conflicts appear to be on the rise. A situation of increasing population pressure, however, tends to lead to a decrease in the rights of outsiders. With an increase of population and an increasing area under cash crops, individuals will start demarcating 'their' land in the communal pool of land, starting a process whereby communal land tenure becomes individualised to the extent that land is inherited buy one's children, may be traded between clan members, and in some cases, even with outsiders.

In case of land shortage, people will strongly discourage the acceptance of immigrants and in-laws because they know the 'stranger's' share of land will have to come from the already limited pool of communal land. As a result, one finds that the practice of virilocality is strongly enforced in such densely populated provinces as Enga and Simbu. Here clan members, who resent the fact that a uxorilocally residing outsider uses their resources may label him derogatorily as '*meri man*', a 'women's man'. The relatively well-endowed fringe clans in the Jimi Valley, however, are happy to accept outsiders in an attempt to boost their numbers, standing and security and will explain the position of a uxorilocally residing man by saying that *'em i stap aninit long lek bilong lain bilong meri bilong en*' ('he lives under the foot of his wife's people)'. In some cases, migrants will actually be welcomed or even invited as an addition to clan strength. When the prospective migrant is an exceptionally skilful speaker, hunter or fighter, he may even be invited to stay a wife is given and assistance is offered in house building and gardening to make him feel

at home. As will be described in this study, similar overtures are visible in the colonial patrol reports (this chapter) and are also apparent during the interventions of the Bismarck-Ramu project, when many clans offered to build a 'base' in an attempt to affiliate themselves with the project.

INSECURITY, COMPETITION AND POSITION

Essential in understanding the competitive nature of Jimi society is its hostile social environment. In pre-colonial days people generally remained on their own territory as beyond the clan territory there were predominantly, enemies, strangers and wild spirits. Only strong and well-armed groups of men with trustworthy exchange connections usually through intermarriage, would travel and trade outside their territory. Most people had little conception of the world outside the direct circle of related clans, trading partners and enemies. When hunting in the Bismarck Fall, for example, the Jimi would turn back when seeing the traces of Ramu people, fearing these to be 'wild men'. It took exceptionally brave men to make contact.

Before colonial rule the Jimi groups were preoccupied with their direct survival under circumstances of continuous inter-clan warfare and war-induced famines. Conflicts usually resulted from grievances over women, pigs, land rights, deaths and the related sorcery claims, theft and rape, often leading to a spiral of warfare and revenge. Warfare was an integral part of highland social life in which both the socialisation of young men into fierce warriors (Lowman-Vayda 1971), the resolution of conflicts with fighting as an intermediate phase (Pflanz-Cook and Cook 1983) and the growth of pig and human populations (Rappaport 1968) play a role. The level of conflict does appear to be at least partly related to population pressure. Lowman (1980:124-125) for example, notes that in contrast to the Jimi Maring, 'the ten Maring groups residing on the sparsely settled margins of the Maring region not only lack clear-cut boundaries, but generally lack histories of recent involvement in wars'. Rappaport (1968: 116) mentions the growing 'irritation factor' that comes with the growth of both human and pig populations, declining natural resources and increasing disease pressure play a role 'irritation factor' that results from growing human and pig populations. Jimi settlers living in the little populated Ramu Valley too state that they see much less reason to fight than their uphill clansmen. Warfare was spatially restricted as belligerent clans fought across their common border, but would not usually engage in long distance warfare (Lowman 1980). The ritualised nature of fighting with bow and arrow from behind big shields and the low accuracy of the unfletched arrows limited the number of deaths during battles.[23]

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[23] The number of deaths as a result of warfare before colonial contact is hard to quantify. Estimates for the neighbouring Gainj suggest that 10 percent of male deaths could be attributed to warfare (Wood 1980:120), while death rates from fighting among the Enga or the Huli is thought to have accounted for between 20 and 35 percent of male mortality (Meggit and Glasse quoted in Johnson 1982: 26). Sometimes tribal fights evolved into wholesale massacres. LiPuma (1988:20) mentions a Kauwatyi Maring raid in the Middle Jimi Valley, during which more than 100 people were killed.

Much more vicious were the sudden raids when women and children working in the gardens could be abducted, men would be singled out for assassination, or whole villages were raided in night time attacks.

> The old man Tai, of the Kema-Ageleka clan in Bubkile, recounted how his clan mainly fought with the Kondelka at Iawaramul and the Maipka at Bubulsunga across the Jimi River. He recalls how they would build a improvised bridge across the Jimi River and fought with the Maipka or Kondelka near what is now the village of Omin, a good 4 hours walking distance away. People would hide behind their big shields, while bowmen would discharge volleys of unfletched arrows from behind their back. People who stumbled were hacked to death, but those who were well-shielded were unfortunate to be killed or seriously wounded. After the fight, the warriors would return home and come back the next day. Sometimes this would go on for weeks on end. The raids were much more dangerous than the open fighting. Tai remembered how, after a fight with the Kondelka at Iawaramul, the Ageleka pretended to return home, but then turned around and raided the Kondelka men's house, setting it on fire and killing the 11 men inside.

Defeated clans would seek refuge with allies while their houses, gardens and orchards were destroyed and their pigs, dogs and cassowaries killed. Warfare and subsequent exile often meant displacement, hunger and hardship for years on end. The colonial administration put an end to tribal fighting. Weapons were burnt, warriors locked up, and courts set up to deal with conflicts. The fear of the *kiaps* kept people from tribal warfare for nearly 25 years. Since Independence, however, many law enforcing institutions have lost their effectiveness and tribal fighting with the help of increasingly modern weaponry is again becoming an option.

SOCIAL LIFE AS A ZERO-SUM GAME

In order to reduce security risks, men in the past not only spent much of their time on defensive activities but also aimed to forge and maintain political and military alliances with neighbouring clans. Those groups that managed to keep up with their neighbours in terms of population numbers, fighting prowess and exchange performance were in a position to forge stable political alliances, thereby improving their security and well-being of the group as a whole. In contrast, those groups that could not meet their social obligations because they lacked the numbers or did not have access to sufficiently fertile land would be relegated to the status of '*rabbis lain*' ('rubbish people') risking social isolation, military defeat and dispersal. The management of political alliances and exchange relations is thus closely related to the standing of the group and the bragging, ostentatious generosity, and display of strength and numbers that come with ceremonial exchange serve to advertise the attractiveness of the group as an ally. The pursuit of position through the management of exchange relations is not a matter of vanity, but in the first place part of the group survival strategy as the groups standing provides an index for the relative well-being and security of the group and its members (Cf. O'Hanlon, 1989).

As a result, feelings of well-being in the Upper Jimi are always relative to the performance of other groups and individuals, a conception akin to the 'image of limited good' generally attributed to peasant societies (Foster 1965). Viewing their world as finite with the most crucial resources such as people, natural resources and reputation being scare, this ideology suggests that clans and individuals can only do better at the expense of other groups and individuals. In the Jimi Valley, when the balance between groups is disturbed due to differing economic, demographic or political fortunes those on the down side, even if not experiencing any change in their own circumstances, will feel that the others are getting the better of them (*'Ol winim mipela'*). The present-day feeling of losing out vis-à-vis the economically more successful people of the Wahgi Valley for example, give the Jimi people strong feelings of inferiority and insecurity, a pattern repeated within the Valley where groups with road-access feel superior to those without.

The perception of society as a zero-sum game where the fortune of one always implies the misfortune of another not only leads groups and people to 'compete to remain equal' (Bailey 1971: 19), but also to jealously guard the existing state of affairs. If one can not keep up with one's neighbours the alternative is to restore the balance by pursuing compensation claims against each other for various reasons. When people die or fall ill, for example, this may be attributed to sorcery, and a compensation claim may be lodged with the offending sub-clan or clan. Conflict between two clans or individuals, followed by death or disease within one of the two clans or individuals is enough to lodge a compensation claim or to commit an act of revenge, in Tok Pisin known as *'pay-back'*.

> An example is the death of a Kema-Ageleka schoolteacher from Bubkile who drowned in the Jimi River days after a conflict with a member of the Owalka clan. The Kema-Ageleka lodged a compensation claim with the Owalka, which led to the payment of 10 large pigs and Kina 2000. By Western standards, these compensation payments appear to imply an admission of guilt on the part of the compensating party. The Jimi people do not share this notion. To them the loss of life in one clan has led to an unacceptable disturbance of the social balance between clans. Compensation can be a way of restoring that balance in a peaceful way rather than through outright retaliation. The compensating clan thus acknowledges the grief of the bereaved clan and somehow 'makes up' for that loss. Whether there is indeed a causal relation between the actions of the compensating clan and the death in case is less important.

Compensation payments are to a large extent aimed at dampening unacceptably large swings in the relative well-being of neighbouring clans and at defusing the violence that may result from such swings.

BIG MEN AND EXCHANGE RELATIONS

Bailey (1971: 23) notes with regard highly competitive societies such as the Jimi Valley that they end up being relatively equal because 'paradoxically... the strivings cancel one another out and, with few exceptions, everyone remains equal to

everyone else... they run hard in order to stand still'. Leadership in the Jimi Valley is based on the ability of influential men to escape from the pull of competition-based equality, and to build up a reputation which sets them apart from the rest. Big men do so by attempting to control exchange relations in order to build up a reputation, a 'name' or a 'number' for themselves and their clan group. As Reay (1959: 96) notes:

> 'The Kuma 'big men' or 'men of strength'... control the flow of valuables between clans by making fresh presentations on their own account and choosing whether or not to contribute to others. Their profit in these transactions is incremental reputation... The aim is not simply to be wealthy, nor even to act as only the wealthy can act: it is to be known to be wealthy'.

Big men are important to their clan group as they weld communal action out of the many independent segmentary groups. Patrilineages and sub-clans operate to a very large extent independently within the clan group, the former acting as more or less independent economic units, the latter responsible for bridal exchange and ancestral ceremonies. Big men, being good speakers, strong fighters and adept at manipulating exchange relations cajole people into co-operating with their plans for exchange, warfare and marriage. It is not so much the membership of a clan that gives a man a reputation, but the individual performance of one or more big men that makes a local group dominant (Barnes 1962, de Lepervanche 1968). [24]

In order to control the flow of valuables, big men need to be prolific producers of pigs and garden foods themselves, a process which often starts with marrying two or three wives. Having more than one wife is an investment which will hopefully provide the labour to cultivate larger than average gardens and breed many pigs, and which increases the range of potential exchange partners and the variability of valuables to which one may have access. By supporting other men in the payment of bridewealth and other exchange obligations they build up a network of supporters obliged to assist them once their own ceremonial presentations are to be made.[25] The extra labour availability, and the resulting 'conspicuous production' for exchange is the basis for one's reputation. Aspiring big men are more than generous with their food, their pigs, their labour and nowadays their money. As they make continuous exchanges and aim to give more than they receive they build up a name. Those people that can not reciprocate because the resources and gifts of the aspiring big man are greater than theirs, default on their obligations thus becoming socially

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[24] Marilyn Strathern argues that notions of personhood and leadership are culturally determined and that in contrast to African cultures where personhood is largely associated with notions of 'office', in which people 'take up' certain positions offices and 'play' particular roles, in New Guinea status, rank and position are not permanently attached to certain individuals, but subject to continuous challenge, negotiation and in need of continuous reaffirmation (in Long 1992: 26).

[25] Bigmenship is predominantly achievement-based as it is the quality of the individual big man, his oratory and fighting skills and his ability to cajole people into joining his exchange 'projects' that make him a big man (Kottak 1994, Sahlins 1963). The fact, however that the sons of big men may capitalise on the exchange relations, name and wealth of their fathers, gives them head-start over clan members of the same generation and brings a hereditary component into patterns of bigmenship (Standish 1978).

indebted and obliged to contribute to the ever grander future exchange projects that he may harbour.

Much of the position of big men and their clan groups is thus related to the extent in which clans produce food and breed pigs as a means to establish social relations, resolve conflicts and purchase women. Pigs belong to individual households and are mainly taken care of by the women. They are no longer kept in people's own houses or breast-fed by lactating women as was the case in the past. Most pigs are confined to pens or kept outside garden areas, while aggressive boars are usually castrated and blinded to make them more docile. The increasing population densities and the large number of pigs found in villages are a source of conflicts between the owners of damaged gardens and the owners of the offending pig. Pork is not routinely consumed within the household. Instead, it is earmarked for ceremonial occasions. By the laws of gift giving, however, it follows that those who give much pork will eat much pork (Lowman 1980). Nowadays pigs are also sold for cash, a practice that clashes with the need to reserve pigs for exchange obligations.

The highpoint of exchange from clan to clan, where both the elements of competition and political alliance become visible is during the ceremonial pig kills which accentuate the association of clan groups. These pig kills are known as kongar in Jiwaka, and require years of advance planning in order to arrive at the largest possible number of fattened pigs at the moment of donation. The Kema-Ageleka of Bubkile for example in the beginning of the 1990s killed more than one thousand pigs and donated the pork to the other Kema clans. Cuts in the tree on the central market place in Bubkile still served as an 'account book' of the occasion and the Ageleka were now waiting for their exchange partners to get organised and reciprocate. The implicit rule that reciprocating groups will always have to up the ante leads to a spiralling process of inflation in which groups work hard to get ahead of their neighbours. Competition, however, is not only visible at the level of the clan against other clans but also takes place within the segmented lineage structure.

> During a pig kill witnessed at Minj in the Wahgi Valley, it became clear that the display that comes with pig kills is not only used to show off towards those that are on the receiving end, but also used to ascertain the relative contributions of the different segmentary groups that make up the donating clan. Thus when the pigs have been slaughtered and cooked, the various households that make up a patrilineage line up their pork bellies and compare and discuss their relative donations. Then the patrilineages which make up a sub-clan get together to compare their pigs, a procedure followed when the various sub-clans compare their contributions before all the pigs of the clan are finally lined up. They are then counted and after speeches which emphasise the alliance between the donating and the receiving clan-groups presented to the allied clan. This is also the moment to emphasise the superiority of the donating clan and its leading big men. As the big man Kawelka expressed it following a pig kill near Mount Hagen in 1974: 'I have won. I have knocked you down by giving so much' (A. Johnson 1989: 65).

The gift is not made in lump-sum from group to group but each and every individual in the donating clan, offers parts of his pork to those people within the receiving clans that he considers most deserving. Thus when the moment of donation has come people will call out the names of their in-laws, friends and exchange partners within the receiving clan, giving them 'their' share of the pork. The pork received, is in turn not fully consumed by the individuals within the receiving clans, but distributed amongst their kin, in-laws and friends, leading to a situation where the pork is distributed across the valley in a network of ever-smaller and out-branching gifts. Important to note is that the quality of a social relationship is expressed in the quality of the gift. Thus important exchange partners receive larger shares of pork and nuts than less important relatives, and these moments of celebration go accompanied with a lot of disappointment. The gift is thus both an expression of the underlying social relation and the consumption of that social relation. To the pragmatic Jimi, the absence of a material expression of such association may be interpreted as the absence of a relationship. The emphasis on generosity as part of the exchange ritual makes it inconceivable that those well-off do not donate their pigs on behalf of the clan, as stinginess not just reflects the inability to meet one's obligations, but even worse, the unwillingness to do so.

Even though the ceremonial prestations involving large amounts of cooked pork are the most ostentatious forms of exchange, food production and exchanges of other food products and seedlings between groups are important as well. In the Kol area in the Upper Jimi, for example, two sections of the Pala-Ageleka clan exchange karuka and marita nuts. Reay (1959: 86-87) describes nut festivals held in the Wahgi Valley where enormous amounts of fruit, groundnuts, pandanus nuts and sugar cane were exchanged between clans.

Whereas the exchange between groups has received much attention in the anthropological literature, reciprocal exchange between individuals is much more common and at least as important as it defines the social relations between individuals. Very important for the status of households, for example, is that there is always enough food. Many Jimi people will, as a matter of honour, emphasise that a shortage of food is not one of their problems. The sharing of food is an important part of daily life in the Upper Jimi which denotes the goodwill of all those that sit and eat together. As Reay (1959: 23) notes for the neighbouring Kuma of the Wahgi valley: 'a man is a 'rubbish man', of no consequence if he has not enough food to offer friends and relatives as well as meet his personal requirements'. Not offering a guest something, however small, is impolite, refusing it even more so, as one rejects a friendly relationship with the host. When gossiping about the Ramu people, for example, the Jimi assert that these people will let their guests go hungry.

More spatially dispersed networks, which enable extra-local trade, travel, access to resources elsewhere and the possibility of refuge in case of trouble mirror patterns of intermarriage as men will mainly trade with the clan members of their wife, mother, sister and - later in life – with the husbands of their daughters. These marriage linkages allow ample room for interpretation and manipulation. When the

Ramu Nickel-Kobalt mine was planned in the Bismarck Fall, a man from the Upper Jimi, far away from the mine site explained to me, that he had in-laws among the Ramu groups at Pimbum and that they in turn had marriage relations with the people living around the new mine. As a result of this link to the affines of his affines he asserted the right to work at the mine once construction started.[26] The choice of extra-local exchange relations both for groups and individuals is highly strategic. Those men that make wise exchanges build up a name as big men, a reputation from which also the sub-clan and clan benefit.

BIG MEN, DECISION-MAKING AND COMMUNITY COHESION

A moot point in the literature on leadership within highlands communities is the question to what extent big men have the ability to influence group decisions. The literature on leadership in the Jimi Valley suggests different patterns of decision-making and roles of big men within clan decision-making processes. The first is a more or less egalitarian model in which there are no hereditary, formally appointed chiefs or political offices and the role of individual big men is diluted, the second is a model in which certain men achieve high levels of influence through the manipulation of reciprocal relations, the ability to organise pig feasts, their knowledge of tradition, oratory skills, and fighting-prowess (Lowman 1980). Both patterns have their relevance for understanding leadership in the Jimi communities, but the first appears the more important in the present-day Jimi Valley.

According to Rappaport, the Maring of the Middle Jimi Valley are more or less egalitarian in the sense that all men participate in decision making. Women rarely play a role in public decision-making. There are so-called big men who contribute disproportionally to the welfare, standing and security of the group, but their ability to influence people in the making of decisions rests principally on persuasion rather than on their position and status. Rappaport (1968: 29) suggests that big men 'may perhaps be defined statistically: they are those who more frequently than other men initiate the courses of action to which a group commits itself'. It is the personal attributes of these big men that give them the powers of persuasion. Maring big men are said to have 'talk' on all issues relevant to the clan such as fighting, ceremonial prestations, women, pigs and gardens and tend to have knowledge of the rituals that are involved in fighting, exchange and other exploits. While the participation in ceremonial prestations and the possession of historical knowledge may confer status

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[26] The consequence of the close link between economic and marriage relation is not only that the level of economic activity between two clans is closely related to the extent to which these clans intermarry but also that the geographical nature of these marriage based networks shifts with the relative economic fortunes of the different groups. Healey (1973: 188) notes how in the past intermarriage between groups living in the Sepik-Wahgi divide and those further away in the Upper Jimi may have 'resulted from a desire to establish ties with groups ... from whom, in future transactions, plumes may be obtained'. My guide Seina commented on the fact that the people from Kol nowadays were reluctant to marry the 'bush people' from further in the Jimi valley, preferring to marry their daughters and sisters into the coffee owning Wahgi clans.

upon people it does not allow them to make decisions for others, or enable them to coerce others into following their wishes (Rappaport 1968).

The resulting structure of decision-making is amorphous. Meetings are aimed at reaching consensus, 'making the talk one', rather than at taking cut and dried decisions. The pattern is one of public discussions concerning a particular subject, in which small groups of men debate the issues, wander around or speak to the meeting at large. Finally, people wander off, without a decision seemingly being made and without action being initiated. It is up to anybody who believes that some form of consensus has been reached to initiate the course of action that the perceived consensus suggests. Even important men may sometimes have to persevere to have their initial action followed up by others:

> 'In late 1962 there was much talk of the need to build a house on the periphery of the dance ground to shelter visitors to the pig festival, and one morning Yemp, who is... recognised by the people to be a [big man], called out that construction would start immediately. Absolutely no one joined him. Undeterred, he proceeded to the forest and began to cut poles and gather pandanus leaves for the structure. He continued to work for three days, complaining bitterly to those who passed by about the worthlessness of Tsembaga men, their sole interest being gardening and copulating. On the fourth day, others, perhaps out of shame or perhaps because Yemp had stimulated their sense of public duty, finally joined him in the work' (Rappaport 1968: 31).

In contrast, Lowman-Vayda (1971) found that certain men amongst the Fungai and Kauwatyi Maring achieve much more decision-making power due to a number of personal abilities and attributes. Depending on their properties, she distinguishes four different types of Big Men: The Unvanquished Men, the warriors noted for their aggressiveness in battle, the Splendid Men noted for their height and beauty and importance for the clan in terms of forging affinal relationships, the Ancestor Spirit Men, those men that have the ability to communicate with the ancestors, and the Fight Medicine Men, who are responsible for the conduct of rituals during tribal fighting. In particular the position of Ancestor Spirit Man is a political position in the clan, as it is one of the few offices representing the interests of the clan as a whole. His role is especially marked when dealing with other clan groups during ceremonies and conflicts.

In the contemporary Upper Jimi the role of the Big Men is limited to a small number of activities, and does not extend into daily decision-making. Opo (1996) distinguishes three categories of leadership among the Jimi:

> The Kangipye have special oratory skills and are especially important at ceremonial occasions. Their skills include the possession of a powerful far-reaching voice, the ability to memorise past events, and the ability to reproduce these events in 'sweet speeches'. Their role differs from the function of clan-spokesman as the Kangipye is mainly involved in customary issues, while the latter deals with the Government.

> The clan fight leaders known as the Opiye, ('fight-men'). Although fighting is less prevalent than it used to be, these men are known for their bravery, and knowledge of battle strategies and have the duty to instruct the younger men.
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> The Yir-ndop-alamb: the 'smoke-fire people', or magic man who uses tobacco to divine the status of sick people. Because of his importance in clan affairs, he is likely to be a target of magic or ambushes by other clans, and will have to take special precautions (Cf. O'Hanlon 1989). He is not expected to participate in the fighting but uses his special skills to imbue his clan's fighters with strength.

These roles have nowadays waned in importance. Indigenous valuables such as bird of paradise feathers as well as shells, stone axes and salt have been replaced by money. The role of the magic man has been eroded due to the arrival of the churches and western medicine. The nature of fighting has changed due to the use of guns, and external relations now include dealings with the government bureaucracy. Education, new political roles, and the replacement of local objects of wealth by money and commodities have undermined the standing of these influential men, and have rendered indigenous responses inadequate to the pressures of modernity. This was evident in 1997 when eight drunks murdered a young Maipka man in Lae a few days before he was to go to teachers college.

> Siwi Takep was one of the few young Pala-Maipka men who had been able to acquire a high level of education and his death was a great shock to the clan. Directly after the news became known in the Jimi, rumours were spread that a Jimi boy from the Pala-Ageleka clan had been involved in the killing and tension rose with the Ageleka retreating to one of their safe compounds to prepare for a possible attack. The rumours proved to be unfounded and tension subsided. These rumours were most probably an attempt to come to grips with the situation as the reasons for fighting known to the Maipka failed to explain the case of a random and senseless murder by a mixed group of drunken individuals in an urban setting. The customary responses of payback, negotiations and compensation did not apply either. It put the Maipka clan-leaders at a loss as to how to deal with the situation as they went through the options of demanding compensation from the 'Lae'. The bringing of the body from Lae to the Jimi proved to be difficult as well. After days of deliberations, hampered by impossible communications, the Angau hospital at Lae agreed to allow one of the hospital ambulances to travel all the way to Kol. The driver, however, refused to go further than Kundiawa. The Jimi escorting the body became angry and chased the driver off, hijacked the ambulance and drove it themselves up to Kol. At Kol, it was decided to keep the ambulance as compensation for his death, but when an armed police squad came to Kol, it was given up without further trouble.

The present-day role of the customary leaders appears confined to ceremonial occasions, the outbreak of hostilities, or when disease and sorcery strike. Their qualities do not bestow the right to make decisions on behalf of the group, as outside their areas of specific competence they are just another, albeit respected, voice in the crowd of men that discuss the issue at stake. Many men would like to be seen as big men, want more than one wife, and aspire a political career.

Consequently, communities appear to have increasing numbers of self-appointed leaders of various sorts, with the net effect that few of them have any real ability to influence community decisions. Many men and their households pursue their own interests, even when it comes at the expense of the community as a whole.

In recent years money and participation in politics have become important sources of status. Young people nowadays acquire respect through their education, income and understanding of wider society, instead of building it up through a history of participation in local clan affairs. The conflicting sources of past and present status represent a thinly veiled generation conflict. Whereas the elder men will argue that they as committed clan members, staying in the village in both good and bad times, assisting people whenever necessary and familiar with its history and customs should be respected and trusted as leaders, younger men emphasise their understanding of the modern world and their ability to 'bring development' to the remote Jimi Valley.

To the dismay of the elders, villagers increasingly regard themselves as dependent on these younger, more educated and wealthier people for the organisation of community initiatives, the harnessing of 'development', and their dealings with the Government. In doing so they hope that these younger educated people have the collective rather than personal interests at heart. This is especially clear in times of national elections, when many voters distribute their loyalty based on gifts and promises rather than on the qualifications and past performance of the candidate. As a result, the election often turns out to be a source of frustration when the respected, more educated, and relatively wealthy person they voted into office, runs off to Port Moresby, not to be seen again. It explains why in rural PNG, the abbreviation MP often stands for 'Missing Person' rather than 'Member of Parliament'.

COMMUNITY WORK AND MUTUAL CO-OPERATION

Within the segmentary lineage organisation that characterises Jimi society the basic principle of solidarity is that the closeness of the descent-group relationship, determines the level of mutual support. The more distant the perceived relationship, the greater the risk of hostility (Kottak 1994). Thus although people of the same clan are expected to refrain from violence against each other, one may fight with the clans with whom one intermarries, while, as we will see below, relations with outsiders and strangers are not necessarily guided by moral considerations at all.

This structure also implies that the 'we-group' that is invoked is dependent on the segmentary level at which the conflict is taking place. A conflict between two men of the same sub-clan will be solved at the level of the sub-clan, a conflict between two men belonging to two different clans will lead to a conflict between those clans and all involved lower segmentary units that make up these clans. This leads to a situation in which the larger groups with a higher position in the social structure are less likely to exhibit co-operative patterns of behaviour than the lower groups. Under certain exceptional circumstances the high levels of competition that

characterise Jimi society may lead to considerable joint effort on the part of a number of clan groups. This can be illustrated by the story of the Kol High School where non-Jimi groups threatened to get the better of the clan groups living at Kol, forcing the Jimi to make an unprecedented joint effort:

> Until 1997 there was no secondary education available in the Jimi valley, with the nearest high school at Banz in the Wahgi valley. For this reason, many Jimi people, wishing to get an education, moved closer to the road but this situation still restricted the number of children that could obtain secondary education, and for the last fifteen years, there has been talk of the construction of a high school at Kol. The idea of the high school was first coined by the then MP James Kuru in the 1980s and he managed to get funds allocated to the construction of the school. His defection from the political party to which he belonged in 1985 led to the funds being withheld when that party came to power in 1987. Since then, the idea of a Jimi High School had been lingering.
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> With an eye to the upcoming elections, the MP of the time temporarily revived the idea, and the Government allocated Kina 800,000 for its construction. The state of the road and bridges between Banz and Kol, however, did not allow construction materials to be brought in. Two weeks before 140 students and 6 teachers were due to arrive there was still no school or housing, and the planning and construction of the institution seemed to become a disaster. Consequently, the Kol community was becoming increasingly anxious that another village would claim the high school if the school was not established before the elections took place. Community leaders therefore met and decided to ask the different clans to assist in the building of a temporary school building while lodging the students in one of the aid post wards and an empty police house. The whole idea was framed in terms of competition with the other possible contenders for the high school.
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> This request resulted in a spectacular procession on a Wednesday morning in January 1997 when different clans came marching into Kol station, carrying cane, wooden posts and thatching. The different groups entered the school grounds one by one singing and yelling, the young men with bare torsos, and a few with painted faces. In waves of mock attacks and withdrawals, with the first men brandishing bush knifes they forced the spectators aside. Each clan heaped its materials separately, allowing for comparison, and waited to see what would come next. It was clear, even to an outsider, that the competition was not only directed at other potential claimants of the Jimi High School, but was also between the clans themselves as to who would mount the most impressive display and contribute the most in building materials. A number of men made speeches, emphasising the importance of education and the benefits to Kol students who could live at home and study for 150-250 Kina a head each year, while students from further away would have to fork out as much as 500 Kina. They also emphasised the fact that the Jimi could not let other communities 'win' this piece of 'development'.
>
> The work was divided between three clan groups keeping the competitive element alive. The Maipka and Aiboka clans were to build the kitchen and mess, the Kumka and Okulka clans were to build a double classroom while the

> Ageleka clan had to dig ten pit latrines. There appeared to be no real plan or overview of the construction activities and I did not see any nails, tools, hinges or other hardware which one would expect to be required. Food, furniture, kitchen equipment, bedding, washing facilities, cutlery, books, blackboards and the like were not mentioned. The main thing was to get the buildings up in order to confront the outside world with a *fait accompli*.

Such forms of co-operation are an exception to the rule. In the past, the importance of group solidarity to minimise security risks enforced a hierarchy of rights within the segmented social structure, where clan interests went before sub-clan interests, while the latter overruled the interests of the patrilineage and individual (LiPuma 1988: 23).

Nowadays the conduct of joint community activities is difficult. The various groups participating in community work continually worry whether other groups are not benefiting disproportionately from the public good that is being built or maintained. Issues such as the number of men taking part, the regularity with which they take part in maintenance work, the location of the aid post closer on the territory of one sub-group rather than another, constitute a continual source of conflicts. These conflicts again give aggrieved clans a reason to stop work and pursue a 'free-rider' strategy whereby they do not participate in community work, while making use of the available service in times of need. This in turn generates a new set of grievances. In addition to the fear of an uneven distribution of work and benefits, community development appears to have become a highly politicised issue in the Upper Jimi. Many local politicians build a career on basis of their ability to organise community projects, making others suspicious of their 'real' motives and reluctant to join in on the work.[27]

The high levels of competition, suspicion and jealousy mean that clan groups will only co-operate fully when it is clearly in the interest of all lower units to do so. This is usually only the case when another outside group is seen as a competitor, as was the case with the building of the High School. The occasions when solidarity is required are limited to land issues, ceremonial activities and tribal conflicts. They do not necessarily include community work, campaigning for political office or resource management. All other activities are the concern of the lower units and are managed at that level, with economic activities co-ordinated at the level of the patrilineage while marriage relations and ancestral sacrifices are conducted at the level of the sub-clan. Only large ceremonial prestations, inter-clan fighting and inter-clan politics take place at the level of the clan when the largest numbers of men and their pigs are required.

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[27] An example is the airstrip at Kosap which was being constructed by the Owalka under guidance of a local big man. Although its construction would benefit thousands of people living on the slopes of Mount Oipo and although few other localities suitable for an airstrip exist, the Kema clans preferred not to join in as they suspected it was a attempt to increase the status of the big man as a future political candidate.

The High School was exceptional in that it enabled a number of clans to co-operate in a single joint effort.[28] Resource issues tend to be confined to the clan level, as the hunting domains possibly targeted for timber production tend to be owned at the level of the clan group.

In the past solidarity in clan matters was a precondition for survival. This solidarity, however, also required that conflict within the clan and sub-clans be avoided as a fission of the group could expose all of its members to the danger of military defeat and dispersal. Consequently, groups will always rally in favour of their man during conflicts, no matter what the issue is, which leads to a situation where social control over deviant behaviour within the descent group is limited.

> In 1997 the Bubkile Ageleka clan had a serious fight between two of its sub-clans, the Kolangkan and Kipingkan. It ended in full tribal warfare and several men received arrow wounds. Everybody agreed that the fault lay with a young man from the Kolangkan sub-clan who two years previously had stolen a bag of coffee, worth 30 or 40 Kina, from a Kipingkan woman. When her brother went to look for the bag, the thief slashed him on the head with a bush knife. The Kipingkan responded by attacking and burning several Kolangkan houses and were later paid 1000 Kina and four pigs for the wounding of their man. The troublemaker thought it better to leave for a while and stayed with relatives elsewhere. In the mean time, his wife who stayed behind had an affair with a man from the Kipingkan sub-clan, but was forced to confess when her child died. In highlands society hidden offences cause bad luck to the clan and it was clear to all concerned that the adultery had caused the child's death. This led to renewed fighting, this time with the Kipingkan sub-clan as the culprits. The Kipingkan finally agreed to pay their opponents 200 Kina and five pigs in compensation for the adultery. Within the Kolangkan sub-clan, however, people were fed up with the troublemaker, firstly, because he had started the initial fight two years before, which had seen several houses burnt and had forced them to pay compensation, and now because he had not been able 'to control his wife', which had seen several of them wounded. No sanctions were taken against him, however, as mutual support vis-à-vis outsiders is automatic, no matter the nature of the conflict.

This lack of social control is also apparent in the perception of pre-colonial community work. People speak wistfully of the colonial period when the *kiap* would threaten free-riders with jail or punishment if they did not participate in other forms of community work. They state that in those pre-1975 days, the patrol tracks were in good shape and people did not drown because the bridges were rebuilt if the flooding river took them out. Nowadays, many people have simply given up participating in community work. The younger men especially, do not care. They prefer to play cards, and want to be paid for their work. Next to the absence of *kiap* control, the most common explanation of this behaviour is that the community is

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[28] Ivarature (1993) argues that co-operation in PNG communities is cyclical. High levels of co-operation are required and achieved for single events such as marital or ceremonial exchange, warfare or trade. When the goal is met, however, the involved communities naturally fragment into the smaller units that are more meaningful for everyday living.

made up of '*bighets*' ('recalcitrants'). In many instances, this 'bigheadedness' leads existing community assets to fall apart. In Bubkile, for example, the aid post orderly left after seventeen years because people were no longer prepared to help him maintain his gardens, house and aid post in return for his services. He has since moved on to the road, leaving between three and four thousand people at 5-10 hours walking distance from the most basic medical care. People who do wish to try and improve the existing situation in their communities, have no other choice than to simply start work in the hope that their example will eventually be followed. As concern with clan solidarity weakens, a fragmentation of communities takes place.

THE 'MORAL COMMUNITY' AND THE OUTSIDE WORLD

F.G. Bailey (1971) uses the concept of 'reputation' to explain the notion of 'community', arguing that the 'moral community 'is the group of people that know each other or at least know about each other 'as people in the round'. Having a reputation within the community, either good or bad, makes one a member of the group. Outsiders, however,

> 'are likely to be judged in an instrumental fashion, not 'in the round'. They are not human beings to the same extent as those of us who belong within the community. This is the world outside where moral judgement becomes less important... where men ... are mere objects to be destroyed or employed in whatever fashion serves our interest' (Bailey 1971: 7-8).

Mantovani (1984) argues in a similar vein that the ethics and morals that apply within the group to which one belongs, do not necessarily apply to outsiders or strangers. Thus, it is not the very act of killing that is right or wrong, but it is the question who is being killed and how this benefits or harms the killer and his group, that makes the action morally acceptable or not. The 'social order' and its normative rules fade out the further one gets away from home, and the interactions with outsiders become more and more subject to opportunistic considerations.

This view is closely linked to the perception of the position of the human community within its social, spiritual and physical surroundings. At the core of the community, is the human clan group to which one belongs, whose members are related by kinship and common descent and who are considered 'real people'.[29] Outside the human community one finds the individuals and groups with whom the clan exchanges brides, pigs and other objects of wealth, and one step further lies the circle of enemies, the people with whom one does not enter into exchange relationships and can only fight. People close to the community, trusted exchange partners and in-laws, may be afforded moral consideration, but strangers and

[29] Many groups in New Guinea consider themselves to be the only 'real people', implying that all other peoples are less than that. The Jiwaka speakers of the Jimi, for example, also refer to themselves as 'Yu we', meaning 'real men' (VanHelden1998b: 53).

enemies are not subject to an ethical attitude and interactions with them will be governed by opportunistic considerations.

Kinship-based exchange constitutes the main stabilising mechanism in the violent and envious economy of the Jimi highlands as these ties connect clans and their members with other groups and individuals. Every Jimi belongs to a number of increasingly inclusive agnatic collectives but also acquires a set of spatially dispersed relations through marriage. Extra-local relations are characterised by a high level of reciprocity and at important moments punctuated by the exchange of women, pork, valuables and trade goods. These exchanges both symbolise and strengthen an underlying social relationship, tying people into economic and social networks which stabilise the volatile social relations and existential insecurity that characterise highlands society. Exchange mechanisms take a variety of forms and cut through space and time, tying groups and individuals into lasting alliances.

Important in conceptualising the notion of 'exchange' is that it constitutes the circulation of goods on the basis of social relations. Unlike economic attempts to analyse the flow of goods as part of a neutral and mechanistic 'market' driven by supply and demand between strangers it is not useful to separate economic from social and political considerations in the Upper Jimi. Social relations *enable* and stabilise economic activities, while economic activities *give meaning* to social and political ties. Trading traffic was in the past always handled through social relationships, and 'lacking a contact a man may not be able to get what he wants at any price' (Sahlins 1974: 298).

The convergence of economic transactions and social relations, however, does not apply to dealings with groups outside the boundaries of the moral community and the extra-local relationship maintained with kin and in-laws. According to Sahlins (1974) tribal societies in which reciprocal exchange serves as an important constitutive element, can be characterised by a series of concentric circles in which the level of reciprocity decreases with social distance from the centre. Within the inner circle of relations a pattern of 'generalised reciprocity' (where one gives and receives without keeping records) is found, which the further one gets from the immediate kin group shifts to a pattern of 'balanced reciprocity' (where one receives as much as one gives) and the onwards towards an attitude of 'negative reciprocity' (where one aims to take as much as possible even at the expense of the other). Between related clans and among in-laws the emphasis is thus on balanced reciprocity, exchange with strangers and outsiders, however displays a tendency to slide into 'negative reciprocity' .

As a result of the inverse relation between social distance and morality, relationships with strangers and outside groups, are governed by pragmatic and instrumental considerations. In contrast to sharing or balanced reciprocal exchange, transactions guided by considerations of 'negative reciprocity' are devoid of moral and social content. Such transactions can be regarded as archetypal 'economic' in nature as it entails the self-interested exchange between utility maximising strangers. In these

cases exchange easily develops into an 'attempt to get something for nothing with impunity... evolving into 'haggling' or 'barter', 'gambling', 'chicanery', 'theft', and other varieties of seizure' (Sahlins 1974: 195). Under such circumstances trade becomes a delicate undertaking exactly because there is no moral basis for the behaviour of the trading partners. Many anthropological accounts of trading expeditions attest to the risk of trading ventures, the dangers of being on foreign territory and the ease with which trade evolves into warfare. In the case of trade with strangers 'the circumstances are radically Hobbesian, not only lacking that 'common power to keep them all in awe', but without even that common kinship that might incline them all to peace' (Sahlins 1974: 302).

Before colonisation it was difficult to deal with people not related through kinship or marriage, as trade with strangers was a risky and unstable affair. Social relations in the Jimi opened up in the wake of the arrival of the Australian Administration whose emphasis on suppressing violence solved the Hobbesian problem ruling trade with strangers. Nowadays trade with non-related people is a common experience in the shops of Mount Hagen, while within the Jimi Valley there is more room for friendship, trade and co-operative relations across pre-colonial social boundaries. Thus people may have friends from other clans or even other parts of the country with whom they went to school, worked on the plantations and now hunt, garden and trade. The pattern of socially embedded economic transactions, however, remains dominant, leading to a situation in which one first establishes friendly relations, and a feeling of mutual trust, which is in practical terms expressed through the undertaking of a joint effort or exchange. The cultural logic of this approach is clear in the light on the previous discussion on in security, social distance, morality and exchange.

The forging of social relations, in order to subsequently conduct economic relations is visible in the earlier discussion of the tenuous position of migrants, but also in many day-to-day transactions throughout the Jimi valley. A coffee buyer from the Wahgi for example, explained that before entering into commerce one had to spend time, eat and exchange stories with the people of the villages in which he wanted to trade. Once people knew you and a modicum of trust had been built up, they would be happy to sell their coffee. Wandering into a village and simply offering a price would never work. In similar terms Jimi people buy their goods preferably from stores owned or operated by '*wantoks*' (kinsmen: 'those that share the same talk') or in-laws. The economic relationship is thus embedded in a social bond, while the failure to maintain economic ties directly questions the nature of the social relationship and generates strong feelings of resentment. Reay for example, notes for the Kuma that:

> 'In Kuma trading there are two distinct forms: institutionalised transactions through trading partners, and casual encounters along the routes. In the former, a man is content to conform to the ruling scale of values... but in the latter he haggles for a bargain trying to gain a material advantage' (Reay 1959: 106).

Similar patterns of socially-based economic relations are visible in Jimi migration strategies towards the Wahgi Valley. In some cases Jimi migrants returning from the plantations use their earnings to acquire coffee blocks in the Wahgi Valley where a sizeable monetary investment may buy legal title to a coffee block with access to the highlands highway. Often these new coffee farmers base their economic activities on a social relationship with the local landowning clan. They either marry into the local land-owning clans or marry one of their sisters or daughters into these clans.

The phenomenon that 'civic sense' (Bailey 1971: 8) is a consequence of the intensity of social relations, is not only helps to understand the attitude that people take with regard to non-community members, but is also of importance in understanding the way in which the Jimi people deal with outside intervenors such as the colonial state, the churches and 'projects' of various kinds. In the remainder of this chapter, I will argue that Jimi connections with the state and other outsiders generally lack the element of generalised and balanced reciprocity kept for their direct kin, in-laws and trading partners and are perceived in instrumental terms where the overriding interest is to capitalise 'with impunity' on the presence of state agents, companies, churches and – nowadays - development and conservation projects.

JIMI PEOPLE AND THE STATE

The well-known expedition by the Leahy brothers, Jim Taylor, Ken Spinks and 12 'native' policemen coming from the eastern highlands was the first to enter the Simbu and Wahgi Valleys in March 1933. The expedition cleared an airstrip near Hagen, allowing supplies and shell money to be airlifted in. In May and June 1933, the party made two expeditions into the middle and lower Jimi Valley. During their encounters with the Jimi people, Taylor and the Leahy brothers found that the Jimi people had no interest in steel tools but preferred to be paid in shells for their pigs and food (I. Hughes 1977: 52-56). This in contrast to the Ramu people who used to have steel axes and knives well before the Jimi. Shortly following these discoveries two Catholic missionaries were killed in the Wahgi Valley prompting the administration to close all areas not yet under administrative control from entry by Europeans.

This did not mean that the Jimi people were unaware of the changes taking place in the Wahgi valley. Walking routes from Simbu into the Upper Jimi Valley run past Kerowagi where a rest house had been established in the first half of the 1930s and as members of the Pala clan-cluster inhabit both Kol and Kerowagi, people in the Upper Jimi were conscious of the advent of the white man before the Second World War. Elderly men remember carrying cane to Kerowagi for the construction of offices and *kiap* houses. They were paid in salt, cloth and steel axes. A 1944 patrol report notes that 'KUNU natives continually visit Kerowagi and Banz bringing in their sick for treatment'(Jones 1944/45). With the Japanese invasion of February 1942, civil administration was suspended and the Australian New Guinea Administrative Unit (ANGAU) was established to administrate the parts of the

country not in hands of the Japanese. During the war, patrol activities were primarily aimed at gaining military intelligence and the ANGAU had little reason to inspect the Jimi Valley.[30]

The first available report referring to the Upper Jimi, describes a patrol undertaken in December 1944 by a new ANGAU Assistant District Officer to investigate the impact of a dysentery epidemic sweeping through the highlands (Cf. Burton 1983). Lt. Jones found little evidence of dysentery. On his return to the Wahgi valley the patrol was ambushed by a group of Njembuka warriors, three of whom were taken prisoner. Following the attack, the District Officer at Mount Hagen concluded that 'with the present staff available it is impracticable to intervene' and that the Jimi valley should not be patrolled until his administrative capacity was strengthened (Jones 1944/45). It thus took until 1948 to dispatch the next patrol consisting of inspector Wakeford with 16 Royal Police Constabularies after reports of tribal fighting in the Jimi were received. The patrol proceeded from Kerowagi to Kol and after arresting four men for murder, moved on in westerly direction where this patrol too had to fight off a band of attackers (Wakeford 1948/49).

After World War II patrols into the Jimi Valley were mounted from a newly established patrol post at Minj in the Wahgi Valley. In 1950 a patrol from Minj was the first to cross the Jimi River to solve a conflict between the Owalka and Kema groups living in the shadow of Mount Oipo. The Owalka had enlisted the help of a Chimbu constable and his gun, leading to the capture and torture of a number of Kema men of whom one died (Linsley 1950/51). In august 1951 different two officers crossed the Jimi River to be received in style. They were

> 'lifted bodily by a screaming lusty band of natives, shouldered and raced up amid shouting and singing to the Rest House. Food in enormous quantities had been made ready for us and suitable return gifts were made (Corrigan 1951/52).

From 1950 onwards the patrol reports abound with comments on the eagerness with which the Upper Jimi people received the various patrols, and built roads, bridges and rest houses:

> '[The Rest House] at TENGA was more of a mansion than a Rest House... to make a level plane... the ground was levelled down some nine or ten feet '(Linsley 1950/51).
>
> 'Natives never previously contacted constructed a magnificent bridge over the Kon [Jimi] River' (Wakeford 1949/50).
>
> 'A feature of patrolling in the Kuno [Jimi] area and a fact that excites one's admiration are the roads which now cross the rough valley system. I am given to

[30] Even though there are no records, at least one patrol, probably coming from Kundiawa, must have come through the Jimi valley during the war. Reference is made to a patrol in 1943 (Jones 1944/45). The only other reference to outsiders entering the Jimi Valley during the Pacific War comes from a 1951 patrol in Madang Province which mentions how newly contacted Gainj speakers east of Aiome recall the killing of three Europeans by Maring groups during the war (Worchester 1952/53).

> understand that notoriously bad tracks were, up to a few years ago, a feature which left a lasting impression but now all this has gone and roads replace them. And all of this road-building programme has sprung from a spontaneous voluntary effort on the part of the Kuno people' (Corrigan 1952/53b)

At one stage, a patrol officer even complained that the

> 'natives in this sub district [Jimi] have one fault regarding building roads. They make them too wide. This in itself is hard work and means many hours spent in maintenance. Where new roads were planned Luluais and Headmen have been give sticks of about six to seven feet long. They have been asked to use them as a guide for their tracks' (Wakeford 1949/50).

A search for suitable land for the building of one or more airstrips in the Upper Jimi started in 1957 leading to the identification of a suitable spot at Kol. In February 1959, work on the airstrip commenced with the construction of six 'native-style' houses to shelter the different clan groups coming to work for two weeks at the time. The work schedule for the different groups was based on the existing patterns of alliance and enmity and as with all other public works the response to the request for labour and the men's enthusiasm was 'very satisfactory'. At the end of the two weeks people were paid in salt, beads, face paint and small mirrors (Richardson 1958/59). Apart from these airstrips, an extensive network of footpaths through the Jimi and into the surrounding valleys was constructed. These routes were maintained by the various communities at the behest of the patrol officers.

The great enthusiasm shown by the Jimi people appears at odds to opportunistic the view of outsiders presented above. It can be understood, however, when one notes that the Upper Jimi people quickly realised that they had little chance of offering armed resistance against the colonial patrols and that capitalising on the presence of these patrols proved much more fruitful. The eager attempts by various groups to build roads, bridges, airstrips, mission stations and rest houses can therefore be understood as attempts by individual groups to attract the administration towards their territory with an aim to increase their status and the opportunities for trade. By inviting the patrol officers and the churches in, by making them welcome through the building of accommodation and the presentation of great heaps of food, the Jimi copied the pattern reserved for influential and powerful migrants described above. By aiming to make the *Gavaman* ('government') feel at home, they aimed to forge a special relationship, no doubt hoping that such would give them preferential access to trade goods, security and reputation over neighbouring clans. The fact that the administration did not wish to build a special relation with any one group in particular was an alien concept in the competitive clan-based political landscape of the Jimi Valley.

FROM ENTHUSIASM TO ENROLMENT

Becoming increasingly aware of the military strength of the Australian administration, local groups aimed to enlist the administration and its personnel for

their security purposes. In one instance, the Owalka group enlisted a Chimbu constable and his gun to raid the neighbouring Kema groups at Bubkile. More usual was that patrols were asked to intervene in tribal conflicts. The 1948 Wakeford patrol, for example, was the result of such request. These requests obviously came from the defeated or weaker parties who would make 'the story of the attack seem so treacherous that it cried to Heaven for vengeance' (Corrigan 1952/53b).

Interventions in tribal conflicts were the only instances when clashes between the administration and groups, who saw a victory over the neighbours thwarted, ensued. In the Middle Jimi Valley for example, things were far from quiet as no less than four tribal wars were taking place simultaneously. In April 1956, pilots flying from Mount Hagen to Madang reported seeing whole villages on fire. The Department of Native Affairs responded by sending an armed patrol which reached Kwiop, where the Manga clan-cluster had just been routed by the neighbouring Yimban group. The patrol proceeded into Yimban territory and following an ambush on the patrol 7 Yimban warriors were killed. Once the Yimban had fled, the Manga proceeded to burn the Yimban houses and destroy their gardens and trees in turn (Pflanz-Cook and Cook 1979). The superior force of the patrol established the reputation of the Australian administration and fighting quickly subsided. The use of weapons became an offence in its own right, regardless of the underlying reason (Pflanz-Cook and Cook 1983: 191).

Once the last belligerent groups had been pacified, a number of patrols censused the Jimi groups and appointed *luluais*, local headmen, and *tultuls*, their assistants. These leaders were elsewhere issued with badges which became a much coveted status symbol worn on a string around the head. The Upper Jimi big men had to wait a long time before they received their badges and many took offence at the fact that Wahgi people known to them were issued with such insignia while they had none:

> 'At each of my camps this question was almost immediately raised: we have stopped fighting, we have left behind us the bad customs of our forefathers and we build roads and we hear the talk of the government. We know that the people in the grasslands of Mt. Hagen and Chimbu have Luluais and Tul-tuls [headmen and their assistants], why not us. Are we so very different from these people?' (Corrigan 1952/53a).

Others tried to pay the *kiap* with pigs in the hope of receiving the distinction (Walters 1952/53).

In the 1960s, the Australian Administration would create the beginning of the three tiered government system which still characterises PNG Government today. The bottom layer of the system, the Local Government Councils (LGC) was created with the aim to educate villagers in the workings of democracy while simultaneously serving as a local-level development mechanism. This entailed the abolition of the '*luluai - tultul*' system and the setting up of local council elections. In 1966 a LGC covering the whole Jimi Valley was established at Tabibuga, but in the mid-1970s the Upper Jimi broke away to form its own council at Kol (Maclean 1984: 39). The

Kol LGC consisted of 25 councillors and a separately elected president. Every clan also had its clan magistrates, land mediators and so-called peace and good order committees, who would mete out justice and solve conflicts. Severe offences meant the arrival of constabulary from the Wahgi Valley, arrest and imprisonment. Open violence became increasingly rare and patrol officers expressed their satisfaction with the situation.

The churches dealt with the 1934 prohibition of entering uncontrolled territory by training local pastors, and sending them in to pave the way for future mission work. The position of these native evangelists could be a difficult one. Whereas the local leaders combined skills in production, politics, public speaking, religious and cultural knowledge as well as fighting prowess in one, the church put a man in a position of authority with regard to one sphere of life: that of worship and church matters. This man, however, did not necessarily command the respect of the community at large. Often he was young, would not take part in non-Christian ceremonies, was opposed to tribal fighting and was not necessarily a strong speaker. Also nowadays, many church leaders mainly command respect by the way they lead by example. They do so by combining their church work with their local responsibilities, in what is basically a double workload. In many cases, earlier sources of status, resulting from a knowledge of tradition, a daily involvement in clan affairs, the ability to grow one's own food, and the ability to stand one's ground during arguments, determine the success of their church work.

Once the Jimi Valley came under administrative control, Catholics and Lutherans scrambled to demarcate their relative territories from May 1958 onwards. The churches quickly became enrolled in the political projects of the Jimi big men. In 1959, at Iawaramul in the Upper Jimi, for example, a Lutheran church worker filed complaint against the arrival of a Catholic cathechist who was building a house 200 meters from the well-established Lutheran Mission Station there. Although there was certainly competition between the individual missionaries, in the competitive highlands this was exacerbated as religion provided a new source of rivalry in clan relations. In the Iawaramul case mentioned above, the investigating *kiap*, for example, concluded that the *tultul*: 'of Iawaramul has a long-standing feud with his *luluai*, a Lutheran sympathiser, and by importing a Catholic cathechist of his own, hoped to even the score' (Richardson 1958/59). Other reports note that 'the natives give one the impression that they are not greatly interested [in religious education] except for any material gain that may be forthcoming' (Corrigan 1952/53b).

A similar instrumental attitude in which the contacts with the government were immediately made useful is visible in the trade relations between government and the Jimi. Like other Highlanders, the Jimi were keen to trade for shells, salt and steel tools. In some cases the patrol officers felt that information on how to get from one place to the other was deliberately being withheld in order to retain the patrol. Patrol officer Worchester, visiting Jimi settlements in the Bismarck Fall, for example, noted that the people

> 'were quite friendly, but most unhelpful when it came to finding out the whereabouts of other groups in the vicinity. It seems that their idea was to get the patrol to camp with them for a week or two and to get their hands on all the trade goods' (Worchester 1952/53).

The eagerness to trade for shell and other items is noted in many reports, as is the rapid change from the welcoming gift of food to visiting patrols to a form of bartered exchange:

> 'In most places visited by the patrol it was the custom to make a heap of food ... On completion of the heap the headmen then made lengthy speeches, emphasis being placed on their joy at seeing the patrol and also how short food was but that they were willing to share what little they had with the Government, the final gesture being the outright gift of the heap. It has been usual practice with past patrols to return the gift with suitable items of native currency. The usual heap previously consisted of one or two pigs, several bunches of bananas, sugar cane and other native produce, the payment ... would be one or two gold lip shell, a knife or a tomahawk, and paint, salt or tambu shell. The amount of each item would naturally depend on the size of the heap of food... This was acceptable to all parties and there was no further talk or haggling (Walters 1952/53).

This form of gift-exchange would, however, rapidly shift to a form of barter in which the terms of trade were far from clear to those involved, and in which opportunistic considerations became more apparent to the great frustration of the involved patrol officers.

> However ... the heap of food now appears to have lost its significance as a friendly gesture and has developed into ... a means of obtaining native currency from the Government whom they think are bound to purchase the assembled goods at the owners price... The heaps of food or 'mountains' as the natives refer to them developed to such an extent that it was embarrassing for me to accept them as I only had a limited supply of trade items...
>
> An incident at Kubura will serve to illustrate the size that these heaps have reached. On one heap alone there were eight live pigs and nine small cooked pigs... The gift was accepted by me, but on return of the gift, which in my opinion was quite a fair one, five pigs were collected by the owners and carried off but none of the pay that I had made was offered back... I immediately recalled my pay and informed all concerned that under no circumstances would I accept their gift if they were going to employ these underhand tactics' (Walters 1952/53).

These instances show glimpses of what can be termed the 'instrumental' attitude of the Jimi people towards the government and churches. In their aim to remain 'neutral' and 'above the parties' the patrol officers refused to identify themselves with one or more Jimi clans, thereby in the eyes of the Jimi defining themselves as permanent outsiders who could be subjected to opportunistic behaviour whenever such was deemed advantageous.

SECURITY, CASH AND THE POLITICS OF DEVELOPMENT

By the end of the 1950s tribal fighting in the Jimi Valley had been suppressed. Restrictions on entering the area were lifted and missionaries began a number of mission posts and schools. The cessation of tribal fighting had a significant impact on the local economy and the use of natural resources. It allowed people to take previously indefensible land into production, and especially men to spend more time and energy on the welfare of their families. Several elderly men mentioned that the interruption of tribal fighting had banished the famines which had characterised their youth, when they had to flee from attacks by neighbouring groups and ate wild yams for survival. Improved security also led to a great increase in local trade (Corrigan 1952/53b), while the arrival of trade store goods increased the fertility of the population: the same elderly men recalled, how after the administration came women started bearing many more children.

An important change took place with the introduction of steel axes, bush knives and spades into the highlands in the 1930 and 40s. These tools facilitated the efficiency of forest clearing and migration into primary forest.[31] The combined effect of the end of the Pacific War and its associated epidemics, the arrival of steel tools, improved nutrition and western medicine and the Australian injunction against tribal fighting led to an in crease in the growth of the population. It is estimated that the growth of the population in the Upper Jimi averaged about 0.96 percent per annum between 1959 and 1980 and increased to about 2.2 percent per annum around 1980 (VanHelden 1998b: 126-127).

To the Jimi people the 'development' problem lies in the first place with their growing wish to take part in the modern consumptive society, with the hard work necessary to earn a little money and increasingly with the need to meet customary obligations through monetary payments. People generally conclude that 'The Jimi valley is a good place for growing food, but a hard place to earn money'. Over the last few decades the Jimi people have become increasingly dependent on cash incomes and there is no household that exists without at least some money to purchase basic household items.[32] Money is also necessary to access the run-down Government health services, for transport, and to pay school fees. With the

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[31] Salisbury (1962:108-110) suggests that with the use of steel tools the time spent on subsistence activities by the Siane of Simbu Province fell from 80 to 50 percent. Godelier (1973: 210), Clarke (1993; 241) and Townsend (1969: 199-200) calculate a tripling to more then quadrupling of the speed with which large trees could be cut. Macaulay (1976) notes in Simbu that garden size increased as the new tools were introduced while Clarke (1971) and Golson (1981) describe how the use of steel axes accelerated the speed of forest clearance and gave especially men, who are responsible for the clearing of gardens, extra time to engage in social, ceremonial and political activities.

[32] The most important items of purchase are tools such as axe-heads, bush knives, shovels, nails, pots and pans, potato peelers, and items like clothes, soap and salt. In households with a little bit more cash, people may add kerosene, batteries, string for the production of netbags, rice, noodles, and tinned fish. Sugar, coffee, tea, and alcohol are considered luxuries. Notwithstanding the limited cash incomes many households in the Jimi Valley own a number of durable household items such as hurricane lamps, radio-cassette players and sewing machines to shotguns, portable coffeepulpers and musical instruments.

instigation of user-pay policies around the country under the World Bank led Structural Adjustment Program and an increasing number of people cannot muster enough financial support among their clan members and relatives to send their children to school. Cash incomes are also closely related to dietary improvement, as items like beef, dripping and tinned fish form an important supplement to the local diet (Joughin and Thistleton 1987: 32). Nutritional studies suggest that the increased consumption of trade store goods is related to a reduction in stunting and wasting among children, and that higher levels of cash income are associated with higher birth weights and an increase in adult size. Food purchased from trade stores may assist in evening out seasonal fluctuations in food availability (Allen *et Al.* 1995).

An important drain on the cash earnings are the exchange relations and obligations between individuals and clans. Whereas in the past bridewealth, mortuary and compensation payments used to be made in pigs, shells and feathers, many of these payments have at least partly become monetised. Pigs continue to be socially important, but other valuables such as shells and feathers have lost their value. The role of shells at first diminished as a result of the large amounts of shell that were flown into the highlands from the 1930s onwards to pay for local labour and supplies. Their value declined rapidly and their use as a trade and exchange item vanished in the 1960s (Salisbury 1962). Until well into the 1970s the Jimi Valley remained an important source of Bird of Paradise feathers. Patrol officer Richardson, for example, recorded in 1959 that:

> 'Considerable trading takes place between Chimbu/ Kerowagi/ Nondugl/ Minj/ Banz areas and the Jimi Valley, the bird-of-paradise and his plumes being exported from this area. Axes, tomahawks, spades, bush-knives, pigs and sometimes cash are the mediums of exchange for the much sought-after plumes for decoration by the Chimbu and Wahgi people. ... the numbers of birds killed in the JIMI area must have reached tremendous numbers. One observer estimated that at a sing-sing at Nondugl, at which perhaps 500 natives were present, the plumes of about 7,500 birds were used as decorations'.

At first the monetisation of the trade in bird feathers and the use of shotguns increased the hunting rates during the colonial period (Healey 1973, Healey 1990), a development which the Australian Administration tried to control by restricting hunting to the use of 'traditional' technology and by reducing the number of gun permits. This trade has since lost its importance in bridal payments in the Wahgi Valley (Heaney 1982) and the use of feathers is increasingly limited to tourist-oriented cultural shows. In some cases chicken feathers dyed-red are replacing the feathers of the Vulturine Parrot (O'Hanlon 1989: 142). As a result of the dwindling trade in bird of Paradise feathers, it appears that the pressure on these bird species is no longer a result of hunting, but has more to do with the conversion of habitat (VanHelden 1998b: 188).

These days bridewealth payments consist of considerable cash payments of about Kina 2000 (U$ 1000) and 10 pigs. As the role of money is becoming increasingly important, women in the Upper Jimi are at risk of being traded as commodities.

Whereas in the past it was up to the groom's clan to make payment according to its own ability and status, clans providing the bride now give an indication of their expectations. Clans in areas with large resource projects see themselves faced with excessive claims, which they can not easily ignore for the risk of losing face. The chairman of the School Board at Kol, for example, has a daughter married into a landowning clan in the Gobe gas concession. As the Jimi know of the 81 million Kina compensation agreement between the mining multinational and the Gobe landowners, the chairman in 1997 asked 50,000 Kina (U$ 25,000) and a four-wheel drive landcruiser as bride wealth.[33] Compensation payments have also become monetised and vary between several hundred Kina for smaller grievances, to 30,000 Kina (U$ 15,000) in case of murder.

SOURCES OF INCOME

The growing importance of cash in daily economic and social life in the Upper Jimi Valley is closely related with the arrival of the Australian Administration, the construction of the road from the Wahgi Valley and the arrival of the coffee economy. The first *kiaps* to visit the Jimi Valley in the 1950s already commented on its limited suitability for the growing of cash crops, with the main constraints being the steep slopes and the lack of roads. Important was at first that the increasing presence of the colonial state brought a number of employment opportunities with it. Up to this day the main wage earners, within the valley are those who take home a salary in their capacity as carriers, guides councillors, magistrates, peace officers and land mediators and later teachers, aid post orderlies, police officers, extension officers and district managers.

The first large-scale opportunity to earn cash incomes in the Jimi Valley stemmed from migration, and especially the introduction of the Highlands Labour Scheme. This scheme was instigated by the Australian Administration in the 1940s to meet the high demand for labour in the coastal districts after the Pacific War. Thousands of men from the highlands savoured the new opportunity to travel and aspired to the wealth that could be earned by joining the scheme. Many of the first to go, spent their wages on wealth items such as shells and feathers which boosted their standing within the community. Enthusiasm for the Labour Scheme waned when increasing numbers of highlanders preferred to grow coffee on their own land once this became possible at the end of the 1950s (Howlett 1973).

For the Jimi, however, there were few such possibilities. There were no extension and marketing services and the first coffee was planted by Jimi people who obtained their seedlings from Simbu. After two airstrips were constructed at the end of the

[33] This is a worrying trend for women, as they can no longer return to their families in case of mistreatment. How is their natal clan ever going to repay her bridewealth if her marriage fails? The pressure on women to return to their husband, whatever the circumstances in their new clan is enormous, often leaving only the option of suicide open.

1950s, some back-loading of coffee started to take place. This state of affairs changed radically when the valley became accessible by road in 1970. Once the road was in place those communities living close to it quickly started growing coffee and the first harvests in 1975 and 1976 coincided with a sharp rise in world coffee prices. As a result coffee quickly became the mainstay of the Jimi economy accounting for roughly 60 percent of total valley income (Joughin and Thistleton 1987). After coffee was introduced many food gardens were no longer allowed to revert to bush but were converted into coffee plantings. The main staple crops continue to be grown by households themselves, and larger areas of land per household were consequently needed to satisfy both subsistence and cash needs which has had a severe impact on the remaining stretches of forest.

As a result of the growing population and the arrival of coffee as a cash crop, most of the forest in the Upper Jimi nowadays consists of secondary bush land and is interspersed with gardens, houses and patches of grassland while gardens are being made up to 2200 metres ASL for the production of vegetables and greens. The only forestland still intact in the Jimi Valley, lies either above 2200 metres ASL or at the far end of the valley on the inner rim of the Bismarck Range. This stands in contrast to earlier descriptions which note that the Jimi Valley is

> 'almost completely devoid of grass ridges, and tall timbers rise from the river banks to the crests of the ridges. Native agriculture is possible in clearings in the forest' (Walters 1952-53).

Hanson (1998) suggests that nowadays a fallow period of around six years is practised, while the time needed to recover fertility after a planting cycle is estimated to lie between 10 and 15 years. Communities in the more densely populated areas respond to the degradation of their soils and subsistence system by taking mitigative action through tilling, mulching and ditching, while the planting of nitrogen-fixing and fast-growing trees helps to restore soil fertility and provides timber and firewood. Hunting and gathering has virtually ceased. People complain that the cassowaries and wild pigs have 'run away' to the other side of the Bismarck Range. The old men recall that in their youth, they would have plenty of game in the vicinity, but now, they say, there are people and gardens everywhere, and their land has turned into *'redpela graun tasol'*, eroded red sub-soil, because of the continuous cutting of the vegetation.

For the more remote communities across the Jimi River, there continue to be very few opportunities for intensive cash cropping. Most people grow some coffee and sell their coffee to local buyers or carry it to Kol themselves. Up until 1987, Kina Coffee Pty used a helicopter to lift large quantities of coffee out of the remoter villages, but the fall in coffee prices, and the cost of this form of transport have made it uneconomical to do so since. Food crops suffer from the same transport constraints as coffee. People hope that the new high school at Kol will provide them with an outlet for their garden produce. A more important source of funds is the rearing and sale of pigs to those wanting to meet their social obligations. Pigs are

sold for anywhere between 50 and 500 Kina, depending on the size. In the Ramu area, Jimi settlers walk or even fly piglets up to the highlands for sale there. Apart from pigs, chickens are sold for a little cash, but larger chicken projects have not been very successful in the Upper Jimi (Joughin and Thistleton 1987: 28).

THE POST-COLONIAL IMPLOSION OF THE PAPUA NEW GUINEAN STATE

The period of pre-independence optimism described above stands in stark contrast to the present feelings of frustration with the state of decline in which the Jimi find themselves since the 1980s. Nowadays if one arrives at a village in the Bismarck-Ramu area, the conversation inevitably starts off with people apologising for the fact that the outsider has come to such a *'rabis ples'*, such a rubbish village. This initial remark is then followed by a litany of comments relating to the total lack of government services, *'sevises'* having become the catch-all word for better roads, health and schooling but also for economic opportunities, money in one's pocket, a second wife for many men and a reduced workload for all. Whereas the Jimi people in the outlying communities will state that those on the road in Kol already have services, those along the road will compare themselves to the Wahgi Valley and complain in similar terms. This introduction is often followed by the complaint that PNG was made Independent much too soon (*'mipela dring susu yet'*: 'we were still being breast fed') and that the Jimi would have been much better off without Independence in 1975. The Jimi people blame the 'coastals' in general, and Michael Somare, the first Prime Minister in particular, for the speed with which PNG became independent and for the lack of services since then.[34]

Colonial times were a period of great change for the Jimi valley, which brought exciting new possibilities, products and services. In contrast post-independence is seen as a period of decline. The council system proved expensive and cumbersome and failed to provide much needed services to the rural areas after 1975. Money made available at the top often did not reach the lower levels as the needs of the National Government and the urban population, rather than those of the rural population, dictated priorities. As a result rural services and infrastructure are in decline and the Jimi people are increasingly losing faith in the Government's ability to provide them with basic necessities in terms of market access, infrastructure and health and education services. Roads, bridges, clinics, schools, government housing

[34] Such expressions are highly strategic and have to be taken with a grain of salt, as the Jimi have a tendency to blame the absent party for the present state of affairs. Thus while talking to a visiting expatriate sociologist, they will present the colonial period as an example of how things should be done. When talking to local officials, however, they may very well refer to the colonial period as the 'dark ages' from which they have failed to emerge. In October 1997 the people of Kosap vented their anger to the new Jimi MP, arguing that the people on the northern side of the Jimi River still lived 'in the colonial days'. Because of a lack of road access people were not 'receiving services like education, health and business and the five community schools were without teachers and nine aid posts without medical staff. The teachers and medical staff do not come here, because of no road. As a result they stay away in Mount Hagen or their places and get paid while the children of Kosap are deprived of education and sick people suffer to death' (The National 23 October 1997).

and other infrastructure have collapsed, or are on the verge of collapsing. Government personnel are demoralised, law and order has deteriorated, and many salaried positions have been abolished. Although civil servants are generally much better off than the non-salaried population, the few remaining civil servants feel increasingly abandoned and isolated due to the lack of funds and the lack of support from their superiors. The few newly initiated 'development' projects are politicised along clan lines and in many cases are a simple disguise for large monetary handouts and political favouritism. Up to 1995/96 the churches in the area were led by foreign missionaries, but these have now left, leaving the church district to its own devices.

This experience of decline is increasingly linked to feelings of inferiority. For many Jimi the development in the Wahgi Valley, only 80 kilometres away, with its cash economy based on coffee plantations, tarmac roads, hospitals, schools and the urban centre of Mount Hagen accentuate their own failure to muster development. This sense of 'missing out', of not being part of the wider world in which development is taking place, of being 'beaten' by other, more successful, groups engenders deep feelings of frustration and a contradictory attitude towards the State. On the one hand the State is seen as failing its duty towards them, while at the same time politics are perceived as one of the few remaining opportunities to access the status, money and services associated with the idea of 'development'.

THE ROAD AS IMAGE OF 'DEVELOPMENT'

In geographical terms the Jimi feelings of isolation are very real. The low extent and quality of local infrastructure constitutes a major obstacle to further integration in the cash economy, a situation reflected in the fact that whenever the Jimi people discuss 'development' people start by talking about 'the road'. Whereas during the 1970s the road and the coffee economy that came with it were the very image of 'development', the road nowadays has become a symbol for the way in which the Jimi have been betrayed by the Government. The road to the Wahgi Valley is narrow, unsealed, and frequently destroyed by landslides, as a result of which it takes around five hours to cover the 80 kilometres to Banz. Up to the early 1990s buses used to run, but in the last few years the condition of the road has deteriorated to the extent that only four-wheel drives and trucks get through. The number of vehicles travelling has been reduced and the cost of travelling is high, forcing many people to walk as their ancestors did.

The disparities between the 'road-people' and the 'bush-people' are an ongoing source of frustration and friction between the different clan groups. For the more remote communities little has changed in terms of cash earning opportunities since Independence in 1975 and many of these people can be regarded as 'functionally landless' in the sense that they are largely unable to participate in the market economy due to the lack of infrastructure and market access (Howlett 1973). Not surprisingly the construction of new roads, rather than the upgrading of the existing

one, is the main concern for the bush-people during the election campaigns. The lack of road access as the dominant problem has lead to a widespread perception of road access as a means to earn money and as the dominant characteristic of a state of 'development'. It is a vision in which the Government, responsible for building and maintaining infrastructure is increasingly seen to fail its duty. Some people say that they need the road to bring mining or logging companies in, but very often this type of reasoning is reversed: in the light of the Government's failure to do its duty, people need a logging or mining company to build roads.

The limitations on their participation in the cash economy force large numbers of young men to seek work on plantations in the Wahgi and Markham valleys and in the coastal regions. In some cases, large number of men leave the village at once through the efforts of a labour recruiter, as was the case in 1987 in the Koinambe region in the Middle Jimi, when about one thousand men left. Obviously this has a major impact on the women and children remaining behind (Joughin and Thistleton 1987: 30). Many people from Bubkile and Bubulsunga have moved into the Ramu valley, to follow a dual cash strategy of planting coffee in the highlands and betelnut in the lowlands. Another way of making use of the fringe location of these clan groups consists of the smuggling of alcohol and the cultivation and sale of marihuana. The first is made possible due to the liquor ban in Western Highlands Province and the availability of alcohol in Madang Province. A carton of 24 small bottles of cheap gin carried up through the forest in four or five days can be sold at a large profit. Marihuana may be the crop of the future for the fringe communities of the Upper Jimi and may actually traded for weapons. The risk of being caught is marginal, as the Jimi Valley is huge, and as no police officer will venture beyond the relative safety of the road.

THE ABSENCE OF STATE LAW

The receding State not only leaves its marks in the form of a lack of road maintenance and health and education services, and but also in its failure to fulfil its archetypal role as conflict mediator and holder of the monopoly on the use of violence. When the Australian patrols entered the Jimi and Ramu Valleys, their first aim was to suppress violence, disarm the various clan groups and instil the 'rule of law'. It is from that basic step that all other Government and church activities followed. The post-colonial state, however, has been unable to maintain control over the use of force and no longer plays a significant role in the resolution of local conflicts. This results partly from the fact that the whole Upper Jimi has but a single police officer. The officer, who originates from the Sepik, lives in Kol, but has to make do without a car, radio communications, lock-up, but is expected to look after a population of 7,000 in a very rough area of 550 square kilometres.

Like many of the government personnel who have spent a long time in the rural areas, he has married a local woman and has gradually been incorporated into the local social structure, much in the same way that Jimi men may choose to reside

uxorilocally or live with other clans. He is a well-respected man and the clans around Kol station contributed to his bride wealth payment. The result of this inclusion in the local clan structure is that he has to walk a tight-rope between his duties as an officer and the expectations of local people. In such a situation, it can be hard to arrest an in-law even in the case of a serious offence. This does not matter too much in practice as following an incident in Kosap and Bubkile, most of the Upper Jimi is considered off-limits to the Provincial Police Command anyway:

> In 1987 a police patrol visiting the Upper Jimi ran amok. Women were raped, people were forced to undress and parade in front of other villagers, and children were strung up by their legs from the branches of trees. Local villagers decided that enough was enough when one of the officers shot at a respected elder man grazing his head with a bullet. People from all villages in the area, armed with bows and arrows, home-made guns and axes marched to the house where the officers were staying and forced them to surrender their weapons. Their uniforms torn up, the officers were humiliated by being forced to frog march and laugh on command. At night, they were told to count the stars. Many people wanted to kill them, but were restrained, and in the end the officers were only beaten up. They were told to send the Provincial Police Commander to discuss the behaviour of his men and to retrieve their weapons. The Police Commander first sent several carloads into the Jimi Valley, but when they arrived and saw the terrain through which they would have to walk they turned back. The Police Commander himself then came by helicopter, but local people were afraid to face him and fled, leaving the guns for him to take away. Since this incident, no police officer has been to Bubkile.

The Jimi thus have to solve their own conflicts with the help of the village courts introduced by the Colonial Administration. This allows for a procedure which turns two-sided conflicts into a triadic situation where neutral councillors and magistrates with judicial authority mediate between the disputants (Cf. Pflanz-Cook and Cook 1983). Each clan has its own magistrate and peace officers that can be called upon to resolve the conflicts of clan to which they are not affiliated. Due to the high level of intermarriage, it can be hard to find a magistrate acceptable to both parties.[35] For land disputes there are so-called Land Mediators, who negotiate conflicting land claims, but both the Land Mediators and the Peace and Good Order committees were decommissioned in September 1995 due to a lack of government funds. The remaining judicial officers are demoralised due the failure of the government to

[35] Village courts officially only deal with minor issues, while more serious offences are to be referred to the National Court. In practice, however, the administrative and logistical difficulties involved in prosecution, arrest and detention provide a strong incentive to also solve the more serious issues locally through compensation negotiations. After the 1993 war between the Kiluwa and Milintse clans, which left three people dead no arrests were made, but compensation was paid. The wounding of a Konkilmanka man went by without police action, but a killing at Olnar on the road happened when a provincial police detail was at Kol and led to the arrest of a suspect. This specific conflict was difficult to resolve by local means anyway, as it involved two brothers within the same family. In such a case, the usual repertoire of clan-based retaliation and compensation negotiations does not apply. As people explained 'Justice had to take its course, because we can not fight'.

provide them with their allowances, stating that 'the Government's money is finished' and that 'therefore they don't work very hard'.

THE PURSUIT OF POLITICS

The growing disappointment with the performance of the national state and its local representatives has, however not led to a reduced interest in politics. To the contrary. In an environment with limited opportunities for socio-economic improvement, many people and clan groups see participation in local, provincial and national politics as one of the very few opportunities for 'development'. This view is a result of the fact that political office has become a direct source of funds. These flows of funding not only stem from political patronage relations that keep the fragile national coalitions that characterise PNG political life intact, but have increasingly become institutionalised. In an attempt to generate development in the rural area's all 109 parliamentarians are yearly allotted large sums of money to implement 'projects' with. These so-called Electoral Development Funds allow MPs to reward their supporters. This has engendered a political culture in which aspiring candidates zip around the district ceremonially killing pigs, making speeches and leaving a trail of promises, cash and gifts.

Jimi settlers living in the Ramu Valley make use of the proximity of the Madang-Western Highlands Provincial border by playing politics on both sides of the border. The Jimi settlers living in the Ramu Valley are part of two provincial political and administrative systems and proved adept at organising the construction of an airstrip, a school and an aidpost at Foroko-Brimde in the Ramu Valley by supporting a local candidate for the Madang Governor's post. During elections many Jimi register in both provinces and would vote for their candidate in the Western Highlands Province as well as their man in Madang, allowing them tap into the political system on two ends. This was practically possible as voting takes place during a number of weeks and as people simply have to make the trek up to the Jimi Valley after having voted in Madang Province, or make the trek back to the Ramu valley after casting their vote in Bubulsunga and Bubkile. This went on for almost twenty years, until the inevitable happened in October 1997, when two helicopter-borne polling teams, one from Madang and one from Western Highlands Province, met each other in the Ramu valley to take the votes of the Jimi communities there. The officials not knowing what to do, allowed all present to vote in both ballots.

In the Jimi Valley the political importance of roads and cash incomes come together in the so-called 'hand-outs' that characterise local political patronage. Unlike wage labour, this important form of 'income' is aimed at whole clans and consists of payment for road building duties. The previous Jimi MP for example, commissioned a number of road projects. Amongst these was a failed attempt to build a road link to Simbu Province and the successful building of 4 kilometres of road from Kol to his own house. Although in September 1995, a total of K 288,500 (U$ 145,000) was paid out to local clan groups for these road works it appears that the district got

very little value for money. The problem, according to some local people, was the lack of planning and especially the absence of a clear relationship between the work done and the size of the sum paid out as many of these payments were in the first place a reward for political support during the elections rather than a concerted attempt to improve local infrastructure. Arguments arose when those clans that had worked well, saw rival groups get paid even larger amounts for less work.

A second issue of importance in looking at the local perception of the political system is the fact that politicians across the country are actively involved in 'bringing development' to their constituencies by opening the doors to international mining and logging ventures. This plays on the strongly held idea that companies provide roads and cash incomes. Many remote areas in PNG have – at least temporarily - been opened up by timber and mining companies in order to gain access to the resources of their choice. In the Jimi too, people would like a company to construct a road so that they make a living like their neighbours further south. The fact that most Jimi politicians run on a platform of promises to construct roads to the various isolated communities even though few of these promises are realistic, leave alone economically justifiable, means that frustrations run deep when those that win their seat do not make their promises good.

> This became evident to the previous MP for the Jimi during his re-election campaign in 1996. As a candidate in 1992, he had promised the construction of a road to Bubulsunga and Bubkile when elected. In anticipation of the coming of the road a number of young men planted large numbers of coffee trees at Bubulsunga. The road, however, was not built, much to the anger and frustration of the Bubulsunga community, who proceeded to drag the MP of his helicopter when he landed for a short visit in October 1996. They demanded to know why he was flying when he promised them a road. He was lucky to have landed among his in-laws, because people from Bubkile stated that he would have been killed had he touched down there. Following the incident the member had to campaign with the assistance of an armed police detail. He lost the elections.

In recent years money and participation in politics have become increasingly important sources of status. People use money to build up a reputation as a leader on the basis of their education, their understanding of the 'modern' world, their ability to link up with the modern state rather than through participation in clan affairs as was the case in pre-colonial society. The fact that politics, status and money have become so closely linked makes elections in PNG increasingly violent and leads to a fragmentation of groups which would previously work together in political affairs. This became especially visible during the Local Level Government elections of October 1997, when widespread fighting broke out between sub-clans and even within extended families leading to widespread disagreement and conflicts in which houses were burnt and a large number of people got hurt.

Status and the ability to secure the welfare and security of one's group thus continue to be the driving motivation within Jimi society, but the manner in which this 'social capital' is being expressed has shifted towards participation in national politics and

the access to the monetary economy. These shifting views of what makes a leader and his clan prestigious and how to achieve development have also affected the values that people hold with regard to their natural environment.

CHANGING VALUES AND THE ENVIRONMENT

The increasing integration of the Jimi in world markets and the waning role of the State has since independence lead to a number of contradictory impacts on the natural environment. On the one hand, cash crops like coffee and vegetables have increased the pressure on land. On the other hand, the growth of the cash economy has provided opportunities for productive work outside the Jimi Valley, leading to a net outflow of migrants and reducing the impact of population pressure. As of yet, however, population growth still outstrips out-migration and leads to increasing population densities. In the past, the value that people attached to their environment was mainly dependent on the extent to which nature provided direct resources and services to local communities.

With the increasing monetisation of the rural economy, and the growing consumer aspirations of the population at large, the nature of environmental values is changing. Whereas nature was previously a source of provisions on which people depended for their livelihood, these provisions are now regarded as second rate. The Jimi people no longer wish to eat bush foods; they prefer the 'white man's food'; tinned fish, noodles and rice. Similarly they are losing their knowledge of, and trust in, local medicine, and need money to access health services and purchase modern medicines. Young men no longer aspire to be good farmers and hunters on their own lands, but hope for a paid job in the Wahgi Valley. They despise the daily drudgery of working on the land, walking long distances with heavy loads for little money, and prefer to relax, chase girls, and play cards. Many are bored with village life and try their luck in town. The older people have become increasingly frustrated and impatient with the development process. Their circumstances have not improved, but have been declining since the 1980s and continue to do so. As a result of these frustrated expectations, money has come to be seen as the key to a better life and a means to meet one's obligations and a source of social status. As long as one has money to spend, one can acquire the things that make life worth living.

Over the last 30 years, there has been a gradual shift in consumer orientation from what the bush and gardens can provide to what is for sale in the shops. Money has come to be seen as the key to a better life, new opportunities, a means to meet one's obligations, and a source of social status. The result of this focus on the purchase of manufactured goods and services, rather than the exploitation of nature for direct use, is that the environment has lost many of its previous functions and much of its previous use-value. Instead, the environment now becomes valued insofar as it can provide financial rewards and better services to people. This shift from use-values to market values for a number of environmental products is most clearly visible in the forestry sector in Papua New Guinea. Where forests previously provided a range of

products and services with direct use-values, they have, as a result of the intervention of multinational logging companies and the increasing frustration of local people with the development process, increasingly come to be regarded as storehouses of wealth. Landowners across the country wish to convert their forests into money as soon as possible. In the Jimi Valley, due to the inaccessibility of the terrain, the absence of minerals, the extensive degradation of its forests and the lack of infrastructure, logging or mining is not an option, leaving the Jimi people in a difficult quandary as to how to improve their lives.

CONCLUSION

This chapter has provided an introduction to the Jimi Valley and its people. The overview of the elaborate segmented social organisation, the fragmented communities, the present and past forms of leadership, and the complex brew of co-operation and confrontation presented above, illustrates how Jimi 'communities', usually made up of a number of clan or sub-clan groups living in dispersed settlements can be characterised by fluid borders and overlapping allegiances. The different strategic groups continuously negotiate, co-operate and battle for reputation, economic advantage and security. Communities do not operate as homogenous entities but in temporary alliances established with regard to a specific problem or situation as it arises. The 'community' with which outsiders have to deal is thus dependent on the issue at hand.

The description of Jimi society and more specifically the practices that the Jimi big men employ with regard to exchange relations in their pursuit of reputation, political alliance and security provides a background for the argument that - in contrast to the behaviour reserved for trusted kin-related trade partners - the Jimi people perceive and exploit their relations with outsiders in the form of strangers, the state, churches, companies and 'projects', in an instrumental manner. The patrol reports illustrate how the Jimi actively responded to the presence of administrative patrols in an aim to make use of new opportunities. Repeatedly patrol reports give the impression that the advent of the administration was much desired, with officers invited to visit uncontacted groups, paraded up the mountains, provided with large amounts of food, cooked pork and long speeches, while rest houses, bridges and footpaths were built with tremendous energy.

The reasons for this enthusiasm vary, but appear to lie with two issues. Firstly, the access to wealth in the form of shell money, consumer goods and the resulting increase in status for those groups and big men associated with the administration and churches. Secondly, the relative security and thereby economic wellbeing that the arrival of the administration brought. The high levels of enthusiasm with the initial arrival of the Government, however, were not necessarily reflected in a 'moral attitude' towards the patrols and the missionaries that followed in their wake. In many cases these outsiders and the goods and opportunities that flowed from their presence simply became yet another issue over which the Jimi clan groups compete.

The colonial administration and the missionaries thus initially did not so much *change* the local social scene, but rather became *part* of it.

The Colonial Administration appears to have fulfilled some of the many expectations that it generated. Airstrips were built, footpaths maintained under the supervision of district managers, health patrols instigated, conflicts mediated and violence suppressed. Opportunities for trade increased, coffee became the mainstay of the economy and the road provided access to more advanced schooling. This period of optimism is sharply contrasted by the post-colonial period which by many Jimi is seen as a period of steady decline. In recent years rural people throughout PNG feel increasingly betrayed by the post-colonial state as educational and health services have declined, coffee prices have boomed and crashed and the state of the road has deteriorated. Whereas in the 1970s the road was the image of a better future, its deterioration nowadays symbolises the failure of post-independence governments.

The failure of the state to maintain its presence and services, has paradoxically not led to a reduced interest in politics. To the contrary, it has increasingly led the Jimi to see the government and the pursuit of politics as one of the few ways left to make meaningful change. Politics are closely associated with the flow of funds into the rural areas through various parliamentary financing schemes, projects and – sometimes dubious - investment schedules, and many influential men make attempts to get elected into parliament in order to serve their private needs and those of their clansmen. Similar to what Nuijten (1998) has noted for Mexico, the State in PNG can be viewed as a 'hope generating machine', which generates expectations with its elections, its grand investment schemes and development plans. In the zero-sum economy of the highlands, however, there are always more losers than winners.

The growing disparity between the isolation of the Jimi valley and the relative 'development' of the neighbouring Wahgi Valley generates feelings of inferiority and existential insecurity among the Jimi people. As a result of the increasing importance of cash incomes, the environment becomes valued in so far as it generates cash. The increasing monetisation of social life has not changed the driving force of Jimi society, which is the pursuit of status vis-à-vis other groups and people. The nature of status is, however shifting. Whereas rank was in the past connected to personal attributes such as age, fighting, speaking as well as the ability to maintain and manipulate and advantageous set of exchange relations, these sources of status are now being partially replaced by a new emphasis on formal education, cash incomes and national politics. Chapter 5 will deal with the first interventions in the Jimi area along the lines of the Lak approach, showing how here too, a combination of a lack of socio-cultural information and a number of implicit and rosy-tinted assumptions with regard to the make-up of local society, led to a raft of problems between Jimi people and the project team.

Chapter 4

MIGRATION, MARRIAGE AND SOCIAL CONFLICT: INTRODUCING THE RAMU VALLEY

INTRODUCTION

This chapter describes the second group of people with whom the project would come to interact.[36] The Ramu people, inhabiting the Ramu floodplain display a very different and much less instrumental attitude to life than the Jimi described above. Ramu society consists of small, loosely structured groups, displaying a much less competitive attitude to life with much lower levels of monetisation than found among the Jimi.

In recent years the Ramu people have seen themselves confronted with growing numbers of Jimi migrants moving through the Bismarck Fall into the Ramu floodplain to benefit from the better services and economic opportunities there. The Ramu people have invited the first Jimi in an implicit brides-for-land deal. In the case of Foroko, the Ramu clans have enlisted the Jimi connections with a local politician to secure the building on airstrip, aidpost and school. Nowadays, however, the Ramu landowners see themselves confronted with much larger than expected numbers of migrants. These migrants cultivate gardens, hunt on territory which the Ramu landowners regard as theirs, and thereby trigger a conflict in which the Bismarck-Ramu conservation project would come to play a role.

This chapter will start off with a description of the Ramu Valley and the Jimi settler groups living there. It will follow with a more detailed description of Ramu society, marriage rules and community cohesion, which will be used to explain the social patterns by which the Jimi have gained access to Ramu resources through the use of a number of intermediary clans. I will end this chapter with a discussion of the

[36] This chapter is based on VanHelden (1998b), while an earlier version of the section on local attitudes to the environment was first presented in VanHelden (1998a).

western idea of conservation in relation to local resource management practices arguing that for a number of reasons neither the Jimi, nor the Ramu people can be seen as 'natural conservationists'.

A DESCRIPTION OF THE BISMARCK FALL AND THE RAMU FLOODPLAINS

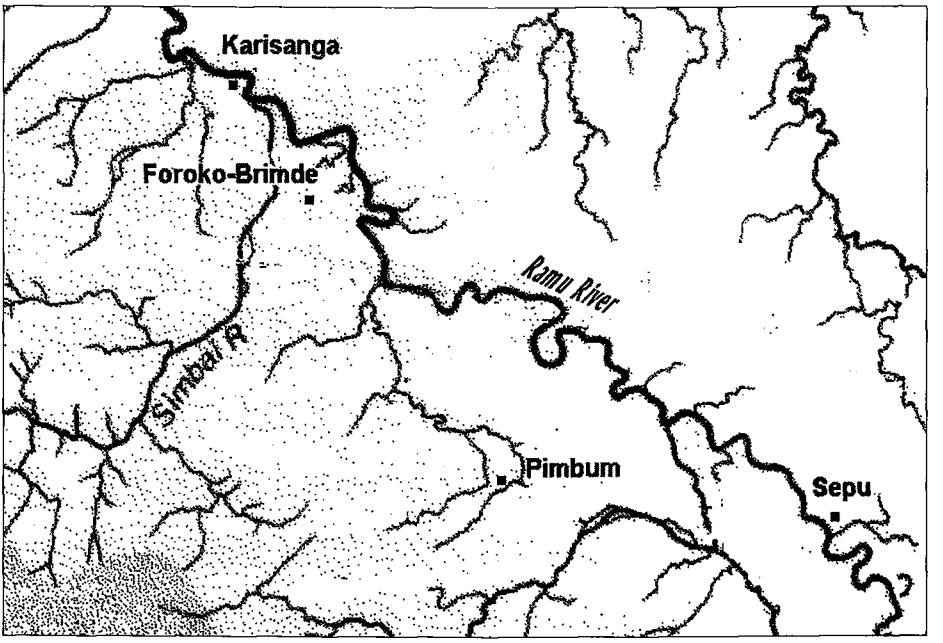
Although two-thirds of the Bismarck-Ramu area of interest selected by the project lies in Madang Province, only 10 percent of the population targeted by the ICAD project live in the Ramu Valley. For a long time the Bismarck Fall on the north side of the Bismarck Range, constituted a natural barrier between the many thousands of highlanders occupying the Jimi Valley and the much smaller lowland groups living on the Ramu River. Notwithstanding the classification of the Bismarck Fall as a 'Potential National Park' in the 1970s there used to be a sizeable settlement in the middle of the fall (for a few comments see Clarke 1971; Healey 1973; I. Hughes 1977: 80). This settlement and the area around it were abandoned in the beginning of the 1980s when these people, known as the Aidem, moved down to live at Pimbum. At present, there remain four to five small permanent settlements in the central part of the Bismarck Fall, mainly inhabited by Jimi settlers. It is unlikely that there are more than 300 people in the Bismarck Fall suggesting a population density of less than 0.5 person per square kilometre.

The low level of occupancy of the Bismarck Fall does not mean that Jimi and Ramu people do not use the Fall. The area is used extensively for the planting of *marita* pandanus, betelnut and fruit, the hunting and trapping of game, and fishing for eel. Rappaport (1968: 273-7) mentions the following wild resources being taken from the Bismarck Fall; wild pigs, cassowaries, marsupials, rats, snakes, eel, birds and their eggs, bats, grubs, insects and spiders. One could add plant products as timber, cane, *kunai* grass, wild betelnut, fruits and medicinal plants. Bird feathers, and animal skins, were important for trade towards the Wahgi, while pots, axes and shell came across from Bundi. Sodium salt came from Simbai Valley and a spring in the Bismarck Fall (Healey 1973, I. Hughes 1977). The importance of this trade across the Bismarck Fall has dwindled in recent times. People in the Upper Jimi orient themselves towards the coffee economy of the Wahgi Valley and those in the Ramu Valley sell betelnut, peanuts, crocodile skins and birds in Madang Province. Only the smuggling of liquor following the recent liquor ban in the highlands offers new economic opportunities to enterprising young men.

A number of makeshift shelters and garden houses lie along the footpaths that lead down towards the Ramu Valley. Even before contact was established between highland and lowland communities Jimi people hunted in this area. The Kema clan-cluster from Bubkile for example, used to have a hunting camp of considerable size in the Bismarck Fall during the 1960s. This camp was used as a base for hunting expeditions aiming both for meat and Bird of Paradise feathers (See also Healey 1973: 79). The Jimi would, however, avoid contact with the lowland groups and would turn back when seeing the border marks or traces of the Ramu people. The

Jimi had no reason to meet these people anyway as their main trade route with Madang ran further eastward through Bundi (I. Hughes 1977). Only at the end of the 1960s, did exchange start taking place, finally resulting in large scale Jimi migration towards the Ramu floodplains.

FIGURE 4: MAP OF THE RAMU VALLEY SECTION OF THE BISMARCK-RAMU AREA



The Ramu River floodplain lies between the foothills of the Bismarck Range from where the Jimi came, and the much lower Sogeram hills further to the north. The plain varies in width and the river meanders through it with a minimal altitude differential. During the wet season, the Ramu water level rises as fast flowing streams running off the Bismarck Range feed the river. In the wet season the riverbed becomes filled with trees and debris washed off its soft banks and is dangerous to navigate even by motor canoe. Occasionally banks are cut away, closing off loops of former riverbed, which provide ideal breeding spots for crocodiles and fish. Protein is provided through hunting and fishing, which are much more important here than in the highland valleys. Other areas are permanently dry as they lie above the watermark and are covered in primary rainforest with an abundance of game.

The people on the Sepu pat of the Ramu River are known as 'Kumula' by their neighbours from Begesin and Bundi, with whom they maintain extensive trade and intermarriage relations. The Kumula consist of a number of small groups of

Ermerum and Musak speakers, who numbered 1,098 people in the beginning of the 1970s, (Z'Graggen 1973) and of whom not more than 200-300 live in the area of interest to the Bismarck-Ramu project. The Kumula inhabit five or six villages and bush camps between Sepu and Karisanga where the river enters the Middle Ramu district. Population densities are very low at about 2 people per square kilometre. People often move from bush camp to bush camp and are much less sedentary than the Jimi. In the past people would move around in canoes, pulling their way up against the current or floating down to reach their destiny. Nowadays, canoes equipped with outboard motors ply the river and provide an entry and exit to the Madang town, where people to sell their betelnut, peanuts and other produce. Most boat operators, known as '*pilots*', are Sepik settlers.

There are two important social divisions among the Ramu River people. The People from Foroko speaking a mixture of the Musak and Gainj languages, are allied to the Gainj living on the western side of the Simbai River and are the traditional enemies of the Kumula people living at Sepu. In 1952, the patrol officer Worchester investigated a conflict that resulted from the fact that the Foroko groups abducted a number of Sepu women (See below). Up to this day few Sepu people will venture into Foroko, while few people from Foroko will visit Sepu. The second division lies between the Aidem of Pimbum and the other Ramu groups. Although all agree that they originate from the same lowland groups, the long period during which the Aidem lived in the Bismarck Fall, and the fact that this cluster has incorporated a number of Jimi clans has made relations between them somewhat difficult.

JIMI VILLAGES IN THE RAMU VALLEY

Further inland, southwest of the Ramu River and just beneath the foothills of the Bismarck Range, lie the villages of Brimde and Pimbum which, previously inhabited by small groups of Ramu landowners, have swollen as a result of the arrival of several hundred Jimi settlers. Foroko-Brimde has quickly become the largest settlement in the Ramu River floodplains and the original Ramu landowners live together uneasily with a large group of Kema settlers from Bubkile. The Jimi settlers inhabit the neighbourhood of Brimde, their Ramu hosts live in Foroko a few kilometres away. The village is clean and well looked after with the houses sitting on stilts as the Jimi settlers have adopted the lowland style of building. The village boasts an aidpost, a school and an airstrip. The use of the latter constitutes the easiest form of access into the area, meaning that most outsiders, also those wanting to progress to Pimbum or the nearby Ramu River settlements come through Foroko-Brimde. With the exception of Foroko-Brimde, social and economic services in the area are non existent.

Access to the few services in Foroko-Brimde is largely guided by social relations between the Jimi migrants and their Ramu hosts. The Ramu people generally do not participate in community affairs in Foroko-Brimde, arguing that the Jimi 'go first' in everything, and that services such as the school, the airstrip, and the aid post belong

to the Jimi rather than the Ramu communities. Consequently, Ramu children do not go to school, although they could easily do so, while the aid post is only called upon in emergencies. A complaint made by the Ramu landowners is that they need their 'own' school at Sepu, even though for some Sepu is three hours upstream by motor canoe and Foroko-Brimde only an hour's walk away. The village of Pimbum a day east of Foroko-Brimde is much smaller and is inhabited by a complex mixture of Jimi and Ramu clans. The main group of Jimi settlers come from Bubulsunga and belong to Pala clan-cluster. The rivalrous nature of relations between the Pala of Bubulsunga and the Kema of Bubkile is copied in the competitive relations between the Jimi villages of Pimbum and Brimde.

One of the most remarkable features of Jimi horticulture in the Bismarck-Ramu area is the lack of major differences in the gardening system across an altitudinal range of almost 1900 metres. Jimi gardens in the Ramu Valley, are not fundamentally different from those in the Upper Jimi, but the soils in the Ramu floodplains are alluvial and much more fertile and deep, and the combined effect of soil fertility, higher temperatures and higher radiation makes for much faster growth rates than in the highlands. The speed and ease with which crops grow on the higher grounds of the Ramu Valley as compared to the Upper Jimi is one of the reasons many highland settlers give for their move into the lowlands. The obvious explanation is that the Jimi have simply transplanted the highlands gardening system lock, stock and barrel down to the Ramu, and are in the process of adapting it to the opportunities that the lowlands might offer. The Jimi have shown a remarkable adaptation to the lowland situation in other respects, including the adoption of betelnut, coconut and sago, as well as fishing and boating technology.

The Ramu floodplains suffer from extensive flooding during three months of the year and therefore have little agricultural potential, with the exception of a thin band of better-drained alluvial soils between the foothills of the Bismarck Range and the Ramu River. This is the area in which the Jimi settlers have built their villages and gardens. The only cultivation along the Ramu River takes place on the higher riverbanks, which are drier than the hinterland, and on small well-drained ridges. The fertility of these soils is higher than in the Jimi Valley and Bismarck Fall due to the deposition of silt by the river, but floods also happen to destroy crops, and gardens still last only one year before reverting to fallow. The Ramu people in Sepu generally have multiple gardens, which serves as a risk avoidance strategy and allows different crops to be grown in different places. The Jimi settlers in turn see themselves as superior to their Ramu hosts. They complain that these people are lazy, inhospitable and unorganised. The Jimi are more or less sedentary horticulturists, who will move only when confronted with unforeseen problems in the form of tribal war and epidemics. In contrast, the Ramu River people focus more on hunting and gathering, supported by their gardens on the riverbanks and sago palms in the forest and will move more often

By local standards, the area between the Ramu River and the foothills of the Bismarck Range is among the most densely populated. Tension between the Ramu

landowners and the settlers is constant as the former feel overrun by the large number of Jimi coming down from the highlands. The Jimi in contrast regard the Ramu valley as a place with abundant resources. The population pressure is much lower giving the relatively low intensity of conflict over resource as a reason for moving down towards the Ramu. As they say '*Mipela bihainim pasin bilong nambis*', 'we follow the lowlands customs [and do not fight]'. This, in contrast to the Upper Jimi Valley, where no man will leave his territory without his axe, and where fights, murders, accusations and compensation claims, not only between clan groups, but also within groups and families, are rife.

Such statements about the peacefulness of the Ramu Valley stand in contrast to the fact that the social situation is rather unstable due to the tensions between the Jimi settlers and the Ramu landowners on the one hand and among the Jimi settlers of Pimbum and Brimde on the other. Jimi relations with the Ramu landowners are punctuated by a fear of witchcraft and Jimi continue to discuss the options of moving back up. As time goes by, and as an increasing number of Jimi people are born in the Ramu Valley, the likelihood of people moving back up becomes smaller and smaller. As the Jimi migrants stay, their claims to rights over local land and resources become stronger and their claim to the title of 'true landowner' more difficult to dispel. The Ramu landowners dispute these claims arguing *'graun i no save long ol'*, 'the land doesn't know them', thus labelling the Jimi as strangers.

These patterns of downslope migration were thought to impede conservation and was the main reason why the DEC abandoned the pursuit of a National Park in the Bismarck-Ramu area in 1986 (Antiko 1986). Oddly enough it is exactly the threat of Jimi migration which would lead the Ramu people into the arms of the Bismarck-Ramu ICAD project.

SOCIAL ORGANISATION AMONG THE RAMU PEOPLE

The structure of the Ramu groups is much looser and less territorial in nature than that of the Jimi groups. Lawrence (1967) writing on the Garia in the Begesin area further north of the Ramu River, suggests that the Garia have no real descent groups based on an ideology of kinship as found in the highlands. Instead, they are made up of the overlapping 'security circles' that each individual household creates out of its contacts with kin and in-laws as well as with trade, hunting and gardening partners. As a result the Garia are often found to garden and hunt on land not belonging to the natal clan.

Conton and Eisler (1976) find a different territorial structure for the neighbouring Usino groups. These groups are loosely structured in 'parishes' with clear ownership rights to tracts of land and with patrilineal inheritance being the main form of transmissions of ownership rights. On the Ramu River a number of relatively small clans claim ownership to vast tracts of land with fixed boundaries. Unlike the highlands situation these clans are not part of an elaborate segmented

structure. Most of the groups in question are very small, consisting of no more than a few male members, their wives and offspring.

The Ramu people live in scattered homesteads which move depending on the wishes and needs of the household and the availability of resources. Housing is very simple, consisting of a sleeping platform and roofing and can be broken up and constructed in a matter of hours. Only under colonial and missionary influence did a number of groups congregate in small villages on the Ramu River and adopt more elaborate styles of housing. This process started under the influence of the Annaberg Catholic Mission Station in the 1930s and gained momentum with the opening of a Government patrol post at Usino in 1967. The resulting hamlets, however, are very small, usually consisting of three to five houses, the only notable exception being Sepu with some 25 houses. In times of conflict, people tend to set up camp far away from these villages, and hunt and garden on their own. In some instances people purposely set up camp at the other end of their territory, in order to reinforce their rights to land and resources.

The Ramu clans are patrilineal in their structure, but put much less emphasis on group membership and the exclusion of outsiders than the Jimi do. This is probably a direct result of the low population densities found in the Ramu flood plains and the resulting low pressure to secure rights to land and resources. Usufruct rights and even ownership rights are easily passed on to relatives and non-relatives and, in general, clans are eager to recruit new members to their *asgraun* ('place of origin' literally: 'arse-ground': i.e. clan group). There is much less emphasis on blood ties within the groups and a real or imagined brotherhood ideology emphasising the us-against-the-rest feeling so strongly present among the Jimi. Every man belongs to a group and derives rights from that group membership, but will cultivate other friendships with exchange, hunting, gardening and fighting partners. In many cases, close friendships may overrule strict kinship obligations in a way unthinkable in the highlands. This is encouraged by the scattered pattern of settlement which allows individual households to cultivate ties with whomever they please without being seen to compromise the group's interests.

MARRIAGE AMONG THE RAMU RIVER GROUPS

In broad terms, marriage rules on the Ramu River are similar to those in the highlands, albeit that marriage exchange is much less politicised and less monetised than among the Jimi. The Ramu clans in the Bismarck-Ramu are generally exogamous patrilineal and predominantly virilocal. As Katinga of Wara Laplap explained, 'men are the bow and women the arrows'. The rules, however, are less strictly enforced and more flexibly interpreted in the light of the falling population. In some cases men even marry women from the same clan, and with the same totemic sign. This is frowned upon along the Ramu and unthinkable in the highlands as 'a father' does not marry 'his daughter', but most probably a reflection of the lack of eligible marriage partners. In 1972 a patrol officer also reported that

the impact of migration and the lack of able bodied men in the villages led to 'adultery of various kinds', while 'a general breakdown of the native laws and social controls is evident' (Spencer 1971/72b).

In such cases the general rule of clan exogamy is violated, a practice more or less condoned as long as the two marriage partners are not too closely related: the main marriage rule among the Ramu clans prohibiting marriage with anybody closer than first cousins. In contrast to the highland communities, the Ramu people show a distinct preference for marriage within their own group or with neighbouring groups (Conton and Eisler 1976). Most clans perceive a need to keep women within the clan or at least exchange a woman for a woman, as in the case of sister exchange, rather than just marrying them out. This, so as not to give offspring away to other clans, but rather keep it to themselves. As one person in Sepu expressed it: 'Giving away women is like giving away future children'. The Ramu people have the same pre-occupation with population as the highlanders. The difference, however, is that the communities in the Jimi Valley face a continuously growing population, combined with a growing pressure on natural resources while the Ramu people, having abundant natural resources are in a state of decline.

Whereas marriage is a way of forging political, ceremonial and trade links with distant clans among highlanders, the Ramu people, with their small number and closely knit marriage patterns, rarely use marriage to initiate new political and economic links (Conton and Eisler 1976: 139). The political lack of importance of marriage in the Ramu Valley is illustrated by the fact that there are no marriage negotiations among clans. The family of the bride simply accepts what the bride's family gives and immediately returns the equivalent of a third to one half of what was given to the family of the groom. According to Conton and Eisler (1967) the size of the bridewealth is not considered relevant in terms of status, and generally forgotten once the payment has been made. This is also visible in the much lower bridewealth payments, which lie around Kina 600 and a small number of pigs. Wild pigs are deemed unsuitable for bridal payments.

This stands in contrast to the highlands, where the size of bridewealth payments is an important indicator for the status of the grooms sub-clan and clan and where bridewealth amounts to several thousands of Kina. In the Ramu Valley the children of a man and wife become members of the husband's clan only when he has offset his marriage payments. In practice this may not be an issue, with sons cultivating land and having hunting and gathering rights in land belonging to both their father's and mothers' clans, regardless of the extent to which commitments have been offset.

Decision-making among the Ramu River groups

In comparison to the Jimi communities, the Ramu River communities are much simpler in structure and decision-making patterns. The Ramu groups are not part of a segmented structure, in which the larger social units lay claim to the support of

lower units. And most decisions are made by three or four elderly men. In this sense the Ramu people know a more centralised decision-making pattern in which age conveys status and the right to make decisions on behalf of the group. In addition, the social climate among the Ramu groups appears to be much less competitive. The sources of status and leadership in the lowlands of Madang Province are different from those in the highlands. In the highlands status is gained through participation in clan affairs and politics fighting prowess and rhetorical skills, and the ability to manipulate pigs, brides and other items of wealth.

In the Ramu floodplains, however, leadership is the result of magical and ritual skills, which some elderly individuals possess, while others do not. Lawrence (1967) describes the neighbouring Garia leaders who possess the ritual skills to make a garden thrive but can also withhold these rituals from those gardeners that do not properly follow their instructions. Because of the ritual nature of leadership, breaches of regulations or a lack of respect for the rules laid down are not punished by members of the community but simply thought to lead to failure, to misfortune, illness or even death. The fear of the consequences of more serious breaches of ritual regulations may act as a deterrent to trespassing and socially deviant behaviour among the Ramu groups.

> A example is a Sepu man who went hunting in the bush of his Yawetama relatives without asking permission and without the appropriate ritual of whispering spells in the ears of the dogs that he borrowed. He was unsuccessful that day, and blamed it on the fact that he had failed to ask the two men for permission. The old men thought it was funny and laughed at him because he should have known the importance of being 'introduced' to an area. If a person is not properly introduced to the local spirits he may fall ill, and the spirits must have sensed the unease of the land-owning elders at his lack of respect.

These sources of respect and leadership have been much less influenced by education, politics and money than is the case among the Jimi people. Education levels are low, and the monetisation of the local economy, as well as production for the market, is much less pronounced than among the Jimi. Politics is hardly an issue on the Ramu River. In fact, the Ramu clans at Foroko invited the Jimi to the Ramu Valley in order to assist them in their dealings with the Government as they felt unable to do so themselves (see below).

In contrast to the disparaging views held of the past by many Jimi youngsters, many Ramu people retain a strong pride in their pre-colonial cultural practices, myths and ceremonies while relying on the subsistence economy for most of their daily needs. Each clan on the Ramu River has a totemic sign referred to as its 'bisnis', a situation also found on the Sepik River. The Ramu people are generally reluctant to discuss these issues because of the general fear that malevolent people may make use of this knowledge, and the fact that some of the churches have told them to get rid of those heathen myths. In Sepu, however, people take pride in their customs and oral history and discuss them much more openly. As a result there appears to be much less of a generation conflict within the Ramu communities. Younger men have little

access to modern sources of authority which enable them to challenge their elders and appear to support a revival of past practices.

Important factors are the small size of the clan-groups and the relatively large areas of land they own. In some cases, there is no question over who is the clan leader and for what reason, as only one or two men remain. These two men may than make joint decisions with regard to the way in which they wish to use their resources. For example, the two remaining men of the Akum-Akum clan in Foroko own huge tracts of forest in the north side of the Ramu River and are in favour of inviting a timber company in, because logging will bring them a road and money. Similarly, the only remaining man of the Numeregu clan, is in favour of the establishment of a National Park such as that proposed on the 1970s.

To outside intervenors with a resource focus, be it loggers or conservationists, this is a decidedly more orderly situation than that which exists in the Jimi communities, where one has to deal with a range of mutually competing views within one and the same clan or sub-clan. Although the social environment is outwardly much less competitive than among the Jimi groups, there is a strong preoccupation with distributive justice (Togolo 1982) meaning that the relative fortunes of different groups are closely monitored and are a continual source of discussion and conflict. Unlike the Jimi situation, the differing fortunes of clan groups do not lead to compensation claims or large scale fighting, but are kept in check through the fear of sorcery and poison. People who do well, for whatever reason, will have to make an effort to share their benefits lest they become the targets of sorcery by envious individuals and groups, or are accused of sorcery themselves. This leads to a 'tall poppy syndrome', where people make sure that nobody runs too far ahead of the pack.

THE NEEDLE AND THE THREAD: JIMI MIGRATION INTO THE RAMU VALLEY

Migration is a common response to the conflicts and declining health status that is associated with communities under resource pressure (Lowman 1980). In a subsistence system under stress due to the declining availability of resources, such as is found in the Jimi Valley the rate and intensity of conflict increases. The increase of population, the reduction in distance between groups, the burgeoning pig populations, the adoption of perennial cash crops which take up land previously under fallow or subsistence crops, all increase the 'irritation factor' (Rappaport 1968) between people and clans. The increase in population pressure leads to conflict, compensation claims, manslaughter and all-out tribal fights. Where an increase in population pressure may lead to increasing levels of conflict, the risk of epidemics also increases with higher population densities.

Within the Jimi Valley, residential movements are a common occurrence and the countryside is littered with abandoned and flattened ridges planted with Casuarina indicating areas of former settlement which were abandoned after misfortune befell

the group living there. There is much anecdotal evidence of illness that caused large numbers of people to die and many of the more recent migratory movements in and around the Jimi Valley have also been precipitated by epidemics.[37] With the growth in population, the option of moving away after misfortune is being closed off, as most land suitable for cultivation in the Jimi Valley is now occupied. The only exception to this pattern are the clans living on the edge of the Bismarck Fall, a number of whom are moving into the Ramu floodplains. For these people one reason for migration into the forest, and away from the cash economy, may stem from the fact that they lack the education, skills, and contacts to succeed in the 'modern' market economy, and are unable to find productive, income-generating work. This leads to the development of an increasingly marginalised group of people, some of whom may choose to live of the natural resources which the forest still provides, and take the absence of services in the form of schools and health facilities as a fact of life. In return, they have relatively abundant resources, plenty of game, and a lower incidence of conflicts and disease as these that are often associated with dense populations.

The option of moving into new areas, however, is only made under circumstances of extreme duress. This results from a number of cultural and technical features of local society. The first is that Papua New Guineans exhibit a very strong attachment to their land. Land is essential, not only in the economic terms of subsistence and nowadays cash crop production, but also in socio-cultural and political terms, as a source of identity, history, unity, status and security. The second reason stemmed from the dangers associated with unknown territory, people, and spirits (Rappaport 1968, Healey 1973). As recounted in the previous chapter, travel and trade were extremely dangerous undertakings in the pre-colonial period usually only conducted by strong and adventurous men. The final reason making it unattractive to move into new territory stemmed from the stone axe technology available to the traditional highland communities. These cumbersome tools limited the extent to which households could bring primary forest into cultivation, as the men would have to cut full-grown trees to clear their gardens rather than much thinner secondary regrowth. Consequently, most highland peoples probably preferred to stay within the central highland valleys, moving only after warfare, epidemics or when general resource pressure forced them to venture into unknown areas such as the Ramu Valley.

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[37] Burton (1983) describes the dysentery epidemics which swept through the Wahgi Valleys in 1943-44, while Rappaport (1968: 8-9) states that up to 30 percent of the Maring died in the same epidemic, known by the name of *sikman* ('sick man'). The main reasons for a flurry of patrols staged from Kundiawa into the Wahgi, Jimi and Bundi areas in 1944 and 1945 was to investigate the impact of the epidemic there. In 1965, meningitis is known to have swept through the Jimi Valley (P. Johnson 1982; 36n), while the Gainj lost 6.5 percent of their population to an influenza epidemic and resulting out-migration in 1969 (Wood 1980). Such epidemics are not a thing of the past. Cook and Pflanz-Cook (1988: 74) estimate that in 1980 about 5 percent of the Manga died of influenza. Lowman (1980) mentions how varieties of the malaria-bearing Anopheles mosquito thrive especially in degraded and densely populated environments, which may have forced people to seek out new settlement land above 1600 meters ASL.

The oral history of groups in the Jimi Valley reflects the misfortune or conflicts that led people to flee into new territory. A common example is the story of a fight between two 'brothers'. In a social environment in which solidarity within the group is synonymous with safety and security, a conflict within the clan is a threatening situation to all members. The taboos on fighting within the groups may have led people to decide to each go their own way, rather than risking conflict and murder between them. Other oral histories of migration into the Jimi Valley relate to the breaching of taboos or promises, which force the unhappy transgressor to try his luck elsewhere (VanHelden 1998b).

The choice to move into the forest is not always a negative one. In some cases, groups of people have simply followed the good hunting opportunities provided by the forest, and have ended up on the edge of the inhabited world, as they know it. *'Mipela bihainim lek bilong muruk'* ('we followed the footprints of the cassowary'), councillor Aik of one of the Kema clans explained as he pointed out how his clan had originated from the Wahgi Valley and ended up at Foroko-Brimde in the Ramu Valley. Others, coming down on their hunting expeditions, and making small temporary gardens, realised how fast crops grew in the Ramu floodplains in comparison with the Upper Jimi Valley, and how little labour was needed to cultivate them. Migration is part and parcel of life in the Bismarck-Ramu area, and continues to play an especially important role in the Ramu Valley, where hundreds of Jimi have settled in the last two decades.

THE KEMA-ASBAN AND PALA-AIDEM CONNECTIONS

Jimi migration into the Ramu Valley has been facilitated by two clans who play an intermediary role. These clans, the Asban and the Aidem have in common that they left the Ramu Valley following conflicts, moved up into the Bismarck Fall where they established contact with the Jimi. The Asban met with the Kema clans at Bubkile, while the Aidem established linkages with the Pala clans at Bubulsunga.[38] It is through these connections that the Jimi established themselves in the Ramu valley, with the Kema settling at Foroko- Brimde and the Aidem followed by the Pala at Pimbum. This intermediary role was nicely illustrated by the Kema who explained that the Asban had been the 'needle', and that they, were 'the thread' that had followed them into the Ramu Valley, where three Kema brothers established contact with the Foroko clans in the middle of the 1960s. They became friends and in the next 10 - 15 years the Kema brothers regularly visited Foroko. When one of them became a councillor at Bubkile, the Foroko clans asked him to assist them with building an airstrip. The politically astute Kema brothers settled at Foroko-Brimde to help 'pull in' services in the form of an airstrip, school and aid post. They put their cards on a local politician, who after securing a seat in parliament rewarded

[38] For simplicities sake, I denote the Jimi settlers in this chapter by the name of their clan-cluster; the Kema from Bubkile and the Pala from Bubulsunga, as adding the name of the various clans involved would be unnecessarily confusing (See VanHelden 1998b).

them by funding the airstrip and the health post at Foroko-Brimde. Daliye and his brothers, however, were soon followed by the rest of their clan when a epidemic struck in Bubkile in the early 1980s. As a result, the Foroko landowners who had not realised that so many settlers would follow, became increasingly disenchanted with their Jimi guests.

The Kema settlers have built large gardens, converted land into betelnut and peanut plantations and have decimated the game in the area. There is an increasingly open conflict between the two groups and an active discussion among the Ramu people about the option of throwing the Jimi people out. Among the Kema settlers themselves, concern centres on the fact that their population grows satisfactorily in the highlands, with many children being born and staying alive, but that the population in Foroko-Brimde is stagnant, with fewer surviving children. Many of the big men blame malaria and the Ramu sorcerers for the high death rates and some suggest that they should return to their place of origin near Bubkile. The younger Jimi, however, do not feel like returning because they do at least have some services in Brimde, and more economic opportunities than in the Upper Jimi Valley. A similar intermediary role as that played by the Asban for the Kema of Bubkile, was fulfilled by Aidem for the Pala from Bubulsunga.

The Aidem, living in the Bismarck Fall the beginning of the 1930s or 1940s comprise of several different clan groups some of which originate from the Ramu valley, while others come from the Jimi Valley around Mount Wilhelm (Cf. VanHelden 1998b). The return of the Aidem from the Bismarck Fall, and with them parts of related Jimi groups is to a large extent the doing of Katinga Sanazga, one of the Foroko leaders. Katinga was born around 1935. His father belonged to one of the Ramu River clans, while his mother came from one of the groups living around Pimbum. At that time, the Ramu groups did not have contact with the Jimi people. When Katinga was still a young boy, two of his clan 'fathers' were killed by members of his mothers clan. The tribal fight that followed forced his mothers group to seek refuge with the Aidem living in the Bismarck Fall. In the 1970s, Katinga, a natural intermediary by nature of his descent, visited his mothers group in the Bismarck Fall and asked them to return. This group, however, had by now been absorbed in the Aidem group, and when Katinga's maternal group returned to take possession of their ancestral lands around Pimbum several other clans, including a number of Jimi migrants came with them.

The main group of Jimi settlers are Pala from Bubulsunga who followed the Aidem when these moved down into the Ramu at the behest of Katinga. The link between the Aidem people in the Bismarck Fall and the Pala of Bubulsunga was a result of the zeal of a Pala pastor, whose religious work among the Aidem, led to intermarriage between the Aidem and the Pala (Opo 1996). When the Aidem finally returned to their ancestral lands near Pimbum, a large number of Pala followed them. Although parts of the Aidem clan cluster trace their ancestry to the Sepu clans, relations are somewhat uneasy due to the long time that they have been separated. The Aidem for example, are linguistically closer to the Jimi settlers than

to the Sepu Kumula. Like the in the Foroko case, the Ramu landowners are upset about the arrival of the Jimi clans. Katinga argues that he only asked his relatives to return, but is now confronted with a growing group of Jimi settlers living at Pimbum. The Aidem themselves are increasingly marginalised due to the large number of Pala settlers living around Pimbum.

A PALA INVENTION OF TRADITION

In contrast to the Kema who confirm the important role of the Asban, and appear to accept that the Foroko landowners are the 'true landowners' in the Ramu Valley, the Pala settlers at Pimbum, do not emphasise the intermediate role of the Aidem in their downward migration. They increasingly assert rights to land in the Ramu Valley, and such a recognition would it ft within their drive to be seen as landowners. In doing so they draw up their own history as to how they came to live in the Ramu valley. In these stories it is not only emphasised that they 'bought' the land by paying money, killing pigs and providing women:

> Poko Mogol, one of the Pala settlers from Bubulsunga, is a friendly man of about 50 years old who lives at Yangal between Foroko and Pimbum and certainly regards himself as a landowner. During the 1960s and 70s Poko and his brothers travelled a good deal across the northern slopes of the Bismarck Range, and made small gardens in the bush. One of those gardens was close to his present house in the Ramu valley where they planted some taro to see how it would grow. They returned up to the Jimi for a while. On coming back to the Ramu valley they noted that their taro had become very large. This convinced him to stay in Yangal, because as he put it 'taro grisim mi' ('the taro seduced me'). In 1987, Poko and Siwi paid K 1000 and 12 pigs to the landowners, and a woman was married into one of the Foroko clans.

The story presented by Poko, however also rewrites the oral history of the Pala clan cluster in order to legitimise the Pala presence in the Ramu Valley. The Pala originate in Simbu province in the highlands, and have subsequently migrated into the Jimi Valley, only in recent decades moving down into the Ramu Valley (For the migration histories see (VanHelden 1998b). Poko on recounting this story of origin of the Pala clan-cluster reckoned that before his ancestors left Simbu province they must have come up through Bundi from the Ramu Valley. And that thus he had become full circle. This statement is highly strategic as it implies that his ancestors must have come from this place and that he is therefor a true landowner. When the ICAD project intervened, this reinvention of the past was used to claim Jimi landownership in the Ramu Valley (See chapter 7).[39]

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[39] Poko's theory is not only at odds with Pala oral history as recounted in the Jimi Valley, but also not in line with the current understanding of highland migration patterns based on the dissemination of highlands languages and crops. Robbins (1963) suggests that the highlands were settled from the east through present day Morobe province and that a population explosion took place in Eastern Highlands Province triggering various migrations into Simbu Province, the Wahgi Valley and eventually more marginal areas like the Jimi Valley.

Unlike the Kema from Bubkile and the Pala from Bubulsunga who have moved down en bloc, a small group of other Jimi from other clans co-exist relatively well with the local landowners at Pimbum. Their numbers are not (yet) large enough to be threatening, and a number of them have made payments in exchange for land rights. The Pala settlers are more hostile towards these other Jimi probably because they are long-standing enemies from the Upper Jimi, and because all of them compete for the favour of the Ramu landowners. The Pala for example claim that unlike themselves, these other Jimi people are not 'true landowners' in the Ramu Valley. Obviously none of the Jimi groups are landowners in the eyes of the Ramu communities.

'OPENING THE DOOR': PATTERNS OF JIMI-RAMU INTERMARRIAGE

Marriage patterns have played a key role in facilitating the above mentioned migration movements and deserve special attention as they introduce the reader to the conflict between Ramu and Jimi people in which the Bismarck-Ramu project would come to play a role. As already recounted marriage rules in the Ramu Valley are similar to those in the highlands, albeit that marriage exchange is much less politicised while exogamy is less strictly enforced in the light of the low population numbers. The interpretation of marriage rules between the much more strict Jimi settlers and the laid-back Ramu River communities is sometimes a source of conflict.

> Highlanders and Ramu people alike practise polygyny, but in November 1996 there was a fight which led to the stand-off between Jimi migrants and Ramu landowners over a Ramu man's wish to marry the younger sister of his Jimi wife. He probably slept with her and wanted her as his second wife, which is not possible by highlands marriage rules. This led to a conflict in which the offender stood on his rights as a 'true landowner' and accused the Jimi of trespassing and not compensating him for the use of resource by providing him with a second wife. The Jimi replied that he could marry the younger sister if he first divorced the elder sister as one can not marry two women from the same sub-clan. This he was unwilling to do, and in turn the Jimi demanded compensation for his sleeping with the younger sister as this had now to be considered rape. The discussion escalated into a serious conflict when the Ramu clans called in their Gainj neighbours to support them and was only subdued through the intervention of the Simbai Counci president.

Similar to the Jimi preoccupation with population growth most Ramu clans perceive a need to keep women within the clan or at least to exchange a woman for a woman, so as not to give offspring away to other clans. The difference, however, is that the communities in the Jimi Valley face a continuously growing population and outward migration while the Ramu people are in a state of decline, leading them to invite the Jimi down in return for brides.

Whereas marriage is a way of forging political, ceremonial and trade links with distant clans among highlanders, the Ramu people, due to their small number and closely knit marriage patterns rarely use marriage to initiate new trade links (Conton

and Eisler 1976: 139). Due to their small size and their closely-knit pattern of intermarriage, the Ramu groups suffer from a lack of eligible marriage partners. In this situation it is a rational choice to provide newcomers with use, or even ownership rights to a proportion of one's resources, if this safeguards the long-term continuity and security of the clan. This appears to be the dominant pattern in the Bismarck Fall, where Jimi groups acquired rights to land in the Bismarck Fall and the Ramu Valley in return for brides (cf. VanHelden 1998b).

To the Jimi such strategic marriages engender a relationship, or strengthen an existing one, so that both groups can claim access to each other's resources and support, a situation obviously on the mind of Jimi settlers seeking access to resources in the Ramu Valley, and which they pursue with a great deal of assertiveness and occasional acts of aggression. As one Jimi settler explained: 'You know us highlanders. W wen a door is ajar we will walk in'. The Ramu groups 'opened the door' by marrying Jimi women, and found to their astonishment that, rather than just acquiring women and having the occasional Jimi visitor, hundreds of Jimi people preferred life in the Ramu Valley and actively started competing over resources. Only a few of the present Jimi settlers appear to have actual marriage relations with the Ramu groups, as most of them have followed their kin when migrating into the Ramu Valley.

Some of the Ramu River people are angry about the way in which the Jimi marry out daughters and then follow them to settle on the land of their new in-laws. They profess that nobody ever expected this to happen and that the local people along the Ramu River would not do so. This is a somewhat skewed representation of reality as the Jimi were invited to settle down at Brimde to assist with the development of the airstrip. Intermarriage with the local Ramu clans was a way of strengthening ties and establishing more permanent rights to the use of land and resources, through an implied land-for-brides deal. In addition, the Ramu people follow the same custom: at Sepu for example, the Banam clans from an area further north followed their married daughters to live at the river. It is thus not so much the marriage mechanism that differs, but the sheer number of Jimi settlers that use it to legitimise their arrival and the aggressive way in which they claim ownership and use rights that constitute the problem.

The only peaceful option open to the Ramu people to reduce further encroachment by Jimi settlers is not to marry their daughters. This option is propagated by the Ramu elders, but not much appreciated by the younger Ramu men looking for an eligible marriage partner, and leads to conflicts between the generations. One of the early 1999 patrol reports notes how at Foroko the local literacy teacher was 'not teaching because he is arranging his marriage and his father does not want him to marry a woman from Jimi' (BRG 1999a: 11). In practice the younger men tend to ignore the demands of their elders, and even the son of Katinga, the old man so annoyed with the arrival of the Jimi settlers, would marry a second Jimi woman during the time of the project.

RESOURCES, DEVELOPMENT AND THE STATE IN THE RAMU VALLEY

As recounted in the previous chapter, the colonial period was one of considerable enthusiasm and optimism for the Jimi. Whereas colonial rule in the Ramu area started fifty years earlier than in the Jimi valley, the impact of the colonial administration in Madang Province was mainly confined tot he coastal areas. Even the Pacific-war, during which the Japanese made it up to nearby Aiome, had little impact. The only patrol report dealing with the southern bank of the Ramu River in the project area, for example, dates from the beginning of 1952.

Aim of the patrol, led by the patrol officer Worchester to investigate and suppress reported cargo cult activities in the Bundi area, after which he was to find his way from Marum to Aiome. This area is largely congruent with Bismarck Fall section of the ICAD project area. Worchester started from Marum and reached the Aidem village, but had to return as the terrain proved extremely rough and as there were no further tracks leading in the direction of Aiome. He then moved on to Sepu to investigate recent attacks on a number of Ramu groups by 'uncontacted natives' from the south bank of the of the Ramu River:

> 'According to the Sepu people, nomadic peoples from the far side of the Ramu [probably the Foroko groups], a couple of days by canoe downstream, have been periodically harassing the villages on the North side for many years. The nomads are aided by 'little men' or 'arse tankets' in these raids. The 'little men' inhabit the mountains at the south of the nomad's preserves [the Gainj allies of the Foroko clans]. The reasons for these raids are said to be the nomads desire to capture women, get steel implements, and to kill off the menfolk. The last successful raid was in 1949, when a murder was committed at Sepu, and women from Musak and Sepu carried off. ... It was decided to try and contact the swamp dwelling nomads first, and enlist their services as guides to the places of the mountain peoples, but the Sepus were extremely dubious about our chances of success, bearing in mind the loose footed habits of our 'quarry' and the fear in their minds that this was a punitive expedition to bring them to account for their previous misdemeanours. The Sepus pessimism was justified, and great difficulty was encountered in locating the swamp dwellers. The patrol set off down the Ramu per raft and canoe towards the area from which the nomads are reputed to come' (Worchester 1952/53: 16).

After departing from Sepu the patrol proceeded downstream the next two days but found it very difficult to establish contact with the groups in what is now the Foroko the area. The patrol team continued onwards to Aiome and flew back from there. There are no records of other patrols into the Andalarum sub-division, since that first patrol, nor have reports been found relating to the establishment of the Simbai National Park in the area. The small semi-nomadic populations on this section of the Ramu River, and its isolated location between the patrol posts of Usino and Aiome kept the area in isolation until very recently. Unlike in the Jimi where the Administration faced a mixture of resistance and enthusiasm, the response by the Ramu people was marked by evasion and pessimism. Tribal conflicts such as that described above between the Foroko and the Sepu/Banam people dwindled with

the establishment of government posts in Usino in the 1950s and in Aiome in 1967, but did not affect daily life of the Ramu people. There was no need for Government violence in the Ramu valley and people generally kept to themselves. The Bismarck Fall, did not fall under any of the six Ramu councils established by the Australian Administration in the 1960s as the area was regarded as uninhabited and destined to become a National Park.

Attempts to further the economic development of the area did not make much difference either. Introduced crops like rice failed due to a lack of marketing opportunities and the patrols mounted from Usino had a large area to cover and generally failed to reach Sepu. The Sepu people in turn were expected to walk to Banam to pay their annual headtax. Many patrol reports note that the unfavourable perception that people had of their council, which, given the fact that people were expected to pay taxes but did not receive any services, is not surprising:

> Generally the people in the Igoi-Sop census Division appear unenthusiastic towards the Usino Local Government Council. The majority of the villages here seem isolationist to an extreme and it is difficult for a Council with strictly limited resources to benefit these people in a way they can recognise instantly. ... There is a general tendency to expect too much ... over too short a period and to think of the tax system as a lottery whereby if a Ward produces a good tax, a reward in the form of an outboard motor or some such is expected. The villagers do not seem interested in the more staple works of the Local Government Council (Spencer 1971/72a).

From the end of the 1960s onwards contributions to community work were to a large extent voluntary and, like in the Upper Jimi, suffered when the system of government patrols was abolished and Local Government Councils were established. These councils, however had little influence on local people.

In the beginning of the 1970s, plans were drawn up to build a road between Usino and Sepu on the Ramu River. The stretch of 24 kilometres was marked and cleared but the road never eventuated, further reducing the already limited confidence in the working of the formal Government system. In Sepu village, however, people have organised themselves better than elsewhere in the area. Several of the patrol reports from the end of the 1960s and the beginning of the 1970s mention the energy with which the Sepu people engaged in road building, rice growing and other ventures. All of them were to fail, in a pattern of repeated attempt, failure and increasing disillusion that continues unto this day.

BUSINESS ACUMEN AND CARGO-CULTS IN THE RAMU VALLEY

In contrast to the Jimi groups, the Ramu River people hardly engage in any cash cropping. There is a little bit of cocoa and robusta coffee grown near Usino, but no cash crops have been seen in any of the other villages including Sepu. A number of men work on a logging concession near Sogeram or on oil and mineral exploration activities in the Ramu Valley and the foothills of the Bismarck range. Crocodile

hunting was until recently the main wage earning activity, but the declining numbers of crocodiles have put an end to this source of income. Generally there appears very little interest in local income earning ventures as people are largely self-sufficient. As one kiap wrote in 1972:

> 'There is a complete lack of business initiative or inspiration, no one dreams of looking to local resources. There are three kinds of business according to villagers, coffee, cattle and peanuts, and if you can't manage any of these three that's the end of business thinking' (Spencer 1971/72b).

The lack of business interest among the Ramu people stands in sharp contrast to the way in which the Jimi actively pursue a wide variety of options to make a living and earn an income. This is a source of concern to the Ramu people who complain that the Jimi cut their trees, hunt their game and trap their birds for sale in Madang.

Issues of economic development found an expression in local cargo cults of which some influenced the Ramu area. Allen (1981) describes how the introduction of rice by the colonial government in the 1950s and 60s and the wave of cargo-cults which swept through Madang and Sepik provinces were closely related. Cargo-cultism does not appear to have played a very large role among the Ramu River people covered in this study, but played a more important role in nearby areas to the north and west of Sepu. One of the defining aspects of these cults is that they are all attempts to come to grips with the wide disparities in wealth and technology which Papua New Guineans experienced in their contact with the white colonial settlers. All were attempts to explain through the use of local concepts how it was possible that the 'white man' had access to such wealth while indigenous people did not. The various explanations have in common that they do not so much see European wealth and technology as a product of organisation, management, investment and work, but as a stemming from a secret knowledge which allow those that posses it to gain access to unlimited resources and wealth.

The various Ramu cultists described in various patrol reports (VanHelden1998b: 45-47) all claimed that they had somehow discovered the white mans 'trick' thereby being able to copy him. The rituals that were developed in order to gain access to the white men's wealth often consisted of a complicated mixture of ancestral propitiation and imported notions stemming from western business. Often these rituals mean that daily subsistence work was neglected in favour of building the necessary ritual houses, and airstrips, or even involved the destruction of food gardens and houses. For this reason the colonial Government actively aimed to suppress such cultist activities. The Worchester patrol for example, was explicitly aimed at defusing cargo activities on the Upper Ramu river, where a movement had been instigated in an

> 'attempt to propitiate the spirits of their forefathers, with incessant singsings and food offerings. A further step taken to please the spirits was the forbidding of the womenfolk to drink water between sunrise & sunset, indeed a hardship on the hot, dry kunai flats of the Upper Ramu. Houses were built ... in the villages for

> the purpose of receiving the cargo. These houses were inspected, and were found to have a table inside, on which was a plate containing food for the 'spirits', and a place set aside where the money was to be put. The houses were surrounded by a fence, and decorated with flowers. (...) The houses were ordered destroyed, and strenuous efforts were made to dispel the illusions of the people' (Worchester 1952/53: 4).

The Yali or Yaliwan cult which swept through Madang District after the Second World War never appears to have taken hold of the Bismarck-Ramu area (Lawrence 1964, Stent 1977), although various patrol reports from nearby Aiome describe a variety of local cults on the Middle Ramu (VanHelden 1998b). The term 'cargo' as in 'cargo cult', however, would come to play an important role in the Bismarck-Ramu project, where it came to denote the way in which many rural people in PNG define 'development' as the receipt of goods and services without taking into account that such may be a product of self-reliance, community organisation and hard work.

THE 'BUSHFIRE OF DEVELOPMENT': COMPANY ACTIVITY IN THE RAMU VALLEY

Even though the Ramu people show relatively little interest in cash earning activities, company activity in their area is much more influential than in the Jimi Valley and constitutes an additional reason for Jimi downslope migration. Apart from the possible construction of a road from the Sogeram River in the north to Foroko-Brimde and the rumoured arrival of logging companies along that road, the most important change to the Bismarck-Ramu and its economy may come from the Ramu nickel-cobalt mine which is being developed in the Bismarck Fall, and a oil drilling project in Banam to the north of the Ramu River.

In 1996 the Ramu mining project started work on the nickel-cobalt resource in response to an improvement in world prices for nickel. The exploration camp is about a two days' walk from Pimbum and one day walking form Sepu. The mine will comprise an open-cut operation, which will feeding a benefaction plant 4 kilometres to the northwest. After the first separation in the plant, the ore sludge will be transported to a processing facility in Astrolabe Bay though a 78 kilometre long pipeline. This prospect is generating a lot of excitement as people throughout the Bismarck-Ramu area aim to find work there. It is likely that a number of settlements will be abandoned once income-earning activities become available at the mine site. People at Pimbum stated that they would migrate across to the mine as they have marriage relations with the Bundi people. A number of people from Sepu are already working at the mining camp.

Another activity which will have a major impact on the local economy, is the oil exploration being undertaken in the Banam area since 1992. The company has established a camp at Sogeram, and is drilling holes in which charges are offset to determine local soil structure and the possible presence of oil and gas. In November and December 1997 the project employed virtually all able-bodied men in the immediate vicinity, paying them the locally unbelievable sum of between Kina 110

and Kina 200 per fortnight. As a result of these experiences, people's expectations have shot up. The companies with their helicopters, equipment, free food and medical supplies, leave a strong impression on people's minds. Men are paid salaries which are very high by local standards, and are supplied with safety boots, work clothes, gloves and other equipment. When people compare this with government or project interventions that they have experienced in the past, they readily conclude that they themselves and the government cannot make changes for the better but that only the company can. The *kampani* thus becomes a role model and the closer the contact with the 'company', the more likely that the future development expectations will be framed in the context of this experience.

Many Ramu people, however, take an ambivalent view of the changes around them. While the Jimi are generally enthusiastic about any type of 'development' coming their way, the Sepu people profess to be worried about the future and the way in which their lives might change. Their village on the Ramu River, lies in between the oil and the mining projects and is likely to be affected by both of them. May Sepu people are worried by the rapidity of change taking place, describing their community as 'a tree' surrounded by the 'bushfire of development'. Later they would present their interest in the old idea of a national park on the Ramu River in terms of 'showing' their children how they lived, what they ate, where they came from, what their roots were. For them 'conservation' acquires the added notion of preserving an identity and a style of life, a notion which is much wider than the conservation notion used by western environmentalists, but not necessarily incompatible with it.

WESTERN CONSERVATION AND LOCAL SOCIETY

In the opening chapter of this study I have presented the basics of western conservation thinking, arguing that now common sense ideas such as that contained in the dominant conservation narrative, are of fairly recent origin and largely a product of western society. The goal of the Biodiversity Program in the Bismarck-Ramu area, which was obviously based on these western ideas, was to achieve biodiversity conservation through the establishment of a large protected area cutting across a number of different ecological and vegetational systems with a minimum size of 50,000hectares. This area was to be kept more or less free of destructive human interventions in the form of logging, gardening and hunting, in order to maintain the integrity of its ecological systems. A number of other uses, such as scientific research, non-destructive recreational activities and for example the sustainable harvesting of non-timber forest products are possibly acceptable (Sekhran 1996: 16). This view presupposes a number of things: firstly, that nature is vulnerable and that man has to take responsibility for its wellbeing, and secondly, that nature excluded from most forms of human exploitation still fulfils an important role and still has value. This view of conservation, however, is

fundamentally different from the way in which both the Jimi and the Ramu people look at the relationship between man and nature.

This section will discuss local views of the environment, arguing that firstly people in the Bismarck-Ramu have little experience with environmental degradation and generally don't perceive the 'problem' that western conservationists present. Secondly I will argue hat local communities generally take a utilitarian view of nature, regarding it as something to be used, not set aside, and finally that due to their specific outlook on the forest and the sprits that inhabit it, they don't feel responsible for its maintenance. Not surprisingly, this section will argue that there is very limited evidence of intentional management of the environment by local people, and that the use of protected areas as proposed by the project team appears fundamentally at odds with local perceptions.

A LACK OF DEGRADATION AND A UTILITARIAN ATTITUDE TO NATURE

One of the key difficulties that western conservationists are facing in bringing their message forward is that until now, many PNG societies have simply not had to seriously look at the long-term implications of their economic behaviour. The generally small populations with their low-impact technologies, either did not profoundly affect the ecosystems on which they were dependent, or were able to adapt due to the relatively slow rate of environmental transformation. As a result, people do not think of their forests as finite resources. Environmental degradation is a recent phenomenon with population growth probably not accelerating until after the Second World War. It is only since the 1950's that the introduction of cash crops is taking up increasing amounts of arable land out of garden production and that a growing road network enables an increasing conversion of previously forested areas into agricultural land (Allen *et Al.* 1995). In certain areas the forestry companies facilitate this process by opening up previously inaccessible areas. As a result of their dependence on their natural resources for their livelihoods, Papua New Guineans tend to be highly pragmatic people who take a utilitarian attitude towards their environment. They have very real social and economic needs and tend to be more concerned with the immediate yields of their gardening and hunting, and increasingly with their ability to earn cash by selling and exploiting elements of the environment, than with questions of future sustainability. They are also predominantly concerned with the welfare of the small group of clan members and relatives to which they belong, rather than with the well-being of elusive entities as 'the nation' or 'humanity'.[40]

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[40] In this respect they are no different from other peoples across the world: conservation awareness in Western countries too, is a relatively recent phenomenon, which is still mainly restricted to the educated urban middle classes, whose members may harbour romantic notions of 'natural' and 'indigenous' lifestyles. Filer (1994), argues that a conservation ethic such as that sought for by western agencies is most likely to arise among the urban middle classes of PNG, where people have escaped the oppression of village life, whose exposure to education, electronic media and western ideas has given them 'the capacity and motivation' to absorb western ideas.

The preoccupation with the direct use value of natural resources among the Jimi for example is evident in local knowledge systems. In the first place people only have detailed names and classifications for those elements of the environment that are useful and important in fulfilling their daily needs, but lack specific names for the elements that are less important from a utilitarian point of view. The Jimi, for example, have individual names for the various Birds of Paradise which they used to hunt and trade, or for the varieties of *marita* which they plant and eat. In many cases, local taxonomies may be more elaborate than Western scientific classifications. In contrast, they will use generic names for several less important species of birds such as parrots (See VanHelden1998b: table 22).

In the second place this knowledge, is aimed at the exploitation and use of natural resources, rather than at understanding the interdependency of ecological systems. People have extensive knowledge of the key linkages that sustain their game and fish, in terms of animal behaviour, breeding cycles, and migratory patterns, but it takes biological and agricultural training to clarify the eco-systemic inter-linkages that lie outside the realm of direct observation. Bulmer (1982: 66) for example, warns that whereas local environmental knowledge may be distinctly impressive, the religious beliefs associated with the natural world may also 'inhibit observation and logical inference from observation' and 'negative mystical associations may support dogmatic assertions about animal behaviour that are contrary to scientific evidence'. Local interest in the functional and therefore 'named' elements of the environment, has meant that only those individual resources needed for survival have been the subject of resource management measures.

In the Bismarck-Ramu area one such restriction involves discriminating between adult male Birds of Paradise in order not to affect future population growth. Next to the conservation aspect, however, there is an important aspect of ownership here. An owner of a display tree was likely to see his tree abandoned if he shot all displaying males, because the remaining females and immature males would move to another display tree and thus become the property of the owner of that particular tree. It is therefore preferable to spare the *bikmaus*, the dominant male. Other voluntary restraint systems apply to the capture of adult cassowaries. By only capturing the chicks that are reared in captivity, villagers would not deplete their breeding stock (Healey 1973; 107-09). Cassowaries are notoriously difficult to breed in captivity. All such conservation measures are aimed at the management of a specific resource and can thus be regarded as elements of an indigenous resource management system, but differ in nature from biodiversity conservation, in that the latter aims to conserve the ecosystem as a whole, rather than a number of specific and useful elements for their future use.

DEFINING CONSERVATION

Because rural Papua New Guineans make use of a large variety of subsistence resources and have an impressive knowledge of their environment Western

observers sometimes presume that local people therefore must be 'natural' conservationists. This romantic view of the 'noble savage' (Ellen 1986, Redford 1990, Milton 1996) does not appear to hold true for the Jimi people who generally take an instrumental and utilitarian attitude to their environment. The Ramu people may be a little bit more reluctant to relentlessly exploit their environment. They are so, however, not because of a fear of environmental degradation, but in the first place because they see themselves hemmed in between a number of outside forces which will change their lives and autonomy in an unpredictable manner.

Alvard (1993) notes that simply observing a group of people living at equilibrium with its environment is not sufficient evidence to label them conservationists. Over the years conservationists have defined the basic properties of 'conservation', allowing me to come up with three basic criteria, which together define the conservation concept.

- In the first place, the conservation act must be intentional and thus based on - an assumed - causal relation between the action undertaken and the intended conservation effect. Although certain actions of communities may have an environmentally beneficial impact, closer analysis makes clear that these are usually not the result of a conscious effort to preserve resources for future use, but the unintended consequence of labour and risk minimising strategies or religious beliefs (Bulmer 1982; Alvard 1993). Such incidental outcomes have become known as 'epiphenomenal conservation' (Hunn 1982), or 'conservation by default'.

- In the second place, conservation has to be costly in the short term, even if it may be beneficial in the longer run. By preventing or mitigating resource depletion or habitat degradation, people forgo a certain resource use and thus incur an opportunity cost. The idea that this opportunity cost needs to be off-set in order to make conservation palatable lies at the heart of the ICAD philosophy.

- Thirdly and finally, the conservation act must have a demonstrable effect in conserving the resource. Ruttan and Borgerhoff Mulder (1999: 635) note that often assumptions are made about the conservation impact of certain indigenous practices without 'conclusive evidence over time' that such is indeed the case.

Conservation in this perspective, thus has to be the intentional management of natural resources which imposes an opportunity cost in the present in return for a demonstrable conservation effect in the future.

Epiphenomenal conservation in the Bismarck-Ramu area

There are many examples of human practices in the PNG and also in the Bismarck-Ramu area which have conservation effects. Most of these, however, are a by

product of other considerations. An example of environmentally beneficial labour-minimising behaviour arises when people prefer to cut secondary regrowth for their gardens rather than primary forest, because the latter is much harder to clear. The resulting reduction of human pressure on the forest ecosystem, however, is not what drives the relevant decision, and can thus not be regarded as a proof of a 'conservation ethic'.

Another example of such epiphenomenal conservation, is related to erosion control. Many people in the Upper Jimi Valley farm on steep slopes, and some may take mitigating measures by putting logs across their gardens in an attempt to avoid soil slippage and a loss of crops. Once the crops are harvested, however, the same people allow their pigs into the garden to eat the remaining tubers and foliage. This leads to widespread run-off of the loose topsoil. Again, the erosion control measures are part of a risk minimising strategy and not part of a long-term strategy to maintain soil fertility.

A similar argument can be made with regard to ownership and use rights. In the Bismarck-Ramu area, for example such aces rights extend to garden and hunting land, fruit and nut trees, display trees for Birds of Paradise, fishing locations, the nesting sites of megapodes, crocodile swamps and sago stands. These measures are effectively aimed at guaranteeing continued access to the natural resources concerned by a specific individual or group, and may have an environmentally beneficial side effect for as long as the owners are able to exclude other groups from using these resources. Once a group is unable to enforce its ownership rights a depletion of wildlife may be the result. Ownership rights, however, have little to do with the existence of a 'traditional' conservation ethic, and rather more with a desire to keep resources for oneself. The assertion of ownership rights for example, may also have a negative environmental impact. Bulmer (1982: 64) mentions the case of a man in the Kaironk valley who cut down several acres of mixed-oak forest in order to stake his claim to the underlying land.

In the past, religious restrictions on resource use may also have had a beneficial impact on the environment. Many communities had restrictions with regard to the type of game that could be taken and eaten at certain times and places. In some cases, rituals are thought to have regulated the periodic staging of pig festivals to reduce the pressure on scarce resources. In the case of the Tsembaga Maring, for example, a prohibition on hunting and trapping during the pig festival 'permits marsupial populations to recover from exploitation that may otherwise decimate them' (Rappaport 1968:151). Similar beliefs may play a role in the case of protected areas which are focussed on certain culturally important animals, like the cassowary in the Kaironk Valley, where the Kalam people regard this bird as classificatory kin or in the case of totemic ancestors such as certain turtle species in Gulf Province. In the Ramu people mentioned a number of food taboos concerning the totemic animals of their various clans. One of these taboos states that, when such an animal is caught, either the men or the women in the family may eat it, but never both. It also seems to be the case that if the eldest son ate the totemic animal, his siblings

were not allowed to do so. It is, however questionable if such restrictions should be interpreted as evidence of a conservation ethic.

Other examples are the general prescription that people have to take care not to be too successful in their hunting lest they would anger the *masalai*, which could lead the hunter and his household to misfortune, disease and possibly death. Misfortune could be averted by killing a pig or chicken for the spirits after a successful hunt. In the past these beliefs may have served as an internal restriction on over-hunting. The definition of 'too successful', however, was not defined by the community or some religious authority, but was defined retrospectively and depended more on the future fortune or misfortune of the hunter. If something went wrong in his household, it could always - in hindsight - be attributed to a breach of rules vis-à-vis the spirits of the forest or, in other cases, the ancestors. Usually the local magic man would determine the nature of the breach and the procedures needed to redress the situation, including the possible killing of pigs or chickens in the sacred grove of the sub-clan. It is important to emphasise, that these magico-religious restrictions were not aimed at specifically preserving the forest and its resources, but were aimed at safeguarding the wellbeing of individuals and groups. The environmentally beneficial impact of these systems was a side effect, not the basic aim of the exercise (Bulmer 1982: 68).

The sacred groves in which people make ancestral sacrifices, for example, are sometimes regarded as having a positive conservation impact because they function as reserve areas. Such a case ahs also been made of India by Chandrakanth and Romm (1991) and Apfell Marglin and Mishra (1993). In the Upper Jimi Valley, however, these places appear to have little significance for nature conservation, since they are very small and generally found close to centres of population. In addition, people's ideas about these places bear little relationship to the Western idea of conservation. Clarke (in Filer *et Al.* 1995: 20) writes about the Maring of the middle Jimi Valley:

> 'Certainly, the groves had a ritual, magical meaning, but I've seen Maring chopping down 'sacred', or spirit-inhabited trees. When asked if there was some danger in this they said that [it] had been eliminated by saying spells. Perhaps consciousness has changed [since 1965] but I don't think the Maring cared much about the actions causing 'overhunting' or 'environmental degradation'.

Even though the Bismarck-Ramu project would use the example of such areas as a means to explain western conceptions of protected area management, it is unlikely that these can be seen as proof conservation in a 'western' sense.

CONSERVATION THROUGH CULTURAL REVIVAL

Still there is a strong cultural survival movement which bases itself on the idea that if the 'traditional' cultures that practise such forms of conservation are maintained such will also be beneficial in environmental terms. In PNG there area a number of rare cases, where indigenous beliefs may indeed provide the point of entry for

discussion of conservation from a 'Western' point of view. In Collingwood Bay, for example, the initial reason for the Maisin people to refuse entry to the logging companies was the fear of the destruction of their sacred sites. These so-called *tambu* ('taboo') places are the spots where their forefathers fought to take possession of the land, and where the dead were buried. Once the decision had been made to preserve these locations, the idea of 'looking after' these sites could be reinforced, and thus adapted to include more 'modern' notions of environmental conservation.

In most cases, however, environmental beliefs are based on complex mystical explanations which are increasingly alien to the younger, more educated members of the community, incompatible with Christian doctrine, and often in direct competition with the modern creed of market production and income maximisation. Even if attempted, it would as Bulmer (1982: 69-76) writes, 'require a culturally very well-informed extension officer to meaningfully relate selected factors of traditional explanation to modern environmental resource management.' He also points out that 'artificial attempts to halt social change or revive traditional cultures cannot achieve conservation'. Dwyer (1982: 184) comes to a similar conclusion, noting that practices with a positive environmental impact are likely to wear away in the face of modern ideas. Although he also notes that 'isolated but deeply held beliefs may persist for longer periods' he also thinks that 'it is doubtful that they could provide major input into a modern conservation programme'. It may prove especially difficult to link the abstract idea of 'biodiversity', a blanket term for all living plants and creatures in the environment, to mythical stories. Biodiversity education may be more usefully approached with notions emphasising man's custody over creation, his dependency on natural resources and services, and the interdependency of global ecological systems.

One of the main changes that is taking place in PNG rural communities is the increasing segmentation and desacralisation of daily life. In pre-colonial society aspects of production and exchange, the regulation of access to resources, food taboos, leadership, religion and social structure were all inter-linked. With the arrival of the colonial powers, Christianity and Western education, questions of religion have become increasingly separated from production and consumption and many of the restrictions that were associated with them have been dissolved. Restrictions on the times and places for hunting and consuming game have largely disappeared. Dwyer (1982) for example, describes how the Rofaifo and Etolo people have abandoned their sex and age class restrictions on the eating of mammals and are now eating foods which they would formerly not eat at all.

Such a process of demystification is taking place in a spatial sense among the Jimi Valley. Where respondents in Bubkile still professed a deep fear of the forest spirits at the beginning of the 1970s, and attributed a large number of deaths to them (Healey 1973), these fears have lost much of their meaning nowadays. The three-day trip through the forest is now a regular occurrence, and has allowed for the construction of a number of semi-permanent shelters. Young people especially, seem less intimidated by the forest than their elders. They are no longer afraid of sleeping

there during their hunting expeditions, and even single women travel through the bush with their children. The previously feared 'wild men' of the Ramu Valley have become known as the rather less intimidating Ramu clans. The gradual disappearance of these beliefs does not have purely negative consequences for the environment. On the one hand, it removes some of the previous restraints on hunting, gardening and the cutting of trees; on the other, it opens the door to explanations of ecological interdependency and environmental decline, with remedies focusing on human behaviour and responsibility.

THE GUARDIANS OF THE FOREST

An additional reason why people in the Bismarck-Ramu area can not be regarded as conservationists is related to the fact that they do not feel responsible for the bush. Among the Jimi, the pattern of reciprocal exchange relations stabilised by moral guidelines which fade with social distance, is not only confined to relations between human groups and individuals but also extends to the ancestors, the environment and its guardian spirits. Hughes (1988) in her description of Simbu spirit beliefs draws a similar analogy of concentric circles. The village, its gardens and immediate surroundings are at the core of the community, with the ceremonial grounds as its social centre where the ancestors are honoured during pig feasts. The community also includes the spirits of the ancestors. People often emphasise the inter-linkages between themselves, their ancestors, the land for which their ancestors fought and their customs, language and identity. All of these together make up their *ples* (village) and people who die are not gone, but are thought to remain within the community, be it within another, ancestral realm. The communal hunting grounds are controlled by the *masalai*, the capricious forest spirits which may cause harm to man and which either have to be appeased or tricked into surrendering game.

The spatial division between the human and the spirit realm is also visible in the fact that many highland groups refer to wildlife as the 'pigs of the *masalai*' as opposed to the 'pigs of man'. As in human affairs, relations with the spiritual world are reciprocal in nature, where man propitiates his ancestors and the bush-spirits and in return hopes for success in pig breeding and hunting game. As in human affairs, donating pork helps to stabilise the difficult relations with unruly ancestors or dangerous bush spirits. The Kuma of the Wahgi Valley divide their pigs into two groups, the 'real pigs' for presentation to people and the 'spirit pigs' aimed at satisfying the ancestors and spirits (Reay 1959:142). Custom on the Ramu River dictates that the hunters cut the belly of their game and leave the intestines and blood behind to thank the spirits of the forest for the game that they have been allowed to take. When a wild pig is killed, the ears and tail are left behind. Once the game has been cooked it is divided between the different families and the visitors. In Yawetama village on the Ramu River after a successful hunt two extra plates of food were placed on a shelf near the fireplace. One was for the 'people of the forest', the *masalai*, the other for 'the people of the village', the ancestors.

The further one gets away from the village the more troublesome and antagonistic the relations with people and spirits become. Outside the circle of known hunting lands is an unknown realm containing malevolent spirits and 'wild' people to whom one has no obligations and from whom one cannot expect any favours. In general the places where these people and sprits live are better avoided. The Jimi for example, used to fear the spirits of the forest in the Bismarck Fall who were thought to inhabit certain remote areas in the forest, known as *ples nogut* ('dangerous places'). If the person hunting does not belong to that area or does not appease the spirits properly, the *masalai* may strike him with illness or bad luck. Some of the most dangerous spirits in the Bismarck Fall are thought to abduct humans and pigs, and are considered especially harmful to women and children. One of these spirits, the Kip-kange or Kondol-kange, is said to roam the Bismarck Fall, where it approaches travellers in the shape of a man and entices them to follow it. People go *spak*, ('drunk'), or *long-long*, ('crazy'), and when they recover, they find themselves in a place where they did not intend to go. When the Kip-kange kills, it does so by swelling the limbs of its victim until they burst. The victim will see his blood run but will not feel any pain.[41] The relations with these wild spirits vary from outright avoidance to reciprocal exchange through propitiation to trickery, depending on the self-confidence of the person involved.

The separation between the realms of the village and that of the forest suggest a dichotomy between the 'social world' of the village, with its people and their ancestors, and the 'natural world' of the spirits (Bulmer 1982, Rappaport 1968). This dichotomy implies a worldview in which the spirits of the forest own and look after the forest, while the ancestors guard and take care of the village.[42] According to Hughes (1988) the village can be regarded as a place of relative order and predictability, as opposed to the chaos ruling the bush. The forest is regarded as alien, as something that needs to be kept at a distance by clearing space for houses and gardens. Only when game or other resources are taken out of the forest, do the *masalai* need to be propitiated for surrendering the things needed by man. Under all circumstances, however, man is an intruder and a coloniser, who has to watch his step and work hard to carve his place out of the endless expanse of the surrounding forest. It is man that is vulnerable, not nature and people speak with respect of the strength and endeavour of men that venture far into the bush to cut new gardens.

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[41] Kange is reminiscent of the Simbu and Bundi kanggi spirits (Hughes 1988, Zimmer 1985) Kanggi as described by Hughes (1988; 67), are very similar as they also inhabit forest areas, swamps and hillsides, through which men will travel but where they will not make settlements. The Kanggi spirits are territorial by nature, have the ability to change shape, and may leave a trail of dog or marsupial footprints. Healey (1973:106-107) records similar spirits among the Narak and Kandawo, while Reay (1959: 131-32). describes them for the Kuma.

[42] Whereas some anthropologists take the dichotomy between culture and nature as a universal one, a number of ethnographers have wondered whether this contrast, which reflects the modernist separation of culture and nature, has the same symbolic significance to New Guinean peoples (See Strathern 1980 for an overview of this discussion).

Whereas at face value this distinction appears to mirror western conceptions of human society and wild nature, there are still a number of differences. In the first place the distinction between human society and wilderness as used in Western conservation discourse is expressed in spatial and temporal terms. There is a place where man belongs and also a 'primordial' and 'pristine' place where man does not. This distinction is absolute. There is no such thing as nature which is a 'little bit' pristine, or 'relatively' primordial. It either is, or it is not. In the second place, it entails a subject-object relationship in which mankind observes, looks after and defends the environment, while nature is being observed, looked after and defended. Nature is a thing. Papua New Guineans tend to conceptualise the distinction between the village and the wilderness in terms of a continuum. In addition, they see their relationship with nature as a social one. One can enter into exchange with the *masalai* that own the forest, one can trick them, or be tricked. It is the absence of stable social relationships makes an area wild, whether it is inhabited by people or not. Thus big forest is not per definition 'wild', while Port Moresby, the countries' capital with its many amorphous and undefined social relationships may be very 'wild' indeed.

The most important difference, however, comes with the notion of responsibility. Whereas western conservationists continue to emphasise the responsibility that man has to take in looking after nature, the western idea of conservation is fundamentally contradictory to the worldview of local people in the Bismarck-Ramu area, who regard the Masalai as the owners of the forest and its game. It constitutes 'almost an impertinence', as it is neither man nor his ancestors, but the spirits which are in control of the bush (Bulmer 1982: 69). If the *masalai* are the owners of the forest and its game, than a declining yield from hunting does not necessarily lead to the conclusion that the game is diminishing because of over-hunting. It may simply mean that the spirits are no longer being propitiated properly by the younger generations. Such beliefs may thus obfuscate the causal relationships between human action and environmental degradation brought forward by western conservationists as they provide competing explanations in terms of sorcery, the wrath of ancestors or the actions of the *masalai*.

Not only the relative balance of power between man and nature is perceived in fundamentally different terms by local people and western conservationists, there is also little realisation among conservationists that in the context of communal land tenure in PNG, not using land and resources weakens one's ownership rights to land. In many cases the use of land and the bestowal of use rights on other parties reaffirms the ownership of its owners over the land, and it is by reference to past use that people claim ownership (Giddings 1984). On the Ramu River. this for example, means that clans keep small groups of relatives living in remote parts of their territory as *spiman* (spies), to make sure that no strangers settle on their land as these are seen to be used.

In the light of the above discussion, it is probably fair to say that there is not much evidence in the Bismarck-Ramu of a conservation ethic which prescribes the

concerted management and conservation of environmental resources. There never was much need to do so due to the relative abundance of the environment and the fact that the notion of 'looking after' the environment is not self-evident within Jimi and Ramu society. Setting land aside for the sake of biodiversity preservation is probably slightly ridiculous in the eyes of utility-oriented local people as it is not clear who is to use the local resource and what for. Future generations, 'humanity-as-a-whole' and the 'intrinsic' or 'unknown' value of nature, are not easy notions to identify with in a society where ones neighbour's neighbours are strangers and thus enemies.

In addition many westerners tend to have a static conception of indigenous communities, underestimating the extent to which social change and the monetisation of the economy are going to change local perceptions of the environment. While these changes are most visible among the Jimi communities, there is no doubt that these also affect the Ramu people.

POLICY OPTIONS FOR CONSERVATIONISTS

At face value the conclusion that biodiversity conservation ideals *per se* are not likely to exist in the area of intervention leaves a number of possible responses open to the proponents of conservation projects. In the first place project teams could simply conclude that because people have no direct interest in biodiversity conservation through protected area establishment, and given the extraordinary power that landowners have in PNG, there is therefore no real opportunity for conservation in the area of their choice. This is a disheartening, but potentially valid conclusion which would apply to all of PNG with the exception of those land groups that opt for conservation on their own account. In this view, PNG should no longer be a target for uninvited biodiversity conservation efforts.

Secondly, conservationists can respond by stating that people do not possess the right frame of mind for 'genuine' biodiversity conservation and therefore need more and better conservation education in order to build such conviction. Once local communities accept 'western' notions of biodiversity conservation, resource scarcity and the need to look after nature, they may be prepared to bear the responsibilities imposed on them as custodians of world biodiversity. This view by-passes the fact that people in the Bismarck-Ramu have real and more immediate needs than biodiversity conservation for the sake of humanity and future generations. Expecting people to forget about their poverty, the existing malnutrition, the lack of employment opportunities and the high number of women that die in child birth in order to embrace an abstract western notion of biodiversity conservation is not realistic. It, however, a notion which is implicit in many environmental awareness programs.

A third, more long-term and evolutionary view, also known as 'weak' or 'indirect' conservation regards the development of a conservation ethic as a product of increasing welfare. Conservation according to this view will gradually come about

as Third World populations improve their standard of living, while at the same time experiencing the environmental decline that comes with the economic exploitation of natural resources, in much the same way western countries have. The demographic transition leading to smaller families, higher education and basic social security will eventually trigger an expanded sensibility to the needs of nature and the enjoyment of the natural environment. A consequence of this evolutionary type of thinking is that environmental interventions first focus on the management of resources for utilitarian purposes, later developing towards setting cherished landscapes aside for recreational, aesthetic and ecological purposes. It is this view which allows Nash to define of conservation as a 'full stomach syndrome' (in Guha 1989: 79). This evolutionary view ignores the fact that in many cases poor people do actively manage their resources, and confuses the many different varieties of environmental management with the preservation of wilderness. This creates a view of poor people as being caught in a static, and environmentally destructive way of life which can only evolve towards a more 'modern' developed and supposedly more nature-respecting life-style in which large areas of wild nature are set aside through the intervention of well-meaning outsiders.

Policy recommendations based on this view call for a redirection of development initiatives towards those rural areas and productive systems that are geographically removed from the areas that are to be conserved. Poor people, being rational actors, will move to where the opportunities for a better life are being created, thereby reducing the pressure on valuable environments and eventually coming to love nature as 'Westerners' supposedly do. According to this view, policies aimed at increased urban and rural welfare through an intensification of economic development are more effective in protecting the environment than the preservationist policies revolving around protected areas.[43] This option suggests that the project should wait until such time that people in the Bismarck-Ramu can *afford* to think about other, more long-term issues than immediate survival. It is obvious that such a waiting period and the social and economic development required to trigger a conservationist ethic may lead to the depletion of natural resources.

The final approach constitutes the use of development projects as a tool to achieve conservation. This view, also known as 'strong' or 'direct' conservation, opposes the evolutionary view of conservation, fearing that such conservation may be too little too late. Instead this view, propelled by the notion of crisis, actively aims to 'make conservation pay'. In practice this is achieved by developing conservation-related activities, which aim to meet the income-earning aspirations and other welfare objectives of the involved communities in such a way, that a destruction of natural resources also leads to a loss of economic opportunities and services. It is this

[43] Shiva (1991a: 7-8) disagrees wholeheartedly, calling this a 'schizophrenic approach' as it, is based on the destruction of agricultural diversity in productive areas coupled to a policy of preservation based on set-asides. In her view such an approach is fundamentally flawed as 'biodiversity can not be conserved unless production itself is based on a policy of preserving diversity'.

philosophy which lies at the heart of the ICAD approach and which suggests the policy of trying to identify those groups of people that have an interest in conservation in order to achieve objectives that can be supported by the project. There where there is a juncture between the needs and wants of local people and the conservation objectives of the project there is room to look at the establishment of a protected area. Whereas the Biodiversity Program initially defined such interests in purely economic terms, the development of a participatory community entry approach would create room for other motivations finally leading to a 'middle ground' between conservation-minded CD workers and a number of territorially-minded Ramu clans.

CONCLUSION

This chapter has introduced the social dynamics that characterise the Ramu Valley, starting with an introduction to the area and some of the key characteristics of the Ramu clans with regard to their size, internal divisions, marriage patterns and decision-making patterns. In contrast to the Jimi how have actively engaged the colonial administration in their economic and political endeavours (see previous chapter), the Ramu can be characterised by an attitude of avoidance. In recent year they have watched with mixed feelings how a variety of changes are taking place around them. These changes range from new logging concessions and associated road building, the development of an open-cut min in the Bismarck Fall, oil drilling in the Banam area, and the growing number of Jimi settlers entering their lands.

I have subsequently described how these small Ramu groups have entered into marriage and exchange relations with the much more numerous and forceful Jimi highlanders and have thereby opened to door to large scale migration. This chapter details how marriage relations have given the Jimi access to Ramu resources, and the role that two intermediary clans have played. Due to the impact that the Jimi have on the environment and resource availability, the Ramu landowners would prefer them to move back tot the Jimi Valley but have little means to force them back up. The Jimi are aware that they are no longer welcome, and are worried about high levels of disease, especially malaria, and the risk of sorcery by Ramu sorcerers, but do not really want to return. Especially the younger men, who have been born in the area argue that they should be seen as 'true landowners'. It is in this complex situation that the Bismarck-Ramu project would come to play a role, first by affiliating itself with the Jimi settlers, later switching to the Ramu landowners as their interest in defending their resources from further Jimi encroachment appeared compatible with the project goal of establishing a protected area.

The final pages of the chapter have looked at resource management practices in the area. The reason to do so stems from the fact that the idea that local people are natural conservationists would come to play a key role, in the philosophy of the Bismarck-Ramu project. The above discussion illustrates how the notions of man's relationship with nature as used by the international and PNG environmental

constituency are not the same as those used by the people whom own the biodiversity. In 'western' eyes nature is vulnerable and its maintenance the responsibility of mankind. In many PNG communities nature is seen as powerful and all surrounding, and as lying outside the social world and the responsibilities of man. Conservation follows logically from the first view, it is incompatible with the second.

The value of nature for local communities lies with the extent to which local people can make use of resources to meet immediate needs. Biodiversity conservationists claim that its value lies in its benefits to mankind and the biosphere as a whole and in potential, but presently unknown, future uses. The first view implies a need to use resources to access their inherent value for the local group, the second the need to leave them alone for the well-being of mankind and future generations. 'Western' ideas of biodiversity conservation are restrictive and tend to lie close to the idea of preservation of resources by restricting their use to non-destructive uses only. Local notions of conservation may be much wider, emphasising a continued use of resources and may imply a partial cultural revival, a passing on of traditions and language and, possibly, the preservation of part of the bush to show future generations what life was like in the recent past. In the next half of this study I will look at the various attempts by the Bismarck-Ramu ICAD project to come to a common understanding with local people.

Chapter 5

THE NATURE OF 'GOOD BUSINESS': CONSERVATION PATROLS AMONG THE JIMI PEOPLE

INTRODUCTION

This chapter[44] describes events as they unfolded with the start of the project interventions in the Bismarck-Ramu area. It starts with a discussion of the process used to select the Bismarck-Ramu area and the inconsistencies between social and biological criteria for site selection that became apparent in the process. Work commenced in April 1995 with a reconnaissance patrol during which members of the project team presented their intentions to a number of Jimi communities on the eastern and northern fringes of the project area. A detailed account of these first interactions shows how patrol teams and Jimi people, although ostensibly agreeing to work together in the field of conservation, were in fact talking and thinking about different things. Whereas the team's focus lay on safeguarding biodiversity, people in the Bismarck-Ramu area were mainly interested in the extent to which the project's presence could become an immediate source of income, status and jobs.

Five months after this first patrol a biological survey was conducted to determine the biological significance of the local natural resource. The survey and its preparatory patrol led to a number of problems that partly resulted from the fact that the survey team seriously misjudged the social complexity of the Jimi Valley. The survey team took little time to become acquainted with the area and its people and based its intervention on a number of untenable premises concerning local society and the position of the newly appointed Jimi community facilitator. Although the survey team focused on the logistical and technical aspects of sampling local biodiversity, it saw the survey itself as the first step in what was to become a long-term collaborative relationship with local communities.

The team members perceived themselves as offering a viable opportunity to communities in this remote area and assumed that local people too would take a long-term view in their dealings with the project. Instead, the project became

[44] A much shorter version of this chapter is forthcoming as VanHelden (2001c).

entangled in a series of messy discussions with a bewildering variety of people and groups who made persistent and opportunistic attempts to extort additional wages, money and jobs. This triggered a range of negotiations and conflicts between Jimi people and the project team. These discussions required the project to shift the onus of discussions from conservation and development issues, towards the nature of working relations between people and project. During the various patrols not only issues of 'conservation' and 'development' but what the team considered to be the 'proper' meaning of agreements, the 'appropriate' level of wages, the 'correct' use of money, the nature of 'good business' and the occurrence of violence became the topics of discussion. At the same time that the team tried to structure the people-project working relationship by lecturing on the need for mutual trust and a long-term commitment to co-operation, it became increasingly entangled in the strategic projects of local individuals and communities.

The background given in the last chapter will be used to analyse the Bubkile incident and the conflicts that arose. It will be argued that the specific social structure of the area, the short-term economic aspirations of the Jimi communities, the instrumental view of transactions with outsiders and the unhappy experiences with post-colonial Government, help to understand why people responded to the project as they did. The feelings of disappointment that arose on the part of the project team were a result of the fact that the Biodiversity Program operated from a number of stereotypical and simplifying premises with regard to the make-up of local communities. These rosy-tinted preconceptions, coupled with a tendency to take public statements at face value, led to an overly optimistic reading of the first encounters between project and people, and subsequent disappointment when people acted in unexpected ways. These disappointments and the hardening conflict at Lak necessitated a radical revision of its project strategy.

SELECTING THE BISMARCK-RAMU AREA

The decision to choose the Bismarck-Ramu area as the next ICAD site was based on number of considerations. In the first place on the basis of a review of existing literature on areas of potential conservation interest in PNG, in the second place on a number of biological criteria and in the third place on a number of socio-economic and strategic considerations. This incorporation of social criteria was a consequence of the Lak experience. Even though the selection document argues that 'it is extremely important ... that social and economic criteria play a critical role in the actual site selection process' (DEC 1995: 5) the choice for the Bismarck-Ramu area would predominantly be taken on the basis of biological criteria.

As a first step a literature study provided 17 sites of potential conservation interest in PNG (DEC 1994). This selection was subsequently reduced to 13 as it was decided to limit the selection process to the mainland of PNG by 'administrative request' (DEC 1995: 2). The latter request probably was a consequence of the extreme logistical difficulties encountered in developing the Lak project. Following this first

assessment, the project biologist assessed these 13 areas in terms of species richness, the presence of endemic species, the presence of species of special concern and a habitat and terrain gap analysis. These data and the calculation of non-weighted scores allowed for the prioritisation of these areas vis-à-vis each other in terms of biodiversity (DEC 1995). According to all of these criteria the Bismarck-Ramu area did well, an outcome which confirmed its status of 'Very High Priority' accorded by the 1992 Conservation Needs Assessment. Especially its altitude gradient running down from PNG's highest summit to one of its richest alluvial lowland forests and the inclusion of swamp forest make it an important depository of terrestrial biodiversity (Beehler 1993c; 201). A fly-over conducted in February 1995 to assess village density and forest structure gave a favourable impression of the area.

The next step consisted of the selection of a more specific site for the actual ICAD intervention, as the project team noted that nearly all priority areas were too large as in PNG the complexity of working on customary land makes managing areas of this size extremely difficult. Instead, the Biodiversity Program suggested that the preferred conservation area had to be between 50,000 and 80,000 hectares large and had to be preferably circular in shape as a low perimeter to area ratio reduces the opportunity for encroachment. The area was to cover lowland sites and lower hill forests in the proximity of higher elevation areas in order to allow for the conservation of mobile species that need a variety of habitats as part of their lifecycle.

It was at this stage that a number of non-biological criteria such as operational, demographic and social considerations and the experiences at Lak started to play a role. Operational considerations mainly had to do with access to the area and the presence of government service. Demographic and social considerations such as population densities and the resulting levels of human disturbance of native forests, the presence of existing and future logging concessions, as well as regional history, local social structures, law and order, and the local predisposition to conservation were also to be included. Little information on these latter issues was available, however, other than that there was no immediate logging threat. The lack of road access and the presence of highlands settlers in the Ramu valley were the major negatives (DEC 1995: 35).[45]

Due to lack of socio-economic information, in the end the choice for the Bismarck-Ramu area was made based on biological considerations. Biologically the area was considered important, an assumption which would prove correct when the results of the 1995 Bubkile Biological Survey came out.

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[45] It is interesting to see that the lack of road access was regarded as a negative feature of the Bismarck-Ramu area. One would expect that in terms of biodiversity conservation the rough terrain and the large rivers which hamper the construction of roads and therefore the access by extractive resource projects would actually make the Bismarck-Ramu area more interesting. In the United States the environmental movement fights monumental battles to restrict road building into wilderness areas. The absence of roads, however would also hamper local enterprise development, which constitutes a key element in the ICAD strategy.

TWO PARK INITIATIVES

One important 'social' aspect that influenced the decision for the Bismarck-Ramu area was the fact that during colonial times and afterwards two attempts had been made to establish national parks at different sites in the area. In the first case, a substantial part of the Bismarck range and the Ramu river floodplain had been proposed as a Potential National Park Area (PNPA) by the Australian colonial administration. The proposal for a Simbai National Park was originally done in 1969 by the Wildlife Division of the Department of Agriculture, Stock and Fisheries which would later become the Office and subsequently the DEC (DEC). At the time of this early proposal, census and language maps showed it as being uninhabited. Present PNG census maps continue to show this area as 'National Park' although hundreds of people have moved into the area since the beginning of the 1980s.

The initial proposal for a National Park reached a stage of agreement between the landowners, the Madang Area Government and the National Park Service in 1969, but was never gazetted and subsequently remained under consideration during the 1970s and 1980s. In 1986, a DEC patrol found that the presence of settlers in the PNPA presented an obstacle to its implementation (Antiko 1986). This reflects the usual idea that only empty areas should be designated as national parks. As the government of PNG had no means to evict people, it therefore shelved the proposal. The Bismarck-Ramu ICAD project did not aim to implement the old PNPA but did recognise that this area was initially selected because of its extensive primary forests, its altitude differential and its low population pressure. In October 1995, a formal biodiversity survey undertaken in the Bismarck Fall confirmed the high levels of biodiversity in the area (Hedemark *et Al.* 1997).

A second attempt to establish a national park in the southeast corner of the Bismarck-Ramu area took place in 1981 when the Government of PNG through the DEC purchased an area of 810 hectares around the summit of Mount Wilhelm. The land was bought from the landowners for the sum of K 12,563 (U$ 12,000) with the intention of declaring it a National Park. Although this intention was gazetted in May 1990, the final declaration of its status was postponed due to conflicts between the landowners and the Government. During the selection of the second ICAD site DEC officials expressed an interest in combining the search for a solution on the planned Mount Wilhelm national park with a possible ICAD initiative in the area (Filer et Al, 1995: 4). In October 1995, the project team visited Mt. Wilhelm to talk to landowners and their interest in a possible extension of the park into the Ramu valley. They found that the park infrastructure was in a poor state, while local people noted that they had no control over what was going on in the area. The only local benefits derived from the area came from compensation payments received for the positioning of three radio repeater stations on its summit (CRC 1995c).

The presence of two sizeable park initiatives in this one area is rather exceptional. In the site selection analysis these past attempts were classified under the heading 'conservation predisposition' and regarded as a positive criterion for selection (DEC

1995). Whether these past attempts should classify as positive or negative, however, would seem largely dependent on the perception of the landowners in those proposed national park areas. The fact that the implementation of the Mt. Wilhelm National Park stalled as a result of landowner troubles should probably have been regarded more of a negative. The fact that nothing ever happened in the Ramu National Park at that stage an unknown. In hindsight, however, the choice for this area, partly because of these earlier park initiatives, may have been the stroke of luck which led to the inclusion of a group of landowners along the Ramu River with a strong predisposition towards the establishment of a national park *as a result* of their earlier exposure to the concept (Cf. VanHelden 1998b).

The general lack of socio-economic information and the growing realisation from Lak that such information was essential to the project prompted the Biodiversity Program to change strategy. It decided not to narrow itself down to a specific area of 50,000 to 80,000 hectares, but deliberately selected a wide 'area of interest' of some 325,000 hectares as the site for the second ICAD project that was to be executed between early 1995 and April 1998. This innovative selection strategy, in which social criteria were later to be 'superimposed' on an area of high conservation value, was a result of the realisation that the project would be dependent on local people for the success of the project. In contrast to what one would expect on the basis of this site-selection procedure and the professed emphasis on social criteria, however, the first interventions in the Jimi Valley and Bismarck Fall were not used to become thoroughly acquainted with the local social and economic landscape. Instead, they became dominated by the conduct of a biological survey.

THE APRIL 1995 PATROL INTO THE MARUM AND RAMU SECTIONS

The first patrol into the Bismarck-Ramu area was held in April 1995 when a team led by the project biologist, also including a British social anthropologist from the NRI, a historian from UPNG who was from the Bundi area and two DEC personnel visited the Marum and Ramu valley sectors of the project area. The objective of the patrol was to gauge the interest of local residents in a possible ICAD project and to put a set of questions to knowledgeable informants with regard to biological, cultural and economic features of the area. The patrol flew into the Marum Mission station and in the following 10 days travelled northwards on foot to Tigari, from where it was airlifted to Pimbum where an airstrip was under construction and walked past a number of villages to Foroko-Brimde.

The mountains in this area are extremely rugged and covered with primary forests. Large rivers cut through steep valleys and can make river crossing a hazardous experience. The villages surrounded by gardens and secondary forest are few and far between and usually consist of about 5 to 20 houses. Education and health services are non-existent in most places and although Government officers may now and then pass through, they never return to bring the lasting change that they often promise. The arrival of a group of outsiders, using helicopters, displaying wealth

and including 'whiteskins' was a momentous occasion in these villages and generated a lot of excitement.

The aim of the patrol was to get a first impression of the biological and social landscape, while also starting its environmental awareness campaign. To do so, an opening speech was held in every community, which was followed by a question-and-answer session with the public. The contents of this opening presentation are interesting as they reveal key aspects of the ICAD approach taken during the opening stages of the Bismarck-Ramu project. The public meetings between the project staff and villagers usually took place in the village square and were followed with more detailed 'storying' sessions at night in the men's house. When the meeting started, under a tree or underneath a house on poles, the respected elderly men and younger men with some education would sit in front, smoking and chewing betelnut and lime with at the back the other onlookers and women and children. Groups of youngsters would sit on the edge of the meeting playing cards, pretending not to be part of it all. These public meetings were often chaotic with a number of conversations in Tok Pisin, and 'tok ples' going on simultaneously and the different speeches punctuated with comments by bystanders on the appearance and behaviour of the newcomers. With the exception of the Big Men listening attentively up front, people wandered in and out of the meeting as it unfolded. Women especially had difficulty understanding Tok Pisin and had household chores to attend to and children to look after.

The opening speech prepared by the team was held in every village contacted on the way and introduced the team and the intentions of the project. It also started with some awareness raising about the potential impact of resource projects on the environment. The presentation was held by the American patrol co-ordinator and project biologist, and was translated into Tok Pisin and the local language by one of the scientists or interpreters that came with the patrol. The speech usually started off with a discussion of three different groups of people and their interests with regard to land use and development: 1) those that wish to exploit local natural resources, 2) those that wish to conserve them and 3) the customary landowners, i.e. the onlookers during the speech. The villagers were told how different types of land-use and resource exploitation in PNG are linked to different rates of development. If development comes 'too slow' then people will get frustrated with the speed with which their lives improve and the old people will complain that they will die before having received any benefits. However, if development is 'too fast', it may be short-lived and unequally distributed. In other presentations the choice was presented as between 'big' development and resource depletion on the one hand or gradual and 'small' development with conservation on the other.

People were told that in the near future, they would need to decide which rate and form of development would be best for their purposes and which type of development would maintain a balance between their present needs and those of future generations. Outsiders such as logging and mining companies that come and bring 'big and fast development' may have no interest in the long-term impact of

their activities and whether the benefits are lasting or not. The interest of the project, however, was to assist people in getting the right balance between 'conservation' and 'development' and the project team wanted to know what the people thought of about the idea of 'exchanging' conservation for development 'in ways which bring gradual but long-lasting benefits to the community' (Filer *et Al.* 1995; 9). The speech held during these initial patrols was clearly influenced by the Lak experience as its main topic was the possibility of logging and mining companies cheating local people out of their natural wealth by making grand promises with regard to the developments, services and cash that they would deliver. The 'gist' of the speech went as follows:

> 'Thank you for accepting us warmly and allowing us to spend the night here. We are not representatives of any mining or timber companies. Unlike the mining and timber companies, we have not come to exploit and destroy your resources, but rather because we want to help you to protect your resources for yourselves, for PNG and for the world at large, and for your future generations. We are interested solely in conservation and do not support the unscrupulous exploitation of the environment. We want to ensure that your pandanus trees are protected, your hunting grounds safeguarded, your rivers not polluted and your sacred sites not disturbed. In fact, we want to help you conserve the area between Mount Wilhelm and the Ramu Valley so that little disruption occurs to the eco-system as it now exists. If you agree to work with us and support our conservation plans then our project will assist, obviously not straightaway, but gradually over a period of time, to bring various 'developments' such as roads, schools, health clinics or walkabout sawmills to the area, however, and most importantly, any 'development' brought to the area will always be at the specific request of the people of the area. Our project will on no account initiate projects on its own' (Filer *et Al.* 1995: 27).

It is doubtful whether this presentation was understood as it was intended. In the first place many of the terms, when translated into Tok Pisin, lose the specificity that they have in English. Concepts such as 'nature', 'biodiversity' and 'ecosystem' become *'olgeta samting i stap insait long bus na graun na wara'* ('everything that is in the bush, on the land and in the water'). 'Conservation' becomes *'lukautim bus na graun na wara'* ('looking after bush, land and water') something which landowners regard themselves as already doing, be it that they interpret it mainly in a territorial sense by maintaining their claims to the land that their ancestors used. Nature itself is not something that people easily take responsibility for (See last section of chapter 4 for a discussion of local attitudes to nature).

In addition, the speech is based on a number of premises. In the first place the project team assumes that those listening share its analysis that natural resources are under threat, a questionable assumption in large parts of the Bismarck-Ramu area (VanHelden 1998b). In the second place, the project assumes that if people do not yet understand the vulnerability of their environment, they can be made aware of the problem and their essential role in the sustainable management of nature. Instilling a conservation ethic is thus in the first place a communicative problem in which people, once they are aware of the 'facts', are expected to do the right thing.

Thirdly and finally, the team assumes that ultimately the interests of all stakeholders, the onlookers, the nation, the world and future generations coincide and lie with the conservation of natural resources. As the experience in Lak had shown, however, villagers in PNG may prefer to see the 'unscrupulous exploitation' of their environment as an opportunity to adopt a different lifestyle.[46]

The project also makes clear that its interests lie with conservation of the ecosystem and does not have development as its prime concern. The project team primarily wants conservation *from* and *by* local communities, with the bringing of development *to* local communities as a means to achieve conservation. This approach reflects the fact that in the context of PNG land tenure the only way to conserve biodiversity is by going through the local communities that own that biodiversity. While the speech underlines the authority of local people over resources and makes clear that it will on 'no account initiate projects on its own' it also implies that people may loose out if they do not co-operate. Those that agree to work with the project will benefit, those that do not, obviously will not.

'Development' is here presented as the sweetener that is to make 'conservation' palatable. It is a *deal*, in which the project brings local people some form of 'development' and local people give the project give 'conservation'. The notion of an 'exchange' of conservation for development, the crux of the ICAD concept, would pop up in all village meetings:

> At Gulno the Tunka people 'said that they are prepared to offer their bush for conservation and would be happy to work closely with the ICAD team for any small development that would come in the future (CRC 1995b: 10).
>
> At Pimbum DEC staff stated that 'If you offer us your bush to look after, we will look out for small developments for you in the future'(CRC 1995b: 39)

From these meetings it appears that people may not have perceived 'conservation' as something done for and by themselves but rather as something that is done for and by the DEC in exchange for which they are rewarded with 'development'. The Jimi community facilitator for example, stated at Bubkile that: 'If *we* [the Jimi people] look after our bush *for them* [the DEC] in the long run they might help us with some small developments e.g.: aidpost, school, etc.' (CRC 1995b: 33 my italics). This reflects the 'economic' premise underlying the ICAD method, namely that people are only willing to conserve if the opportunity cost of their conservation efforts is off-set by income generating activities and the provision of services.

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[46] The choice of words between 'fast' and 'big' development on one side and 'slow' and 'small' development on the other is a tricky one. Any rural PNG asked out of the blue which variety he would like better would probably like it 'big' and 'fast'. People like big pigs and big *kaukau* (sweet potato), take pride in making large gardens and prefer to belong to populous tribes. 'Big' is often synonymous with 'good'. People are tired of waiting for change: they want a hugely better life, and they want it right now. 'Small is beautiful' remains a difficult message to get across' (Weeks in Brooks 1996: 27).

During the Bubkile biological survey of October 1995, the team went a step further in illustrating its commitment to conservation by making a short speech about the origin of conservation monies. It illustrated this with a map showing PNG in the middle surrounded by 4 countries called USA, Europe, Australia and New Zealand, with arrows labelled 'Kina' denoting the flow of conservation funds from these countries to PNG. The report explains:

> 'We reviewed the concepts of extinction and went on to explain that many people were concerned about the problem. These people are willing to send money to do conservation and this conservation money comes from many places. The most important place is money from PNG. This money comes from the Government. The DEC is part of the government. Money also comes from different countries outside PNG. Here men and women ask their governments to protect all plants and animals in the world. When they send money they also send people to help to do the work. That is why [we]... have come to help the government of PNG to protect animals and plants. Response from the people 'now we understand you better. Thank you' (Hedemark *et Al.* 1997: 57).

The emphasis on development and money attempted to clarify why foreigners are prepared to pay for international conservation, but also introduced a misunderstanding around the notion of value. Whereas the conservationists tried to explain the importance, 'the value', of biodiversity in terms of its benefits to humanity and future generations, local onlookers interpreted the fact that other people were prepared to pay money for conservation to mean that leaves and animals had *cash* value. In Gulno, following the biological survey local leaders stated that until the conservation team came in 'they did not think the bush was worth anything other than subsistence to bush people' (Hedemark *et Al.* 1997: 57). Thus while the team in its presentations also emphasised the importance of conservation for local livelihoods, the team also fed into the growing perception of rural Papua New Guineans that minerals and natural resources provide a short-cut to 'development'. Following the start of more intensive patrol work and the biological survey, the money issue would come to play a prominent role in the discussions between people and project.

In addition, by focusing on the issue of exchange, without taking time to become acquainted with local people the team went against the grain of Jimi culture where reciprocal exchange is based on the existence of a social relation which becomes expressed through gift-giving and mutual collaboration (VanHelden 2001a). To have a group of outsiders suggest a novel form of exchange, without spending considerable time together and without establishing a modicum of mutual trust is anathema in the Jimi Valley, where economic transactions are always embedded in, and constitutive of social relations. Relations with strangers, however, are devoid of a social relationship and – as a result – open to treachery, haggling and violence.

PEOPLES PESPONSES TO THE PROJECT'S ENTRY

It is obvious from the above that the first patrol members who made this speech and their onlookers were talking at cross-purposes. On the one hand there is a set of underlying notions with regard to the concepts of 'development', 'conservation' and the complicated relationship between them. These notions are buttressed by the assumption of a shared perception of the vulnerability and value of nature and the need to 'conserve' nature from the ill intentions of business-minded outsiders. It is doubtful whether much of this conservation idea meant anything to the onlookers, with the exception of one or two more educated and travelled people. On the other hand, however, there is the bait that is presented in the form of the talk about money coming for conservation, the provision of services, and small 'developments' in the form of infrastructure and income generating activities. During the speech as presented here, there was mention of income-generating activities such as walkabout sawmills, while on other occasions chicken farms, orchid farming, butterfly farming, crocodile breeding and eco-tourism were mentioned. This reflected the ICAD approach.

People's responses to these presentations wavered between pragmatism, scepticism and excitement but were obviously in favour of the project. Many may not have been entirely clear as to what the project wanted, but the possibility of *some* change was enough to make people want to co-operate. For many rural communities in PNG, the nature of 'development' has become less important, as long as there is some hope for change. The first patrol report notes how 'the people of Marum are now inclined to say 'yes' to any kind of proposal which offers the faintest hope of 'development', but without any confidence that this will actually materialise' (Filer *et Al.* 1995: 45). At Akiai, Mr. Kavare pragmatically noted that as there was no way of getting a logging company into their rugged area, the people had nothing to lose by supporting another form of development. They might, however, wish to allow logging on the more accessible portions of their homeland. He noted that people in Bundi knew how to look after the environment and thought that they could kill 'two birds with one stone' by continuing to practise their 'traditional' conservation methods while at the same getting some kind of development from the project (Filer *et Al.* 1995; 44). Some of the Bundi people further down the valley were rather more sceptic. The polite Mr. Nogonda from Tigari for example

> 'said he had no problems in understanding and supporting the proposal for a conservation area, but he had some difficulty in comprehending the commitment to bring 'integrated development' projects into the area, because outsiders had made similar undertakings in the past, but the people had nothing to show for it. As a leader concerned for the long neglect his people had suffered, he had on each occasion expressed interest in such proposals - whether for a mine, a road, a school, a health clinic, even for a church - in the vain hope that 'development' of some kind might come to his homeland. But, however well-meaning the proponents, none of these promises had been fulfilled, so even if he desperately wanted to believe that something would finally happen before he died, he could surely be forgiven for remaining sceptical until it did' (Filer *et Al.* 1995: 45).

Mr. Nogonda may have been right in his judgement for the project would only return to Tigari four years later. By then the talk of 'bringing development' had ceased as a result of a change in philosophy.

The Jimi settlers living between Pimbum and Foroko-Brimde in the Ramu Valley responded with more enthusiasm and clearly saw an opportunity in inviting the project in. The helicopter dropped down in the bed of a river near Pimbum and people welcomed the team by slaughtering a pig for them. One of them, a hardworking contributor to all following patrols, would later be employed as a radioman. It also turned out that a Jimi geology graduate from the University of PNG played an important role in the search for development opportunities in Pimbum. He was responsible for co-ordinating the building of an airstrip there and local people had built him a house to live in. The Pimbum people did not tell the project team that his other intention was to bring a logging company in, but referred the project to him for further questions. The graduate was later tracked down in the Jimi valley and recruited as community facilitator to work for the project. During the next visit in September 1995 when he was present, the Pimbum people would officially agree to work with the project. The new community facilitator had his own reasons for being part of the project, as he would use it to run for office in the 1997 national elections.

During discussions in Pimbum the Jimi settlers argued among themselves about their understanding of 'conservation' and 'development'. Some suggested that they had come down from the Jimi to hunt for birds, although others asserted that these were now 'finished'. They now had to look for some other form of 'development'. It follows from this discussion that the hunting of birds for sale was equated with 'development' (Filer *et Al.* 1995). One man in the area knew about the history of the 1970s Proposed National Park and was able to explain better what a conservation area meant. He mainly wanted to know how local landowners were to be involved in the project and how and where the project was going to set up offices. He also suggested that a local 'committee' had to be set up. The report notes that

> On one hand this meant that he was able to clear up some of the confusion which had been evident in the responses to the ... speech at PIMBUM. One the other hand, it meant that he was keen to hear our answers to some of the more delicate questions involved in the establishment of an ICAD project, most notably those concerning the organisation of landowner participation and the spatial distribution of material resources' (Filer *et Al.* 1995: 56).

Issues such as the location of the base, the establishment of 'committees', the participation of landowners, would become a recurring theme in all future patrols as the different clan groups tried to pull the project and its resources towards them. It has to be noted that most of these discussions were confined to the Jimi settlers living at Pimbum and Brimde as the Ramu landowners generally kept their distance from the public meetings. At Foroko, the NRI Anthropologist had a separate evening discussion with one of the few remaining Inja landowners, as the man preferred not to speak in public. This discussion made clear that although the Jimi

settlers were much more numerous and aggressive in their public presentation, the Ramu clans regarded themselves as the 'true landowners'. The report noted that 'the most obvious priority' would be to conduct meetings with the Ramu landowners (Filer *et Al.* 1995: 59).

THE SEPTEMBER 1995 PATROL: MONEY, TALK AND VIOLENCE

Five months later a second patrol was organised to walk down from Bubkile in the Upper Jimi towards Pimbum in the Ramu valley. The patrol team consisted again of the Project Biologist, a newly recruited New Zealand Conservation Area Advisor, the recently employed Jimi community facilitator and two DEC staff. The objectives were the same as in the first patrol, with the additional objective of identifying sites for a forthcoming biological survey in the Bismarck Fall. The team was air lifted to Bubkile by helicopter from the nearest road, where the provincial radio station had advised the people of its pending arrival. It was market day and there were as many as 200 people to welcome the team. The meeting took much the same shape as it had during the April patrol, but the group of onlookers was much larger. After the team had been introduced, several team members made speeches starting off with the fast versus slow development speech by the team leader followed by speeches by the community facilitator.[47] After these speeches permission was requested to hold a biological survey in the area in the following month.

As during the first patrol, people were very welcoming to the team and a big man, who claimed to speak on behalf of the whole Kema clan-cluster, gave permission for the survey to proceed. Other big men among whom one was a councillors and another a peace officer agreed. They insisted though on being informed of anything happening in the area and emphasised that the team could not forbid the community to talk to logging companies, a statement, which was readily acknowledged by the patrol team. The team interpreted these responses as 'signs of considerable enthusiasm toward the ICAD notion', noting that they were later presented with a well-prepared dinner of vegetables and chicken. The report states that 'traditionally this practice [of sharing food] is a sign of welding a lasting relationship and acceptance by the community' (CRC 1995b: 32).

THE NATURE OF 'GOOD BUSINESS'

During the next week the team, accompanied by 12 carriers, travelled down the Bismarck Fall past a number of small hamlets in which the ICAD project pitch was repeated. Along the patrol track a number of potential helicopter pads were marked and partially cleared for the forthcoming biological survey. During the patrol, there

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[47] A DEC team member unexpectedly went into his experiences with police brutalities at the Porgera mine. This latter speech seems to have had little bearing on the ICAD ideas that were presented and the array of ideas conveyed must have been quite bewildering (CRC 1995b).

were continuous discussions about the rate of pay and the number of people that were to be recruited. On departure the team

> 'negotiated for 8 carriers. The carriers were selected from every tribe. During the discussion on pay rates the carriers said the packs were too heavy and that they wanted to take extra men to switch the loads. We ended up with 12 men. At the start of the trip we also had 4 women, 2 pigs, 3 dogs, 6 young kids and 2 girls. [This]... resulted in about 40 people. Included in the cargo of the locals were one homemade shotgun, a rock hammer, a baby and a gold pan' (CRC 1995b: 6).

It was decided that the carriers would be paid 8 Kina per day, substantially more than the Government rate of 5 Kina per day. The next day, however, there was the first wage dispute, as the carriers wanted to be paid more than the agreed rate, while two of them opted to return to Bubkile. The original rate was maintained and the returnees were each paid the stipulated sum. Three days later, when the weight of the provisions had been reduced, three carriers were sent back to Bubkile and a discussion over their pay ensued. The carriers stated that the job had been much harder than expected, but were told

> 'that 8 is 8 and that we provided food and that we had hired extra men to help with the load. We also told all the carriers that if all equipment was present at the end we would pay them all an extra K10. The three returning carriers should therefor receive 4x8+10 = 42 Kina. During this [one of the carriers] became very animated and vocal, pulling individuals aside to talk and moving from one to another. He was especially argumentative and seemed to be the main one pushing for a change in the original agreement. During the pay out [one of the DEC employees] paid each man the equivalent of 10 per day plus the bonus (total K50). When [the team leader] determined what had happened, it was too late to recall the money' (CRC 1995b: 14).

Later that day, the team leader came back on the wage argument. His concern was that the success that the three carriers had had at haggling for more money would influence people's attitudes to the forthcoming biological survey when a larger group of workers was needed. He told the carriers:

> 'you cannot change your minds after you make an agreement. This is not good business. Let me tell you a story. Suppose you want to buy this rucksack. You say how much. I say 40 Kina. You say that [is] too much so I say 30 Kina. Now you say OK and you go get the money from your friends. Now when you come back I change my mind and say 40 again. Now you should be mad and you should say I will not pay because we made a deal.' (CRC 1995b: 37).

The term 'good business' is revealing as it illustrates the basic assumptions used by the project team in its dealings with the Jimi people. Although its presentation to local communities is framed in economic terms as an exchange between conservation and development, the underlying notion is that this exchange, the joint development of an ICAD project, is grounded in mutual trust, respect and co-operation. Business based on mutual trust is the basic premise from which the team operated. This view, however, does not automatically apply to the highly

competitive social organisation of the Jimi people whose sense of morality is in the first place related to social distance. An outside body such as the project, affiliated with a state that has let them down is not necessarily subject to moral considerations, but more likely to be treated in an instrumental and opportunistic manner.

In addition, the Jimi notion of 'business' is fundamentally different from that used in western society. Whereas the Western concept is based on notions of long-term investment and continuity, to many Jimi business enterprises are short-term investments aimed at meeting a temporary need for money. Consequently, agreements tend to be short-lived and permanently open to renegotiations. Especially transactions with strangers are open to what in pidgin is know as 'traim tasol' (just try), a short-lived opportunistic attempt to maximise immediate benefits at the expense of long term relations. In rural PNG, a 'bisnis' that results in the achievement of a set goal and then ceases to exist is considered a success. People talk about 'doing bisnis' as opposed to 'having a business'. Bisnis is not necessarily seen as something ongoing and the life of an individual may thus include many successful acts of 'bisnis' none of which last for very long (Brooks 1996). Here again the implicit assumptions of the ICAD project team, that its economic proposal of exchanging conservation for development would not only be based on mutual respect but also on a long-term view proved at odds with locally held conceptions.

Opportunistic behaviour aimed at a short-term gain was not only displayed by some of the carriers. At one stage, as the party camped by the river

> 'a young man called Konmo Buka walked into the camp swinging his bushknife and demanding 30 to 50 Kina in compensation for camping and cutting down saplings to make our shelters... [The community facilitator] tried to talk to the man but he would not listen... After 45 minutes [the patrol]... gave Mr. Buka 30 Kina' (CRC 1995b: 10).

Two of the carriers of the party each contributed 10 Kina to the compensation payment. The next morning a local magistrate visited the camp. The party explained the trouble with Mr. Buka and called on his duty as government official to resolve the conflict.

> 'The magistrate then went to the top of the hill and called out to Konmo. Konmo eventually came down and a long discussion ensued. [Later]... the situation was resolved. Konmo gave the money back and joined the expedition as a carrier. [The community facilitator] said that he was able to convince Konmo that he had initiated the patrol and that we were not miners and had no timber interests even though there were whiteskins in the group... [and] told him we were interested in working with him in the future because he was young and his father was old' (CRC 1995b: 11).

This short passage shows a number of people jockeying for position vis-à-vis the project. In the first place, Mr. Konmo Buka sees an opportunity to extort some money by claiming that he ought to be paid for the party camping in his area.

Swinging a bush knife always helps to make one's point. In the second place, the community facilitator, recruited by the project with the task of dealing with local people and communities initially sees no other option than to give in. Two local carriers sensing that this might affect the willingness of the project 'to work with them' chip in.

After lengthy discussions in which the magistrate and the community facilitator will no doubt have invoked the possible benefits that are to be derived from the project's presence and the risk of chasing the 'whiteskins' away, Konmo Buka agrees to pay the money back. Instead he becomes a carrier in the party thereby earning the money he needed. The community facilitator now claims both credit for solving the issue towards the Biodiversity Program and towards Konmo Buka and the magistrate by arguing that he has taken the initiative for the whole patrol and project. The argument that basically he is responsible for all the good derived from the project would constitute the basis of his election campaign. Thus in the short time that the patrol team passes through the area the community facilitator establishes some sort of clientalistic order by incorporating outspoken and belligerent individuals into the ambit of future project activities. The team leader and the conservation manager, have no choice but to await events. They do not speak the local language, find themselves in the middle of the jungle three days walking from the nearest village of any size and are totally dependent on their carriers, personnel and local people.

An issue, which the expatriate patrol members found hard to deal with constituted the level of violence, encountered during the patrol. On the second day of the patrol, a fight erupted between the first and second wife of one of the carriers during which the first wife threatened the second with a bush knife. When the men restrained her and took away the knife she took a big stick and used that to drive off the second wife. A few days later a similar event took place when it appeared that Papa Kol, a Jimi settler residing in the Ramu Valley and returning home with the patrol, had taken a new and second wife with him. He went ahead to prepare food for the patrol but before arriving at his house the patrol was met by Kol running back up the road, a short while later followed by his first wife, who was brandishing a huge stick and bush knife. The report recounts how:

> When we arrived at the house, Kol had circled around and was now leaving... He told us to rest and enjoy [the food] that had been prepared and left. Two minutes later the wife came into the house clearing and followed Kol towards the river. A few minutes later we heard yelling and screaming and several of the carriers ran to investigate. ...The wife returned with a very swollen right eye and cheek. (We could not tell at the time if the eye had been removed)... A few minutes later a carrier came back and said that Mrs. Kol had opened a huge gash in Mr. Kols head' (CRC 1995b: 30).

The team leader was so disgusted with the violence that he refused to eat the food that he was offered. He did not want to be seen as condoning domestic violence and went as far as saying that the food was poisoned. By Jimi standards, where the

sharing of food is a part of building up relationships the refusal to take part in a meal is a serious insult and a culturally appropriate manner to make one's displeasure felt. The team was thus not only discussing issues of conservation and development, but also actively aimed to modify the behaviour of the people it was working with.

Just before reaching Pimbum the team leader decided to pay the carriers as it is never a good idea to do so when many people are around. People who have not carried loads become envious, those with money in their pockets will be unable to keep it from the claims of their kin and some people may get the idea that the patrol can be relieved of its money by force. The team leader, remembering the April patrol when he had seen how carriers used their money to play cards, decided that he should give a lecture on the role of money in development:

> 'Remember our talk in Bubkile about fast and slow development? Today we will pay you. What you do with your money is your business, but the members of the first patrol were very unhappy to see the Gende men gambling with their money when they reached Foroko. If you want development you have to use your money to make life better for you. Drinking and gambling will make it worse and this is not the kind of development we want to bring you. You should buy tools, clothes, medicine and pay school fees' (CRC 1995b: 38).

Upon arriving at Pimbum, the patrol team emphasised the fact that it wanted to build a good relationship with the community, but that it was annoyed by the continuous attempts by some people to extort money out of the team.

BACK AT PIMBUM

The people at Pimbum were happy to see the patrol leader and his team and emphasised that they had not really believed that he would come back. Their experiences with Government personnel were such that people came once, made speeches with big words and many promises and were then never to be seen again. They also welcomed the university graduate in his new role as project community facilitator. Now that their clansman was there, they could say that they were very interested in 'working together' with the ICAD project. The patrol report then shows how the Pimbum people immediately started to enrol the project team into assisting them with the building of the local airstrip, a project with which the community facilitator had been involved up to that moment. One of the local Jimi Big Men, pointed out that 'as you can see, this project is incomplete and your access to the area will continue to be difficult until we have the airstrip completed....' In response, he was told by the patrol team that 'we can help you and [the community facilitator] find money and talk to people about completing the project' (CRC 1995b: 39-40). Later the project would fund the survey of the airstrip.

In addition, the people offered land for the project headquarters at Pimbum and wanted to know how local landowners were going to 'participate' in the project. The team responded that it could assist with the building of the Pimbum airstrip, but

that it would discuss the establishment of a base only later. The team however, was suitably impressed with the friendliness of the local people and the opportunities of establishing a small base near a future airstrip in the middle of the area of interest. The lack of access had been one of the main drawbacks of the area during the site-selection process and a recommendation of the September patrol report thus suggests that: 'the airstrip project should be given ... support to expedite completion' (CRC 1995b: 40-41).

The team moved on towards Foroko-Brimde, but did not spend any time in that village, flying out the same afternoon. Notwithstanding the recommendation from the April patrol to give priority to the position of the Ramu 'landowners' in the area, the team did not meet representatives of these clans. Instead, it relied on information provided by the Jimi settlers and especially the Jimi community facilitator. This reflects the focus of the patrol, which although collecting sociological information, was in the first placed used to organise the upcoming biological survey. The reason for this focus on nature lay with the fact that in contrast to the April patrol, the team was dominated by biologists and conservation managers with a professional inclination to focus on nature rather than on its users. In addition, the process was under pressure from the political-administrative requirements of the donor. Without a strong scientific assessment of local biodiversity, the Biodiversity Program in Port Moresby would be in a difficult position to justify its expenditure of GEF money. Only when the significance of local biodiversity has been confirmed could the project make a firm commitment to the Bismarck-Ramu area. Consequently, the technical determinants of conservation and the legitimising requirements of the donor went before the need to establish a working relationship with local communities.[48] During the October biological survey, the question whether conservationists 'make money' by doing whatever they do, became a source of problems.

WHO IS BAITING WHOM? A REVERSAL OF ROLES

Before the October 1995, biological survey started something interesting happened. PNG is a large and geographically highly fragmented country, but news travels fast and many communities and landowner companies take every possible opportunity

[48] This focus on nature would also become explicit on two other instances. During the patrol the team members were much impressed by the natural resources and bird life that they saw, emphasising its beauty and uniqueness during their community speeches. The focus on nature, rather than people became a source of friction and misunderstanding on a number of occasions. The first such instance happened when a bird watching patrol member admonished a local youngster at Kol to be quiet and not to shoot birds with his slingshot as he was trying to look at them. Instead of shooting at birds the youngster shot stones at the bird watcher for telling him off. The patrol report noted that a man present during the incident 'seemed powerless to use adult authority to discipline another person's child' (CRC 1995b: 30). A second instance happened when the same bird watcher told two women walking behind him in the forest to be quiet because he was trying to look at birds. This behaviour shocked bystanders, whom for a start had no idea of bird watching as a past time and did not expect married women on their home territory to be addressed in such a manner by strangers (PC Konda).

to draw the attention of government organisation and aid agencies. Well before the survey had been planned in detail, a letter addressed to the Biodiversity Program offered the project a one million hectare conservation area in the Middle Ramu, west of, and well outside the designated area of interest. The letter written by a clearly educated person from that area requested

> 'your urgent support in arranging for a biotic survey team for specimen collections. We therefore need to inform you that, you contact us for advance schedule for the survey of this 1,000,000 hectares conservation. Could you prefer to arrange for an early date in the month of October 1995 for the biotic survey' (Ade-ik Gulali to CRC 18 August 1995).

The letter ended with the comment that 'prior to the commencement of the survey, we also need to agree in principles as requested by us' and a flourishing 'For the Earth' above the signature. The team leader replied by asking for more details, which arrived after the September patrol containing the name of the village, a sketch map of the Middle Ramu area and the comment that

> 'It is important that you consider arranging this 1,000,000 hectares conservation through a landowner company group for support and participation from this area which I also represent' (Ade-ik Gulali to CRC 03 October 1995).

The issue was not pursued by the Biodiversity Program and it is unknown how this local group had gained its information. The timing and contents of the letter betray a detailed understanding of the issues at play within the Biodiversity Program, and suggest that the group had a contact within DEC who saw the possibility of his home area linking up with the Bismarck-Ramu project. What is interesting is that this approach mirrors that of the project team. Whereas the project patrols presented 'development' as a means of exchange to achieve conservation, this landowner presents a huge conservation area in a remarkably conservationist and participatory terminology as bait to the Biodiversity Program . Obviously it is 'important' that the author of the letter and his landowner company 'facilitate' local support to the project, based on 'principles as requested by us'. This phrase that makes clear that conservation is not the only issue at stake here and that the landowners company intends to control the resulting activities and benefits.

THE BUBKILE BIOLOGICAL SURVEY

The Bubkile biological survey of October 1995 was an impressive logistical feat. A team of biological experts of both expatriate and PNG origin and their support staff, which included the Jimi community facilitator, were airlifted into the Bismarck Fall to conduct a survey of local biodiversity. Whereas the project area had initially been selected on the basis of a number of comparative biological indicators, it was now time to confirm the expected high levels of biodiversity on the ground. During the September patrol the team had identified four camps and cleared three helicopter-landing places to enable sampling at altitudes ranging from 2600 down to 200

metres ASL. The camp and sampling sites were located on an existing trail from Bubkile to the Ramu valley and were thus accessible to the carriers that would shift large amounts of gear and samples between the camps. The first and highest camp, located on the ridge above Bubkile village provided the starting point, after which the team moved downwards, spending five days at each of the four sampling sites. A helicopter ferried the team and its gear in and out of the Bismarck Fall and would re-supply the team halfway during the survey.

The total operation lasted 24 days and started from the road near Kol. From here, the helicopter airlifted staff and gear across the Jimi River onto a ridge above Bubkile Village. The helicopter did not stop at Bubkile to inform local leaders of what was happening as this had already been done during the September patrol. As the team made camp on the ridge, it started to rain and there was no time to carry the goods to the designated campsite. The next day sampling started, while the camp was being expanded along the narrow ridge. By noon, the camp was full of spectators from Bubkile hoping to work. As it was pouring with rain the onlookers tried to find shelter in the kitchen house and the patrol leader found himself standing in the rain without anywhere to go. According to local stories there was one instance where he lost his temper, sending people back to their village. As the patrol moved away from the Jimi Valley and the weather improved, the problem of having large numbers of people in the camp became less acute.

When the survey started, a number of local people, some of them known from the last patrols and considered reliable were recruited. Haggling about the number of people needed and their pay continued throughout the survey, and were dealt with by the community facilitator. The original plan had been to recruit 15 men from the clans on whose land the survey was working, so that they could be trained in certain aspects such as trap and net setting, specimen preparation and general maintenance. Those present, however, insisted on men being recruited on a daily basis so that employment opportunities would be spread wider. This was accepted but made the logistics much harder. Firstly, because training in the specific tasks had to be repeated over and over again, in the second pace because the wage schedule became complicated, and thirdly because bonus payments for good behaviour at the end of the patrol failed to work when a rotational labour schedule was applied.

A source of frustration to the patrol would be that there were continuously 'workers' and 'watchers' hanging around, but that simple things like having the plates washed and extra working tables erected were not done. Where men did 'volunteer' to work this was not always a success: three men from Bubkile cut five birds out of mist nets thereby destroying two nets, but still expected to be paid for their services. They were instead told to pay compensation for the ruined nets, which they refused. The resulting discussion at least meant that for the remainder of the survey the nets were left alone. People, however, continued to find ways to have more men recruited. At the first camp for example there was the rumour that strangers had been seen and that 5 men should be made responsible for general security and be given five shotgun shells each. It is very unlikely that any 'stranger'

in the area would have presented a threat to the survey with its many participants, but the team bought the story and five additional men were recruited and each provided with two shells. [49]

If it were difficult to find a reason for extra people to be recruited, local clans would insist that they be given the right to work when the survey entered their clan land. Thus at the Kanel River when moving from camp one to camp two, the survey team was met by a large group of people from Gulno who were adamant that the Bubkile carriers be sent home and that they, the 'true' landowners of that area, be given the job to do. This is common practice in PNG and often goes accompanied with loud and intimidating discussions and – from the point of view of local people - preferably involves the patrol team paying both groups for the same day's work. These discussions about the level of wages and the right to work reflect the fact that the survey was regarded as an interesting source of cash earnings leading the various clan groups to assert their right to work in the face of competing claims.

The team was not prepared to find that local labourers were poorly equipped for the cold weather. It rained a lot during the survey, a time when people usually do not work and simply stay at home, but the team was surprised to find that none of the workers had warm clothes to wear at higher elevations. This constituted not only a problem for the local men but also for the scientific staff in their sleeping bags and tents as

> 'it appears that the means to deal with cold weather is to sit up all night around a fire and sing. This has the deleterious effect that the men are tired in the morning and cannot work and that the scientists are also tired from being kept awake. As the patrol progressed the men did become more organised, yet many were found sleeping in the sun during the day' (Hedemark *et Al.* 1997: 59).

As a lack of sleep began to take its toll, the team leader had to ask the men to be quiet so that the scientists could get some sleep.

Five days after the survey had begun the survey leader and the community facilitator went down to Bubkile village to explain to local people once more what was going on. As a token of appreciation the team presented the sum of Kina 50 (U$ 62) and a flag of PNG to the school at Bubkile. Local people were also asked not to steal traps. A maternal uncle of the community facilitator living at Bubkile was asked to store the specimens in his house for the duration of the survey. The work and pay schedule for carriers and other workers were also discussed. The next day the patrol moved on to camp two, employing no less than 42 carriers to shift all the gear. Camp was set up in the clearing made during the September patrol and sampling continued. Here a new dispute over pay rates ensued in which Konmo Buka, the same angry man from the September patrol, 'held a loud and animated

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[49] What may have played a role in this assessment was the fact that local people are known to grow marihuana and that the team had difficulty assessing the extent to which this activity constituted a threat to its activities (See section on law and order in chapter 4).

discussion'. At least this time he did not wield a bush knife (Hedemark *et Al.* 1997: 59).

Theft was a problem during the survey. With the earlier patrols, this problem had been dealt with by promising a bonus if all gear proved complete at the end of the trip. This strategy worked reasonably well as the September patrol report notes that when a bush knife went missing 'it was found in ten minutes after a reminder of the loss of bonus agreement' (CRC 1995b: 14). With a daily turnover of workers, however, such strategy did not work, and over the course of the patrol boxes of cheese, cans of bully beef, a big bag of rice, two shotgun shells, bat food and spoons and bowls went missing. The item most regularly lost were rat traps of which 13 disappeared, possibly as bandicoots ran off with them on the end of their noses. The community facilitator, however, recovered four traps from Bubkile as a number of 'small boys had found them and carried them off' (Hedemark *et Al.* 1997: 63).

In camp three the helicopter dropped off a bat scientist who had been unable to join in from the start and took out the specimens that had been collected from camps two and three. The specimens of camp one stayed in Bubkile for the time being. The helicopter had difficulty finding the camp in the forest and the team had to guide him in by radio. Its arrival led to a great deal of commotion and at one moment became very dangerous when people, unaware of the danger of the rotor blades, rushed towards the helicopter. A man from Gulno, who was ill with malaria, was allowed to fly out with the helicopter with one other person to accompany him. In the melee, people who wanted to fly back to Kol besieged the team leader with requests. Eventually a councillor was let on in the confusion. This led to a discussion between the community facilitator and the team leader, the latter angry by the constant demands on his attention and frightened by the potentially lethal risk that a helicopter landing in the midst of a group of excited people entailed. A casualty during the survey would not only have meant the end of the project but could also have led to immediate physical retaliation on the team members.

Notwithstanding these annoyances and the logistical difficulties that resulted from the extreme remoteness of the area, the survey progressed well. In total 28 species of mammal, 108 species of bird, 5 species of reptile, at least 18 species of amphibians, 51 butterfly species and 730 plant specimens were collected and recorded (Hedemark *et Al.* 1997).[50] On the evening before departure, the Tunka people from Gulno village near camp four expressed their appreciation by presenting the team

[50] Later analysis of the specimens revealed 15 new plant species, a finding which in terms of biodiversity contrasted favourably with the 2 and 8 novel species described from comparable surveys in New Ireland in 1994 and the Lakekamu basin in 1997. Most impressive was the rediscovery of the black-spotted cuscus (*Spilocuscus rufoniger*). This species of tree kangaroo is PNG's largest mammal and its collection by the biological survey was the first time that such specimen had been collected in 50 years. Only 15 specimens of this species are kept in the world's scientific collections and its discovery meant that the animal was not extinct in the eastern ranges of New Guinea as previously believed. All species were handed over to the National Museum in Port Moresby and the Herbarium in Lae.

with a meal of vegetables and chickens, while also giving each member of the team an arrow.

> 'James ... said he spoke for the people of his area [and] repeated the message that [they] ... did not think we would really come back after the first visit. He repeated the notion that they did not think the bush was worth anything other than subsistence to bush people. James went on to say that all the problems we had experience were caused by other clansmen and none of their group and that they wanted us to come back. He also said that a baby boy was born two days ago and that they named him after [the team leader]' (Hedemark *et Al.* 1997: 57).

It had not been a bad three weeks for local people as more than Kina 2500 had been paid out in wages. The next day the equipment, specimens and staff were flown out from the Bismarck Fall to the road near Kol.

THE BUBKILE INCIDENT

Based on this experience, the team felt it had established some sort of working relationship with the Bubkile people. It saw the biological survey as the starting point of many years of joint collaboration, and assumed that the Jimi people, as had been the case in Gulno, were happy with the manner in which the survey had been conducted. This view, however, was rudely shattered during the final hours of the survey. As the whole team had been lifted out of the last and lowest camp in the Bismarck Fall and had been dropped off on the road, the plant scientist flew by helicopter to Bubkile to pick up the specimens. The report, however, notes how he

> 'came back unexpectedly informing us that the landowners of Bubkile would not give up the samples because they wanted K 350. [The plant biologist] ... asked that [the community facilitator] and [the team leader] go back and straighten things out'(Hedemark *et Al.* 1997: 60).

On arrival, a discussion ensued between the team leader and several local residents who wanted to be paid additional money. The team leader initially refused, knowing full well that if the project set a precedent this time round, it would be open to blackmail in the future. After defining where the complaints came from, the team leader instructed the helicopter pilot to shut the engine down and asked the community facilitator to translate his feelings. He recounted how the team had donated money and a flag to the school, that the samples were worthless in terms of money, that the team had agreed to hire as many people as possible, and that it was difficult to work together with communities that used blackmail in their relations with outside agencies. This argument was countered with the comment that there had been a gift made to the school, but that no money given to them, the landowners. This again was followed with a discussion over the nature of community-based projects and the need to stick to agreements in line with the speech that the patrol leader had made during the September patrol.

During the course of the discussion, a number of men in the crowd intervened on the side of the project and became annoyed with those demanding money.

Consequently, the price that was being asked came down. The elder men in particular, were concerned that the project would pull out leading to a loss of future opportunities, while the younger men appeared predominantly interested in squeezing money out of the situation. One of the older men made his point by picking up a bundle and throwing it in the helicopter, but other bundles were being held by men who refused to let go before they had been paid. Finally, three men were paid an undefined sum of money, to which the community facilitator and his uncle contributed, as they felt ashamed of the situation. Different men now started loading the helicopter until a boy no more than 15 years old, jumped out of the crowd, took hold of two pandanus fruits and shouted that they were his and that he wanted payment before he would let go. Survey staff would later express their amazement at the way in which a young man thus contravened the growing group consensus. The team, however, refused to pay additional money, and told the helicopter to leave seeing the pandanus fruits thrown on in the last seconds before take-off (Hedemark *et Al.* 1997 and PC Hedemark).

As the project leader flew into Mount Hagen, he was happy to have salvaged the specimens, but also felt increasingly disenchanted with the communities that he had been working with. Later the Bubkile incident would be recorded under the heading 'Community Un-appreciation or Misunderstanding' and changed the positive views of Bubkile, where the earlier acceptance of the speeches, the provision of dinner and the co-operation during the survey had been interpreted as a signs of enthusiasm toward the ICAD project. That evening he called his wife to report that they had all made it safely out of the field, only to hear that the PNG National Intelligence Organisation was questioning the intentions of the survey.

THE BUBKILE COMPENSATION CLAIM

Shortly after the start of the biodiversity survey a letter sent by one of the Kema communities would make it to the Provincial Government and the National Intelligence Organisation. The letter written in name of the 'Kerma tribes', and dated while the survey was still in progress brought to their attention the fact that four expatriates and four PNG nationals who 'are believed to be from the environment and conservation have entered the area and are committing serious damage' (Kema tribes to NIO, October 1995). This information made it onwards to the DEC, the Prime Minister's Department and the Internal Revenue Commission alerting them that a group of four expatriate 'smugglers... operating under the pretext of being an environmentalist group' had collected a range of animal species and plant samples (NIO to DEC on 17 October 1995). The intervention of the Secretary of the DEC and the Resident Representative of the UNDP were necessary to defuse the situation at a government level, but the compensation claim which followed, would continue to sour relations between project and local people.

A Mr. Gabriel Kenzegna from the Kema-Komnoka clan pushed the claim as he saw an opportunity to ask for compensation from the Biodiversity Program. It appears

that the attempt to pressure the team for compensation money was well thought out as he even tried to get photographic evidence. Three days after the letter had been sent to the NIO, a Bubkile man named Kanjip Kumia came to the survey team at camp 3 after the letter to the provincial government had been sent. Mr. Kumia carried a new camera, which according to him belonged to Gabriel Kenzegna and with which he wanted to take a group picture as 'a reminder for the Bubkile School'. Unfortunately the film jammed, but ironically the survey team willingly sold him a new film at cost price (Hedemark *et Al.* 1997).

The Biodiversity Program never got to see the incriminating photographic evidence but was presented with a copy of a letter to a PNG community rights group some 7 months later. The letter, written by Mr Kenzegna, stated that he himself was a local member of the Melanesian Environment Foundation, an environmental group active in rural PNG. In this capacity, he informed the Individual and Community Rights Action Forum (ICRAF) of the fact that the survey team had 'collected wild lives [sic] ... and chopped down trees' (Kenzegna to ICRAF on 12 May 1996). He then went on to explain in true conservationist prose that the landowners were

> 'concerned that the chopping down tress and palmnuts have effected our daily lives. These tress helped us to provide tree food and some tress provide homes for the animals that we hunted for. They [the survey team] also collected some medicine plants such as leaves, flowers and fruits ... that we used ... as local medicine.'

He also elaborated on the survey work explaining how

> 'On these mountains they [the survey team] used 13 net traps and collected birds. These birds were skinned... They also took 30 rat traps and used it for traping rats. They killed many rats and injected with drugs and remove only the skin and threw the meat away' (Kenzegna to ICRAF on 12 May 1996).

In other words, the conservationists of the Biodiversity Program had severely jeopardised the livelihood of local people through their damaging and wasteful practices, and the Kema asked for assistance in bringing their concerns to court. The second half of the letter contained a list of damages done. According to the letter no less than 9.6 hectares of trees, valued at K113,700 and 5.6 hectares of pandanus trees worth K5,900 had been cleared. In addition a 100 different types of mice, worth K10 each had been killed and skinned, 50 lizards good for K8 a piece and 3 snakes worth K20, as well as 198 frogs at K15 each had been taken, while 10 tree kangaroos valued at K50 each, 200 different insects worth K10 each and 86 different types of birds worth K30 each had been killed. The total value of damages done amounted to Kina 129,100, a sum roughly equivalent to U$ 100,000. Although the Biodiversity Program received a copy from the ICRAF, it felt that as the correspondence was not directed at them there was no reason to respond.

A month later, Kenzegna wrote to the survey leader at the Biodiversity Program telling him that he as 'President of Oipo-Ramu', wanted to know 'your future plan and your dreams at the site, are any development going to be taken place ... or [did]

you and your team just come to visit' (Kenzegna to CRC on 3rd of June 1996). The survey leader responded in a non-committal fashion, stating that the team was looking into the options of establishing a working relationship with local communities in the area. Nothing was heard for a while until the first of a new series of community development patrols entered the Bubkile area in September 1996.

More than a year later, after patrols resumed with the use of a much more open-ended approach, these patrol teams were presented with copies of the letters to ICRAF. This was seen as a demand for compensation for the damages suffered on the part of the Kema-Komnoka. Based on this compensation claim, the Biodiversity Program decided to put visits to the Kema-Komnoka near Bubkile on the back burner, while the project continued to work with the Kema-Ageleka. This claim put the project team in a difficult position though, as a patrol report notes:

> the biological survey may have been organised without proper permission of the councillors of the three clan groups (Ageleka, Komnoka and Darlka-Tunka-Asban) that live around Bubkile. The people generally felt that what the Biodiversity Program did was illegal. ... Although the villagers were happy to work and earn money at the time, this is now backfiring on us as it makes the Biodiversity Program and DEC susceptible to outrageous compensation claims, and is a concern for the safety of its [personnel]. It was decided that for the moment nobody of the project would go to the village in question... It would also be worthwhile ... to determine whether it was in fact illegal what happened, or whether we could reasonably expect that people agreed with the survey work as they themselves cut the trees and carried the specimens for which they were paid very well by local standards' (BRG 1996c: 37).

GOOD GUYS/BAD GUYS

A visit that I made to the area in April 1997, brought to light what appears to have evolved into a sort of good-guy/bad-guy strategy on the part of the Kema-Komnoka and Ageleka clans. The Ageleka on the one hand claimed to feel very bad about the problems with the survey, they even gave the first camp the name of the patrol leader. At the same time, the Komnoka tried to play hardball by claiming compensation. As I wrote in a letter to the Biodiversity Program:

> 'Camp (one) is on land above the Bubkile and the Molu-Tabiap ridges in a saddle between the mountains Ngantsmang and Mount Oipo. Mount Oipo is joint hunting ground with pandanus plantations of both the Ageleka and Komnoka clans... The area to the west ... is Komnoka land, the area to the East and North ... Ageleka territory. This means that the landing pad [at camp 1] is on Ageleka land. This was confirmed by several people present... Gabriel Kenzegna of the Komnoka clan is thus staking a claim for damages to land which is not his. What I don't believe for one moment is that the Ageleka are not aware of this, or do not allow this to happen without them having a stake in the US$ 100,000 [claim]. The whole thing stinks, and is as far as I can see simply a case of 'traim tasol' from the side of Gabriel [Kenzegna] to which the Ageleka have no objections. If they don't win, they don't loose either. If payment were made, however, they

> would certainly receive a large share of the money, all these groups being Kema and intermarried and all that. This way of thinking seems confirmed by the fact that I saw a freshly cut tree at the camp ... They've got to keep that ridge suitably damaged haven't they?' (VanHelden to Hedemark, 31 May 1997).

This strategy may not have been intentional but may have been the practical outcome of the diverging strategies of the Ageleka and the Komnoka clans, and of Mr. Kenzegna's tactics. The project did not have to make a decision as to how to respond as communications with Bubkile ceased when fighting erupted with the onset of the national elections in June 1997. The ongoing tensions led to several casualties in the area and put an end to all patrol work for a period of four months. At the end of 1997, the fighting over the elections, the ongoing misunderstandings between project and people and the findings of the social feasibility study eventually led the project team to decide to pull out of the Jimi Valley altogether.

In July 1998, however, the tenacious Mr. Kenzegna visited the Bismarck-Ramu project office in Madang with a raft of questions referring to the biological survey. Presenting himself as the President of the Oipo-Ramu Association, he stated that the project had failed to get permission from the landowners before conducting the survey and that they should therefore be compensated. The new PNG conservation manager, however, explained that the survey had obtained permission before the survey in September 1995. Kenzegna also wanted to confirm the rumour that the specimens collected during the survey had been sent overseas for sale. When told that the specimens were in Lae at the Forest Research Institute and in Port Moresby at the National Museum, he said he still wanted compensation as the government was now making a lot of money from visiting tourists. The explanation that these specimens did not have monetary value but were simply kept as vouchers and not on public display failed to satisfy him.

The fact that the samples were 'worthless' as they were only intended for learning, is obviously difficult to accept by people who can not conceive of any other reasons for the project's interest in local resources than that these possess monetary value. The emphasis of many rural communities in PNG on resource exploitation as a means to 'development', the earlier talk by the team on the exchange of 'conservation' and 'development' and the origin of conservation monies, and the expenditure of money on the survey were only comprehensible if the samples taken during the survey were seen to have cash value. The project's surveying activities were thus equated with the activities of logging companies. To Kenzegna it may certainly have looked as if the conservationists got whatever they wanted, but were now reneging on their part of the ICAD 'deal' that they proposed in the first place.

AN ANALYSIS OF THE BUBKILE SURVEY

The Bubkile incident illustrates a number of social features prevalent in the Upper Jimi valley, most notably the lack of central authority and social control, and the welcoming, but simultaneously opportunist attitude taken towards strangers.

Although there is no defense against the opportunist behaviour encountered by the team, one can conclude that the Biodiversity Program made too little effort to understand the local situation. Instead, it operated on the basis of a number of implicit and simplistic assumptions with regard to the local social and political landscape.

The first problem lay with its conception of the notion of 'community'. The team assumed that *because* people shared the same locality, they *therefore* shared a sense of commonality. In Bubkile, however, the present clustering of houses is not a sign of unity, but a recent artefact of the colonial administration. Whereas people used to live dispersed throughout the Jimi valley, present-day villages are usually centred on the few flat areas selected by patrol officers and missionaries to construct schools, churches, health posts and airstrips. These became the combined administrative, economic and social centres of the present-day villages. The enforcement of the *Pax Australiana* meant that different clans could now live in each other's vicinity without fear. It does not mean that these different groups also act in unity.

The second problem lay in the fact that the team acted from a homogeneous view of local society. Following the September meeting, the team assumed that it had secured the commitment of the Bubkile community 'as a whole'. The meal that they were given was not seen as mere friendliness on the part of their host, but interpreted as a token of appreciation by the entire commune. This uniform view of the Bubkile community was not only read into the situation by the team, but may also have been a consequence of the way in which people present themselves to the project in public. In many Jimi communities an ethic of solidarity prevails in the face of outsiders, temporarily suppressing the conflicts that simmer under the surface (VanHelden 1998b). In addition, it is important to realise that public meetings are rarely a good means to assess the cohesion of a community or the 'real' thinking of people. As has already been mentioned such public events tend to emphasise the general over the particular, concealing the diversity of interests among local people (Mosse 1994, Pottier and Orone 1995, Bierschenk *et Al.* 1998).

In fact, the different units of Jimi lineage organisation only co-operate under rather restricted circumstances. Economic endeavours and the organisation of household work are mainly restricted to patrilineages, consisting of nuclear families and their direct kin. The unifying character of the sub-clan centres on the exchange of brides, the conduct of ancestral sacrifices and migration decisions following disease, defeat or misfortune. The clan acts as the main territorial unit playing an essential role in 'external' issues: e.g., those relating to security treats, political alliances and ceremonial gift exchange. These issues affect the security and standing of all clan members alike and require intensive co-operation and social control. The alliance between the clans of the Kema clan-cluster exists mainly in people's conception of the past, and has little significance for present-day action (VanHelden 1998b).

The politically naive assumption of the homogeneous community also blinded the project team to the position of the Jimi community facilitator. He was recruited

because the team perceived him as somebody who by nature of his Jimi identity should have a natural rapport with people in the area. During a later presentation in the Ramu Valley two project members would refer to him as 'a spokesman from the people from the Upper Jimi River and he was their choice' (CRC 1996b: 5). Just as the image of 'community' obfuscated the essential divisions between the various Bubkile clan groups, so in the case of the community facilitator, the notion of 'Jimi' came to represent a homogenous conception of all people living in the Jimi valley. In fact, the community facilitator belongs to one of the Pala clans of the neighbouring village of Bubulsunga, who are the traditional enemies and wedding partners of the Kema. He had a maternal uncle in Bubkile whose house was used to store the specimen collection, but the Kema were certainly not prepared to see him as their representative. When the survey was finished, the rumour that the community facilitator was selling land and wildlife to the World Bank illustrated the lack of trust in his intentions (BRG 1997a). The suggestion that the Bubkile people might perceive the community facilitator as 'one of them' was thus a result of the team's homogenising perception of Jimi society, but far removed from the social reality on the ground.

A third premise, closely related to the assumption of the homogenous community lay with the team's perception of local leadership in the Upper Jimi. During the group discussions, the patrol teams focused on the leaders present, assuming that when a big man spoke out, his word was given on behalf of all and regarded as binding by the other community members. In this view, leaders are not seen as individual personalities with private attachments, commitments and priorities, but as representatives of homogenous and well-defined communities. The tendency to take public statements at face value and as collective expressions of interest, without sight of the possible political, strategic and personal nature of such statements, set the stage for the recurring disappointments on the part of the project team.

The September patrol report for example, notes that only the councillor of the Kema-Ageleka was present during the speeches at the market. Although he claimed to speak on behalf of all 5 Kema clans (CRC 1995b), it is unlikely that the other councillors would agree with him doing so. Later, Mr. Kenzegna, would argue that he claimed compensation 'because the project did not get permission from the landowners' (Chitoa to DEC 30 July 1998). Leadership in the Jimi Valley is highly competitive and fluid and takes a variety of forms. In general, there is an excess of leadership as many men have leadership aspirations, seriously diluting the influence that anyone individual can expect to have. Formal salaried leaders such as councillors and magistrates are not necessarily more influential than their non-formal counterparts, and such a status sensitive environment, forgetting to include one or more self-styled leaders in discussions may lead to unexpected opposition. Thus a good knowledge of the community, its essential divisions and main characters and a range of contacts within it, are essential for any project aiming to establish a 'working relationship' with local people.

DEFINING THE 'RELEVANT' COMMUNITY

A more careful analysis of divisions within the Bubkile community would have shown that the Kema clan-cluster is divided in five different clans that constitute three political units as the three smaller clans generally operate together. These units are the Kema-Ageleka, the Kema-Komnoka and the Kema-Darlka-Tunka-Asban. These different units are largely intermarried, but also in constant competition with each other and are driven by the fear that others may do better than they do themselves. Consequently, the different units only co-operate under rather restricted circumstances. The clan, for example, acts as a unit when it faces *external* issues of importance in the form of security threats, political alliances and ceremonial gift exchange. These issues affect the security and standing of all clan members alike and require intensive co-operation and social control. The management and defence of land and resources are typically a issue which is determined at the clan level and garden and hunting lands are generally divided along clan lines. The unifying character of the sub-can is mainly limited to the exchange of brides, the conduct of ancestral sacrifices and decisions regarding disease, misfortune and migration that affect the group as a whole. Economic endeavours and the organisation of household work are mainly restricted to nuclear families and their direct kin, the so-called patrilineages. Competition over income earning opportunities and land and labour between these various units is concealed by a ethic of mutual help and support, but is extremely intensive, and may erupt into all-out conflict.

The relevant 'community' with which outsiders have to interact thus depends on the type of issue at hand. In the case of the biological survey, the project team did well to ask permission to enter Kema territory. It did so, however at the highest possible level, that of the clan-cluster containing five different clans and three territorial units, by addressing a large group of people that happened to be present at one of the Bubkile markets. The team, however, did not specify on whose clan territory it was going to work and, by extension, which clan group it was going to work with. The September patrol notes that only the councillor of the Kema-Ageleka was present during the speeches. In his reply the Kema-Ageleka councillor claimed to speak on behalf of all 5 Kema clans, but it is far from certain that the other clans would agree with him doing so. The patrol, however, presented with the image of a coherent homogenous community, did not take time to secure consent from the leaders of the Kema–Komnoka and Darlka-Tunka-Asban clans (CRC 1995b).

Once the survey had started, the team made an effort to spread the employment opportunities as far and wide as possible, but did little to look at the way in which the benefits of its survey work were distributed amongst the different groups, and whether the landowners of the sampling sites were given preference over relative outsiders. Sampling sites were chosen on the basis of altitude and access considerations, not because of landownership. When the survey team arrived in the area, it did not discuss the organisation of survey work in the selected sampling sites but simply flew into the first camp, triggering a flood of spectators hopeful to find

work. Later landowners in the Bubkile area would complain that the survey came 'like a thief in the cover of night' (BRG 1996c: 20).

If one looks at the location of the four sampling and campsites, it becomes clear that the first camp lay on a ridge that overlooked the garden lands of the Kema-Ageleka and Komnoka of Bubkile. The Ageleka and Komnoka clans share hunting land and are close allies. The allied Kema-Darlka-Tunka-Asban group living in the Bismarck Fall is the product of a merger between the Darlka and the Tunka clans, who come from the same Kema ancestry as the Komnoka and Ageleka, and the Asban group coming from the Ramu Valley. The three clans commonly function as a united group within the Kema clan-cluster (VanHelden1998b: 235). Thus at the location of the first camp especially the Ageleka and Komnoka men from Bubkile were allowed to work. The three other sampling sites lay on land belonging to the Tunka-Darlka clan and their Asban allies, who were therefore by far best positioned to benefit from the survey and they made sure that they did. The patrol reportrecounts how

> 'where the trail crossed the Wara Kanel, we were met by a large crowd from another clan and were told we had to change carriers. [The community facilitator] sorted things out. It was resolved that the Bubkile carriers would get the K8 for the day while the Gulno men would carry the bags to the next camp for free [and be allowed to work the next couple of days]. The conversation got very loud at one point but it was settled' (Hedemark *et Al.* 1997: 60).

Two days later, Tunka men asserted their rights to work and voiced their discontent because they were not being trained to do the skinning and preparation of the specimens which other men, trained in camp one, were seen to be doing. The team decided to train two of the Tunka men from Gulno in the skinning of rats and birds. This led to a situation in which the Bubkile people, while contacted about the biological survey in the first place, felt excluded from work. The Tunka-Darlka-Asban, however, were not as successful in excluding the Komnoka and Ageleka as they would have liked to be. In April 1997, Magistrate Aik of the Darlka group told me that the way in which the biological survey had been conducted was not acceptable as many men from other clans had entered the Tunka-Darlka-Asban grounds and had worked there. In future, he insisted that if the project worked in their area it had to use his people. Aik also explained how they had heard stories about the World Bank land registration and structural adjustment programme (SAP) and thought that the Government had sold their land through the project's community facilitator because it could not pay its debts.[51] He gave this as a reason for the Bubkile incident and asked why the project had collected leaves and animals.

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[51] This rumour stemmed from the fact that PNG was in the grip of a World Bank enforced Structural Adjustment Program. Part of this program was a drive towards the registration of customary landownership which lead many land-owning groups in rural PNG suspected that outside agencies were trying to take their land and resources. The conduct of the biodiversity survey in October 1995 led a number of communities to believe that the Bismarck-Ramu personnel too were cronies of the World Bank aiming to 'steal' their land and wildlife.

Once told that the PNG Government and its donors did so to gain knowledge and not with the intention to earn money, he appeared satisfied (BRG 1997a).

THE DISTRIBUTION OF SURVEY BENEFITS

A more likely reason for the incident at Bubkile than the World Bank and the role of the community facilitator stems from the distribution of the survey spoils. While the Tunka-Darlka-Asban did well, the two other Bubkile groups had been used as a point of entry by the team, but were largely marginalised during the remainder of the survey. This became apparent at the border between Ageleka-Komnoka and Tunka-Darlka-Asban territories, when the former clans were asked to hand over their baggage and jobs. The first patrol and the survey both started from Bubkile territory and in making its presentations no doubt spoke foremost to the Ageleka and Komnoka groups. The team may thus have raised expectations that were not met when the first camp was abandoned after five days and the patrol moved into Darlka-Tunka-Asban territory for the next 15 days. Consequently, especially these clans did well. The results from a split up of wage payments between the five Kema clans, provided by the community facilitator shows that the earnings from the survey were highly skewed. The three smallest landowner groups counting some 150 people earned two-thirds of all wages, while the neighbouring Ageleka and Komnoka clans, together counting some 1050 persons, had to do with the remaining one-third.

TABLE 1: EARNINGS PER KEMA-CLAN DURING THE BIOLOGICAL SURVEY

Clan	Ageleka	Komnoka	Tunka	Darlka	Asban
Sum	K 662	K 234	K 1136	K 270	K 232
Joint Size	1050 people		150 people		
Received Sum	Kina 896		Kina 1638		

Source: Adapted from Hedemark *et Al.* 1997: 63 and VanHelden1998b: 215.

In hindsight, it is probable that Ageleka and Komnoka people who felt left out because they were either absent or not selected for work, held on to the specimens. A possible explanation is that they saw how other people had been paid for work, were envious and regarded holding back the specimens as the last opportunity to get 'their share' of the survey spoils. This action was not contravened directly by

other people present, as there is no accepted authority within the village to solve the issue there and then. Other people expressed their dissatisfaction with the troublemakers by starting to load the helicopter, a type of decision-making also described by Rappaport (1968) for the nearby Tsembaga-Maring (Cf. VanHelden 1998b). As with the other compensation claims, those intent on keeping good relations with the project team chipped in to meet the cost.

THE EARLY 1996 PATROLS

In the first two months of 1996, two more patrols were made with the aim to present the project to local communities and to gain a better understanding of local physical and human geography. The patrol teams concerned were much smaller than on the first patrols and were warmly welcomed. The report noted that – possibly as a result of the small patrol size - people's attitudes were more relaxed than with earlier patrols and suggested that more frequent but smaller patrols would be more effective. The patrol started in Ambulluah just east of Kol and travelled through the upper Jimi visiting the village of the community facilitator at Bubulsunga on the outer fringe, before returning to Kol. The patrol did not visit Bubkile. Meetings were held at various villages during which the slow/fast and small/big development and conservation speech was used.

As on earlier occasions, the speech was responded to in favourable terms with a number of leaders commenting on the need of the project to establish a project base on their land. As elsewhere, there was the comment that local people should carry during patrols and as elsewhere there were the assertions of local authority over resources, a claim readily acknowledged by the patrol team. A man at Bubulsunga, probably having heard of the biological survey, commented that the carriers of the project should not take birds and game from their area. A councillor near Ambulluah told the team that he controlled hunting in his people's forest area and that people going hunting had to report to him first (CRC 1996a). The team also noted that the social structure of the area was much more complex than previously thought as not only people from the villages of Bubkile and Bubulsunga, but also people from other Jimi villages claimed hunting rights in the Bismarck Fall. Several of these clans have small groups of people living there as well. The report reiterated the April 1995 suggestion that the Ramu landowners needed to be visited by concluding that the presence of the settler communities 'makes the need for a visit to the people on the Ramu River a high priority' (CRC 1996a: 13).

THE LOCKING-UP AT FOROKO-BRIMDE

In February 1996, another patrol was made to Foroko-Brimde and Pimbum in the Ramu Valley. The recommended visit to the Ramu River communities was postponed until later, but the recommendation to establish a temporary base at Pimbum was followed up. The Biodiversity Program had decided that as a token of

its interest in working with the Pimbum community it would pay for the surveying of the local airstrip, a task which took place at the end of 1997. The idea was that once the airstrip would be pegged out, local people could finish the levelling and clearing themselves.

In addition, the project team had decided that the project's operations would benefit from establishing a temporary presence in Pimbum. The community facilitator owned a house in Pimbum, which was built for him two years earlier and which he had offered to the project as a 'base'. The team, although not wanting to establish a formal base such as had been done in Lak, thought that by equipping the house it could establish a temporary and low key set-up which would be helpful for its planned patrol work in the Ramu valley. It was therefore decided to equip the community facilitator's house with a radio and some household utensils and sleeping materials, allowing future patrols to rest there while staying in touch with the office at Madang. In addition the team asked the community facilitator to recruit two local people to look after the house and the radio and to guide and assist future patrol teams. The community facilitator promised to choose two hard working and committed people. One of them turned out to be the Jimi settler living in Pimbum who had proved very helpful during all of the previous patrols and the biological survey. The other man was one of the community facilitator's clansmen. Both were Jimi settlers, a choice that would later lead to problems with the Ramu landowners.

The community facilitator brought the first load of materials and household equipment to the house in Pimbum in late January 1996 and waited for the conservation managers to install the radio. The PNG conservation manager and his New Zealand counterpart arrived in February 1996, on a visit that would also allow them to check up on the progress made with the construction of the airstrip since the last visit in September. They landed at the airstrip in Foroko-Brimde, where the new radioman awaited them and told them that a problem between the people of Foroko-Brimde and Pimbum prevented them from moving on that day. A young Kema-Darlka man in Foroko-Brimde had died, and the Pala people from Pimbum were accused of sorcery and told to pay compensation. The patrolmen were told that they could go no further until the Pimbum people had done so and the rest of the day was spent talking to the local people about the area and the events going on. During the discussions:

> 'we attempted to point out that the problem was between people at Pimbum and Foroko and had nothing to do with us. The logic of such an argument, however, was overshadowed by the more practical advantage of using the patrol as a lever to speed the resolution of the conflict ... [After much discussion] the landowners told us that we could go to Pimbum and that they would guarantee us safe travel through their territory, however, they said all our equipment would be kept in Foroko. While thanking them for allowing us to leave we pointed out that we had come to work and without the equipment we would be unable to do so. We felt that our only option was to stay with the equipment' (CRC 1996b: 4).

Following this stalemate the two were given a house and all the equipment was put inside. The patrolmen were the only occupants, which is not normally the situation as the houses where the patrols stay are usually full of spectators. The next morning, they found that during the night the door had been locked and that they were being held prisoner. Later in the morning, a group of men came to the house and again a long discussion ensued.

> 'It was explained to them who we were and our reason for being there. We were asked why our base was being set up at Pimbum. They were told that a temporary base was being set up at Pimbum because it was in a central position. More patrols with different people would be coming in future to talk to all the communities and although they would not stay all the time at Pimbum it would be used as a staging point. The radio there is for the safety of the future patrols... It was explained to them that we would like to help them save their bush... (CRC 1996b: 4-5).

They also questioned the community facilitator's role in the work at Pimbum to which it was explained that the PNG conservation manager was in charge of the project, while the community facilitator was seen as a spokesmen for the people from the Upper Jimi as 'he was their choice' (CRC 1996b: 5). This statement was made to Jimi settlers of the Kema-Darlka clan, who as I have already mentioned were certainly not prepared to see the Pala-Maipka community facilitator as their representative. Finally, however, the villagers allowed the team and their cargo to move on to Pimbum under the usual condition that Jimi carriers from Foroko-Brimde would be used. Eight carriers were employed, the radio battery was slung onto a pole and the whole party, consisting of the two shaken conservation managers, the carriers with the cargo, and the radioman started to move eastwards. At the river which marks the boundary the Brimde men were paid off and carriers from Pimbum took over and the patrol continued its way to the community facilitator's house, arriving well after dark.

ESTABLISHING THE 'BASE' AT PIMBUM

At Pimbum, the next two days were used setting up the radio and its aerial, with the help of a lot of eager hands. Two 10-meter poles were put up for the aerial and the solar panels to charge the battery were installed on the roof. When installation was complete the two new radiomen were trained in its use. The house was crowded with people for the first turning on but – as it was a Sunday – the new radio failed to establish contact with Port Moresby. The next morning contact was made, and during that day large groups of people came to work on the levelling and clearing of the new airstrip. After a day spent in neighbouring hamlets, the two conservation managers returned to Foroko-Brimde (CRC 1996b).

The newly established radio had an unintended side effect, as it not only allowed patrols to contact the Biodiversity Program in Port Moresby, but also allowed the two radiomen to contact the Biodiversity Program on behalf of the Pimbum people

with the request for further assistance in the construction of the airstrip. In March they told the Biodiversity Program they needed four wheelbarrows and 50 spades and picks. The Biodiversity Program, however, regarding the Pimbum airstrip as a 'community project', and now emphasising 'self-reliance', noted that it had already provided surveying assistance and that considering the tiny sum required which could very well be furnished by local people themselves, simply passed the message on to the community facilitator in his capacity as airstrip co-ordinator. The refusal of the project to supply further assistance and the community facilitator's unsuccessful efforts to secure tools from other sources led to a halt of work on the airstrip.

On the return trip from Pimbum, the two conservation managers held a meeting at Foroko-Brimde to discuss the reason for the patrol's coming and to explain people that they were interested in helping them with the conservation of their bush (CRC 1996b). Following the usual big versus small development and conservation talk, the discussion centred not so much on the conservation themes contained therein, as on the actual establishment of 'the base' in Pimbum.

> Question by a Foroko man: If you would set up a base here with an office and a radio we could work together' Answer: 'Were are setting up a temporary base at Pimbum. No decision has been made on the location of bases. The area we are looking at is very big ... When we have talked to everyone after many visits the location of bases will be decided. Pimbum was chosen for the location of a radio because it is in the centre of the lowland part of the area we are looking at'.
>
> Questions by a Ganz Man: 'Who is going to take care of your base?' and 'do you think you can set up your base in the Ganz-Simbai area to cover Ganz, Maring, [Ramu] and Jimi?' Answer: That has not been decided, but for now [the radioman] ... will be taking care of the radio' (CRC 1996b: 6-7).

Both were obviously interested in seeing the base established in their own area. In a fragmented and competitive society like that in the highlands of PNG this is a typical response aimed at attracting potentially beneficial activities, people and institutions. In some instances, for example, if a man from another clan were regarded as an exceptionally skilful speaker, hunter or fighter he would be a welcome addition to the clan. In certain cases houses are built, a wife is given and assistance is offered in gardening to make the person in question feel at home (cf. VanHelden 1998b). A local leader at Foroko-Brimde took a similar but subtler tack by explaining during the discussion that 'there are four different languages and two different districts in the area. The Ganz and Maring languages in one and the Jimi and [Ramu] in the other. The base should be at the boundary of these two districts' (CRC 1996b: 6-7). As Foroko-Brimde is on the boundary between both the districts and the language groups, this explanation was really an argument to locate the base at Foroko-Brimde and not at Pimbum. The conservation managers responded that they would consider such issues, but in the eyes of local people that decision had obviously already been made.

The next day the two flew out, leaving the house of the community facilitator, by now locally known as 'the base', and its radio and equipment behind. Relations with local people in most of the Bismarck-Ramu area, however, proved difficult and the mutual understanding that the project team was looking for largely absent, with the exception of Pimbum where the joint efforts of the community facilitator and local people had secured the presence of the project in their area. Work on the airstrip appeared to progress well, but would halt shortly after the two conservation managers had left.

CONTINUITIES WITH THE PAST

The responses by the Jimi people to the project's intervention show many of the same patterns that they displayed in the 1950s towards the patrols of the Colonial Administration. As described in the chapter 3, outsiders were seen as offering an opportunity that needed to be grasped and moulded to meet local aspirations. As was the case in the 1950s, the first contacts between Jimi people and conservation patrols was generally very positive. People welcomed the colonial administration and the project, and expressed their willingness to co-operate. The dominant question, however, immediately revolved around the issue with whom the project was going 'to work together' and how local people would benefit. In the competitive environment of the Jimi Valley, linking up with powerful outsiders may constitute a useful strategy in the struggle for reputation. One way of enticing outsiders is to be more hospitable, more welcoming and more enthusiastic than rivalling clans.

This pattern is also visible in the migration strategies where influential big men considering migration may be enticed to come and reside uxorilocally or with their trading partners by assisting them in building a house and cutting gardens. It is the pattern displayed by the Jimi settlers at Pimbum who built the community facilitator a house in order to keep him there and who in return expected him to assist them with the construction of the airstrip. Just as the earliest patrol officers were impressed by the enthusiasm with which the Jimi groups erected rest houses and built foot paths, the first patrols of the Biodiversity Program were happy with the many welcoming speeches and the promises to build 'a base' in the areas visited. These promises had little to do with an enthusiasm for conservation and much more with the fear of losing potential development opportunities to other clan groups.

Once the presence of the outsider, be it in the form of a big man, project, mission post, or government, station has been secured, the next step is to capitalise on its presence. Such an instance has been recounted in the section on the shift from gift exchange to bartered trade where patrol officers bemoaned the opportunistic ways in which Jimi people tried to alter the terms of trade in their favour. Similarly the patrol team, believing that local communities expressed a genuine interest in co-operation, was shocked to find itself locked into endless debates over rights to employment, wage schedules, workloads and compensation payments. To the project staff, aiming to establish a modicum of mutual trust, people displayed a

disappointing propensity to opportunism and short-term gain, which was incompatible with its wish to find long-term joint commitment to community-based conservation and development.

CONCLUSION

During the first patrols in the Jimi valley, the duration of contact with people was largely limited to a speech and question and answering session on issues of conservation and development. This speech, in line with the ICAD approach at Lak, was framed in terms of an exchange. People were to 'do' conservation and the project would help them with some form of 'development' in order to curb the destructive activities of logging and mining companies. The only logical conclusion for any villager taking part in the first patrol meetings was that there was nothing to loose from asking the project team to return. One never knows whether the project could actually bring some form of 'development' to their extremely remote area or a measure of cash labour that would benefit local people. People may not have understood exactly what 'conservation' entailed but they were certainly aware of the reciprocal nature of the 'conservation-for-development deal proposed. These initial expressions of interest, however, can not be interpreted as a commitment to conservation or even as an expression of the willingness to co-operate as the project team had so strongly hoped.

In practice, project interventions were based on a number of untenable premises with regard to local society. In the first place the team had a rather naïve view of local communities as it assumed that communities, approached during a one day discussion session would act as a homogenous entities. A second premise, closely related to the perception of the monolithic community lay with the tendency to take public statements at face value and as collective expressions of interest, without sight of the possible political and personal nature of such statements. The lack of understanding of local social fragmentation, the assumption of the homogeneous community and the focus on formal leadership not only clouded the biological survey, but also blinded the project to the position of the newly recruited community facilitator. As an educated locally born person, he was seen as a useful go-between between 'the Jimi people' and the project team. In reality he could at best act as a broker between his own Pala-Maipka clan and the project team, but could not possibly speak on behalf of other Jimi clans.

Fundamental to these perceptions is the focus on nature rather than on people. The project had learnt from the Lak experience that it could not ignore the views of local people but, with the exception of the first patrols, the encounters with local people were primarily aimed at organising the biological survey, and at setting up a base at Pimbum. The reason for this bias lay with the fact that with the exception of the first patrol, the team consisted entirely of biologists and conservation managers with a professional inclination to focus on nature. As a result, the technical determinants of conducting a biological survey and the legitimising requirements of the donor went

before the need to establish a working relationship with local communities, because as the project biologist would later explain: 'why establish a working relationship if the biology is not there?' (Hedemark to VanHelden 23 July 2001).

The team did not realise that in doing so, it went against the grain of Jimi culture, where one preferably first establishes a social relationship, which subsequently becomes expressed in economic and political terms. In line with the earlier argument made about the inverse relation between social distance and morality initial interest in the project was mainly a result of people's eagerness to secure the short-term economic opportunities that the project might offer on the presumption that relations were short-term and unstable as relations between strangers always are. This led a number of individuals to try to extract whatever resources they could lay their hands on. On the basis of their past experiences with Government officers, these people may not have had reason to believe that the project team would return, and saw no loss in alienating the team by continuously claiming higher wages and compensation for the use of local resources. Later many people expressed amazement at the fact that the project actually kept coming back.

In addition, the project immediately became an asset in the struggle for reputation and opportunity between the various Jimi clan-groups. Where the project was talking in terms of the need to conserve the environment in the face of rapacious companies, local people framed the discussion in terms of the distribution of jobs, benefits and reputation. Especially the location of the 'base' became an issue of particular importance, as to local people the best means to maximise the access to project benefits was to get the project to stay with them. Over time, several groups offered to build houses or a 'base' with an eagerness mirroring that earlier displayed towards the incoming colonial patrols. The location of what the team saw a temporary 'base' at Pimbum, however, immediately led to new problems as it was regarded as an indication for the project's political affiliation within the clan-based landscape of the Bismarck-Ramu area.

The Pimbum people, coached by the community facilitator, successfully enlisted the project, getting it to accept his house as a 'base', and thereby scoring an important victory over neighbouring Jimi clans in Foroko-Brimde. To the latter, the strategic location of the airstrip at Foroko-Brimde gave them the opportunity to strike back at Pimbum by withholding the cargo for the base and by locking up the conservation managers. The attempts by local people to enlist project personnel and resources in their own strategic projects meant that soon after the project started, the line between the 'intervenors', the conservationists attempting to establish a conservation area in the area, and those 'intervened', the communities owning the resources in the area, started to blur. Whereas initially the initiative for proposing some form of development for conservation deal was with the project as its patrols wandered through the area, within a matter of months local people were baiting the project with the promise of a large conservation area in the Middle Ramu and several offers to build a 'base'. The community facilitator in turn would define the project as the prime vehicle for his upcoming election campaign.

The lack of meaningful co-operation on the part of many people was a source of frustration to the project members, who saw themselves as offering a good opportunity to a group of isolated people which was much too easily scorned for short-term economic gain. They did not realise that they were basing their intervention of western notions of 'good business', in which even strangers base their transactions on the assumption that opportunistic behaviour is counter-productive. The subtext of the economistic ICAD proposal presented to the Jimi communities was one of co-operation and participation, based on mutual respect. Later the message that the project would willingly leave if people were unhappy with their work became a recurrent theme in Bismarck-Ramu project presentations. As a result of the perceived lack of co-operation, the content of discussions between people was not restricted to the 'technical' issues of conservation and development, but had far more to do with fundamental questions as to how the relations between project and people were to be defined and which set of co-operative practices was acceptable to both. Matters such as how to negotiate, the meaning of agreements and mutual trust, the use of threats and violence, the occurrence of theft, the distribution of employment opportunities, the use of money and patrol assets, the acceptance of gifts, the sharing of food, the exploitation of the project as lever in inter-clan conflicts and for personal and community gain all point to a clash of values between project and people. The meaning and content of notions of 'development' and 'conservation' were still largely to be touched upon.

Chapter 6

REDUCING EXPECTATIONS: THE BISMARCK-RAMU COMMUNITY ENTRY APPROACH

'In the sweat of thy face shalt thou eat bread' *Genesis 3:19.*

INTRODUCTION

By early 1996, the Biodiversity Program and its ICAD projects were in a state of crisis. It was becoming increasingly clear that the Lak population was not willing to put an end to the timber operations, and that the project team had to make the difficult decision to terminate its operations (See Chapter 2). Operations in the Bismarck-Ramu area were not progressing satisfactorily either, as the repeated attempts by people to extort money, the conflict over the Bubkile biological survey, and the locking-up of the two conservation managers at Foroko-Brimde pointed out. All experiences suggested that the project was failing to establish rapport with local communities.

Both the Lak and the Bismarck-Ramu projects had until then been dominated by the biological requirements of conservation, while local people had focused on the material goods and money that could possibly be wheedled out of the project. In the Bismarck-Ramu area, the project had also become enlisted in matters of Jimi inter-clan rivalry and it was difficult to see how this situation could be turned around. This chapter[52] outlines the change in philosophy that took place as a result of the experiences in Lak and the first phase of the Bismarck-Ramu project. It will discuss the institutional changes that were made, and especially focus on the manner in which a new view of communities and their relations to outsiders would change the way in which project personnel presented itself during the second phase of the Bismarck-Ramu project.

[52] Part of this chapter will appear as VanHelden (2001b).

In contrast to the Lak project and the first phase of Bismarck-Ramu interventions, which were dominated by conservation experts, a new community entry approach emphasised the right of local people to define their problems. The new project team tried to create room for such an exercise by temporarily withholding its own conservation agenda. As will be shown in the next few pages this focus on the problem definition by, and the empowerment of, local people generated several contradictions inherent to the practice of community-based conservation. I will amongst others argue that the ostentatiously open-ended and participatory community entry approach used in the second phase of the Bismarck-Ramu project was notwithstanding its participatory ideology in fact a highly structured and disciplined exercise. The realisation that participatory methods are not so much about discovering some pre-existing local reality, but more about the creation of a joint agenda, a 'middle ground' from which to work together, discloses the essentially political nature of such strategies.

TOWARDS A MORE PEOPLE-ORIENTED APPROACH

By February 1996, the ongoing problems which the Biodiversity Program encountered in both the Lak and the Bismarck-Ramu areas led to a halt to all further patrols. A number of diverging views over what this meant for the program and its next project evolved. The key issue concerned the use of biological versus social indicators for protected area establishment, increasingly pitting the until then dominant conservation staff against a number of commentators who were arguing for a more careful and people-oriented approach. Among the latter, the resource economist of the Biodiversity Program played a key role.

As recounted in chapter 2, the project had accorded priority to the biological narrative, presenting project development as a linear sequence of steps in which it first selected an area of future work, then determined its biological significance, then went through a social assessment, following which a strategic plan would be developed and implemented. Every step went accompanied by a concerted awareness drive, while the building of the base absorbed large amounts of energy and time. What was becoming apparent was that this order of things was a simplification of reality. Local people responded to what they saw happening, conflicts erupted as a result, and as the Lak experience demonstrated determining the area of work and making large scale investments in terms of surveys and base establishment were questionable if the willingness and ability of resource owners to co-operate was not yet apparent. This not only pointed to the need to include more sociologically and community-oriented people from the start of the project, but also suggested that the biological determinants of protected area establishment should maybe not dominate.

The first suggestions that a different approach should be considered came from a June 1995 Project Review Mission, which took place at a time when the first patrol in the Bismarck-Ramu area had just been held. The evaluation report that an

evaluation of the Lak lessons would be 'essential' for the development of the second ICAD site, but also that a more 'soft approach' might be more appropriate. As the report writes:

> Such an approach would place emphasis on a more detailed understanding of, and closer relationship with the target communities before 'harder' conservation advocacy, which the project currently appears to favour is considered. With a better knowledge and understanding of the communities involved, the project would be in a better position to devise its strategy for ICAD implementation (PRM 1995: 3-7).

In line with these priorities, the review team suggested a revision of the expatriate staffing structure of the Biodiversity Program to incorporate the need for a Community Development Specialist. Until then the Biodiversity Program had been run by conservation managers, and biologists with a resource economist to back operations up. At the time of the review mission the Biodiversity Program was recruiting another conservation manager to run operations in the Bismarck-Ramu area. Instead of employing a 'traditional Conservation Management Adviser', the review team suggested recruiting a Community Development (CD) Specialist (PRM 1995: 3-8). This was not possible as a New Zealand conservation manager had already been recruited. As things evolved the person in question turned out to be the most people-oriented conservation manager that the Bismarck-Ramu project could have wished for.

The review team also recommended to shift the balance between biological and social work in the Bismarck-Ramu area by suggesting that the CD Specialist and his counterpart should reside there ('without the construction of a permanent Conservation base, but provided with acceptable accommodation'), conduct a participatory rural appraisal program, including a genealogy analysis and a local needs assessment. It also argued that

> 'the substantive part of ICAD Development, including Conservation Base construction, detailed biological inventories ... and strong advocacy should be made after a year or sooner, depending on the advice of the CD Specialist' (PRM 1995: 3-8).

In other words, the biologists were to follow the social scientists and not the other way around as had been happening until then. With regard to the assessment of local biodiversity the team suggested that 'there is no urgency to undertake the studies and that a decision on the mode of study could be made [later] '(PRM 1995: 3-8). As we have seen in the last chapter, these various suggestions were not followed and the project continued as planned with the biological survey in Bubkile in October 1995, followed by the establishment of a temporary base at Pimbum in February 1996.

By then, however things were becoming increasingly difficult and the realisation that the Biodiversity Program was not able to compete head-on with large resource developments led to a sense of pessimism amongst some of the staff members. This

feeling was based on the idea that due to the system of land tenure, the unrealistic expectations of rural people and the negative experiences in the Jimi Valley came to see conservation in PNG was well nigh impossible. To the resource economist, who would be instrumental in processing the Lak experience, the main issue was to avoid this very conclusion, and to argue that the Lak experience allowed for the development of a coherent strategy for the second ICAD site.

It is at this stage that a CD specialist working for the North Simbu Integrated Rural Development Program made his entry into the Biodiversity Program. The CD trainer, a buoyant New Yorker, former Vietnam vet and community organiser with extensive experience in community training, organisation and planning in the Solomon Islands and PNG came to play a key role in processing the early Bismarck-Ramu experiences described in the previous chapter. Later he would take responsibility for a new participatory community approach while training the project's field staff in the Bismarck-Ramu area. His quickly developing alliance with the resource economist provided the latter with a rationale for continued support to biodiversity conservation initiatives in PNG and led to the development of a modified proposal for the second phase of the Bismarck-Ramu project. This philosophy would be used to analyse the events at Lak and to develop a new strategy for the Bismarck-Ramu project, finding its main outlet in the earlier mentioned *Race for the Rainforest* document (McCallum and Sekhran 1997).

The CD trainer had a personal and political reason to get involved with the project. Having worked with a large number of NGOs in PNG, he had become increasingly disenchanted with the NGO movement as NGO people in PNG increasingly turned out to be not only ineffective, but also status-oriented, highly opportunistic, and even violent and corrupt. In a paper titled *NGOs are Getting in the Way* (Lalley, no date) he argued that the present generation of NGO workers had failed the country, and that the only solution was to train a new generation of fresh and critical people. His interest in identifying and training this new cohort of future NGO workers, coincided with the turn towards community work made by the Biodiversity Program and offered him a vehicle to pursue his ideas.

COMMUNITY DEVELOPMENT AND CONSCIENTISATION

The CD trainer was not a conservationist, but in the first place driven by the idea that people need to make their own choices on the basis of their own experiences. To him the essential aspect of the forestry crisis was the political disempowerment that resulted, a process of which environmental degradation was but one symptom. Not surprisingly, during the development of the Bismarck-Ramu project there would be a continuous tension between the drive to establish a protected area on the one hand, and the trainer's emphasis on the need to do things slowly and participatory by focusing on peoples own needs and perceptions on the other. In many ways his private agenda of building a team of hard-headed, dedicated and critical community workers, focusing on community self-help rather than on the implementation of an

externally-defined and narrow conservation idea, would be one of the most tangible results of the Bismarck-Ramu project.

The trainer's view of community development was heavily influenced by radical perspectives of social work emanating from the United States. Whereas social work in the United States was institutionalised as a mainstream activity after the Second World War, work by Alinsky (1971) and others took a more radical and confrontational style when dealing with Government and private sector interests. In this view poverty and the lack of participation by deprived groups was not the result of cultural, racial or family factors, but in the first place the result of political, economic and social oppression (Midgley 1986). When this analysis took hold of community development projects, often in conjunction with a Marxist political philosophy, widespread confrontations with the sponsoring Government bodies were inevitable, a view caught in the title of Loney's 1983 book *Communities against Government.*

The radical approach to community development had considerable appeal in the Third World and would be elaborated on by a range of people, foremost among them Paolo Freire, whose *'Pedagogy of the Oppressed'* of 1973 has stood at the basis of many development manuals aiming at the conscientisation of local people (e.g. Hope and Timmel 1984). Whereas the radical arm of community work in western countries had helped to define Government institutions as part of the problem, Freire focussed on the psychological aspects of development, emphasising that for local people to unleash their full potential and battle the constraints of poverty and injustice, they first needed to be conscious of the root causes of their predicament. In this action-based model of community development, local people, with the help of trained facilitators, take stock of their situation by going through a series of training sessions designed to generate the ability to co-operate and tackle the issues that affect the community.

In this agenda, the CD trainer would be strongly supported by a number of people. In the first place there was a PNG conservation manager appointed by DEC. He used to be a forest officer in Lak who was largely marginalised within the corrupt regional forest office, until he was discovered to be a 'good' bloke by the Lak ICAD project team and subsequently recruited. The project offered him the opportunity to get out of a near hopeless situation as a minor civil servant tucked away in the corner of the country and he grabbed it with both hands. Although a forester by training, he would develop a strong interest in conservation and become one of the mainstays of the project. In this he was supported by his New Zealand Counterpart, a hands-on conservation manager who, unlike the recommendation by the PRM not to recruit a 'traditional conservation manager' suggested, came to play a critical role in organising the community fieldwork in the Bismarck-Ramu area. Later, when the project was located with an NGO based in Madang on the north coast of PNG, the team would be expanded with the director of the NGO, a church liaison officer, a number of PNG Community development workers and myself.

TOWARDS A REFLEXIVE AND PROCESSUAL APPROACH

One of the first things that the CD trainer did, was review the interventions in Lak as well as those in the Bismarck-Ramu area. This review led him to propose a fundamental revision of the way in which project staff was to behave in the field. His so-called 'community entry approach' was designed to contact communities in such a way that the level of expectations generated by the presence of the project was minimised. Instead of promising people development, income generating activities and services, this approach emphasised the self-generated, processual and participatory aspects of development and conservation.

In response to the high-pressure experience at Lak and the difficult experiences during the start of the Bismarck-Ramu intervention, the trainer suggested to take more time to think things through, not to pin itself down on a single predetermined approach to conservation and development activities, and to turn away from economic incentives as a means to quickly establish a conservation area. Instead, he suggested to focus primarily on establishing a working relationship with local people and on discussing the changes taking place within their environment. In order to facilitate such a debate within the communities of the Bismarck-Ramu area, it needed far greater room for manoeuvre in order to implement what was essentially an open-ended process of co-operation.

The first step in getting away from the idea that the project had to plan on behalf of people, meant doing away with the blue-print nature of conservation area establishment. Greater flexibility had already been introduced as part of the 1995 area selection process, when the project defined a broad area of interest on the basis of biological criteria, while the social feasibility of conservation area establishment was to be assessed through a separate sociological study and the work of a number of PNG Community Development (CD) workers.

Thus the area which was to be conserved and the communities with which the project would work together were not predetermined. This decision was made in response to one of the first lessons from Lak, which had been that biological criteria may be used as a basis for identifying broad areas of high conservation value, but that the selection of specific sites was to be made dependent on social criteria. In addition, it was deliberately decided to take an area not under immediate threat so as to have time to facilitate the process with local communities (DEC 1995, McCallum and Sekhran 1997). While this would initially create room for a more slow and reflexive community development approach, it would come to constitute a problem when a second phase of the Biodiversity Program was developed in 1998-1999. As the GEF would by then only fund programs mitigating a real threat to biodiversity, the design team now had to argue that the Bismarck-Ramu area, first chosen because of its low levels of threat, was actually sufficiently threatened to warrant further GEF investment (See chapter 8).

The second step towards more room for adjustment to local circumstances came from the decision not to predetermine the type of conservation regime. Although the

Framework Plan for the Bismarck-Ramu project (CRC 1995a) ostentatiously aimed at the declaration and gazettal of a national park by April 1998, the project team decided that it was more realistic to keep the type of management regime that would evolve open. The Bismarck-Ramu project team thus moved away from an immediate drive towards the establishment of a national park, towards a situation in which the type of conservation management and the size and exact locality of the area or areas that were to be conserved were made dependent on the responses of local people. This was a major shift in thinking as it meant doing away with the idea that the biological expert's opinion on local matters counted most. This shift, however, gave the Bismarck-Ramu team the flexibility to allow conservation initiatives to gradually evolve in an open-ended and long-term discussion between project and people.

In the design of this new so-called community entry approach, the project team also decided not to start off by mentioning specific western definitions of 'development' and 'conservation' to local communities. This meant a departure from the earlier patrols where the project had presented itself and its intentions to local communities and had laid the basis for a possible ICAD deal. Instead, the trainer proposed to discuss problems and issues that affected peoples lives in a more general and broad manner. It also meant that the economistic idea of an 'exchange' of conservation for development such as that used in Lak and in the first phase of the project's intervention in the Jimi Valley had to be done away with and that the linkage between the C and the D of the ICAD concept had to be left much more open. As the Bismarck-Ramu Framework Plan formulated it in 1995, the project

> 'must start not by talking about economic incentives, and not by talking about development... Instead they should be listening to the community, and facilitating a debate within the community... Conservation and the establishment of protected areas will be the outcomes, not the motivators' (CRC 1995a: 36)

In order to allow communities to express their own view on issues that concerned them, the field staff were explicitly told not to 'preach' with regard to the dangers of logging and the need for conservation. Instead the project team, through the a number of community development (CD) workers, tried to engage communities in the area into an ongoing dialogue. The topics of this dialogue focused on the nature of social, economic and environmental changes that were taking place in peoples lives, the good and the bad in those changes, the dreams that communities had for the future, and finally the things they could do for themselves to make some of those ideas come true. This dialogue thus shifted the onus of analysis from the global to the community level, away from biodiversity conservation towards resource management and development issues at the community level, and in some ways away from the 'traditional' ICAD concept towards a more broadly oriented open-ended participatory rural development-like approach.

DEVOLUTION AND INSTITUTIONAL AUTONOMY

Another step aimed at obtaining greater flexibility, but also one that created room for an agenda based on community development from within rather than conservation from without, came from the decision to redesign the institutional structure of the Bismarck-Ramu project and its position within the Biodiversity Program. The Lak project had suffered from poor communications, difficult logistics and an awesome administrative burden involving several UN agencies. A lack of implementation capability and delays had been the inevitable outcomes. Learning from this experience, the staff of the Biodiversity Program realised that daily fieldwork in the Bismarck-Ramu area should not be executed by the involved UN offices, but should be brought under the umbrella of an independent NGO under contract with the UNDP/UNOPS. The advantage of such a set-up was that it required one annual contract to be negotiated between the UNDP and the NGO, specifying the types of field activities to be undertaken, which after finalisation would allow the NGO to hire and fire personnel, program, plan and budget without needing to involve the DEC bureaucracy and three UN agencies for every cheque involved. A suitable NGO partner was found in the Christensen Research Institute (CRI) in Madang.

The CRI was in the lucky possession of good infrastructure including laboratories, maintenance facilities, sleeping quarters, office space and a conference room. The new physical and institutional set-up meant that the Bismarck-Ramu field staff at the CRI were able to carve out a considerable degree of autonomy from the office in Port Moresby, the involved UN agencies and the DEC. Whereas the Lak field operations had been managed from the CRC in Port Moresby outward, most decisions with regard to field work in the Bismarck-Ramu area were now delegated to the Madang project office. The field work was now physically removed from the policy discussions of Port Moresby, and financially largely independent through its new financing structure. This devolution not only meant a decreased administrative burden, but also a reduction in potential political pressure from the side of the DEC and the UNDP. It thus created room for a shift from conservation towards community-development.

The move to Madang was appreciated less by the incoming chief technical advisor of the Biodiversity Program, who although formally responsible for project execution, found himself to have little control over whatever happened in the Bismarck-Ramu area. He would on arrival, when community work had already started, note that the field staff in Madang perceived the Bismarck-Ramu area as some sort of 'free space' in which the project could do as it wanted to. Such a view clashed with the administrative imperative to structure the process in a more or less linear fashion with tangible and assessable outcomes. While his Madang staff was doing a variety of unclear things with a wide range of possible outcomes in the Bismarck-Ramu area, he found himself sitting in Port Moresby having to develop log frames and fill in progress reports to satisfy the administrative requirements of the donors. These documents were still based on the initial project document which

focused on establishing a conservation area by April 1998. The discrepancy between the fluid and processual developments in the field and the rigidity of the administrative requirements would be noted in the final evaluation report:

> 'the mission ... notes the difficulties faced by Project staff in developing a logframe which would need to "rationalise" and accommodate outputs and activities which had evolved from shifts in implementation which were more made in response to external events than to any logical process of project planning' (PRM 1998: 24)

DEC officials didn't like the move to Madang either. The reasons were twofold. The first had to do with the underlying premise that an NGO would be better equipped to execute field operations than the DEC bureaucracy. Whereas the responsible UN officers were prepared to draw this lesson from the Lak experience, this was clearly seen as a threat within the DEC. Officers of the Department, and civil servants within the PNG bureaucracy in general, do not think highly of NGOs and see them as a direct threat to their competencies. Considerable effort for example has been made to 'organise' NGOs through the Department of Home Affairs, Women and Youth in an attempt to bring their activities under civil service control. As an increasing number of donors is pointing to the fact that Government services throughout the country are expensive, inefficient and of low quality and prefer to fund NGOs rather than cumbersome government bodies, the move to Madang and the devolution of responsibilities to the CRI were perceived as threatening.

The second and related reason, had to do with the apparently mundane, but in practice all important issue of the distribution and use of project assets. The CRC constituted a pleasant and efficient microcosm in an otherwise dysfunctional department. After the termination of the project the Biodiversity Program assets, ranging from office equipment to vehicles would no doubt be transferred to DEC. The move to Madang, however, entailed the risk that substantial resources would end up being put into the NGO rather than into the department. This assessment proved correct as most assets from the Lak project including a boat and outboard engine, a four wheel-drive vehicle and a substantial amount of office equipment was shifted to CRI and thereby 'lost' to the DEC. The issue of the level of autonomy granted to the Madang field staff would repeatedly become a source of discussions. First during the second half of 1996 when a newly appointed chief technical advisor based in Port Moresby tried to move his offices to Madang, a move which was seen as threatening to the autonomy of the CRI, the second time in 1998 when the discussions for a second phase of the Bismarck-Ramu project had the DEC rejecting UN or NGO implementation, instead trying to regain control by vying for what it called 'national execution'.

BETWEEN DEVELOPMENT AND DEPENDENCY

In order to develop the new community entry approach, the project team led by the resource economist and the CD trainer decided to rethink its priorities. Rather than

putting 'conservation' up front, assessing local biodiversity in order to subsequently and presenting people with a set of either/or choices, as had been the case in the high-pressure environment of Lak, it saw the building of a trust relationship and the emphasis on self-reliance as its first objective. Later steps would include taking communities through a problem identification and prioritisation process, after which people would have to be mobilised into implementing their own community plans.

The analysis by the Biodiversity Program as it was contained in the earlier documents on the attitudes of the Lak population, the analysis of the CD trainer and as it would be articulated in *Race for the Rainforest* presented certain characteristics of the target population as a key issue in the possible acceptance of conservation initiatives. One of the issues that played a large role in the analysis of the Lak ICAD project refers to so-called 'cargo' thinking found among rural people in PNG. Cargo thinking here denotes the manner in which many Melanesian communities regard 'development' as the simple provision of externally provided material goods and money; i.e. '*kago*'. The term 'cargo thinking' is used to denote the idea that an improved material well-being is not so much seen as part of a complex process of changing educational patterns, new forms of productive work, changing power relations and new responsibilities and opportunities. The actual goods and their consumption *are* development and are in themselves expected to lead to a state of well being.

This type of thinking is derived from the famous Millenarian movements known as 'cargo-cults' and which resulted from a clash between pre-colonial culture and the advent of the colonial powers with their range of material goods. Development in PNG has in many cases become associated with similar sources of 'easy money' as those promised by the cargo-cults of the past. The best imaginable deal these days, and a very real possibility to a small number of resource-rich communities, is to have some foreign company exploit the available resources while the owners receive and consume the royalties that are being paid for the right to access these resources. As Filer (1997a: 171) states, 'PNG, which was once a nation of gardeners, is now becoming a nation of gatekeepers and rentcollectors'. The level of expectations with regard to the amounts of royalties paid and the provision of infrastructure and services is usually framed in the light of PNG's experiences with the multinational mining corporations.

According to this analysis the ICAD project in Lak displayed large amounts of wealth through the use of helicopters on its biological surveys, the building of a base and the presence of four-wheel drive vehicles. In the analysis of the Biodiversity Program this led the Lak people to think that whatever they did with the project had to be compensated for in monetary terms. Whether the activities were to benefit themselves or the project did not matter. The case of the village health and water programs in Lak illustrates these feelings well:

> 'Many families spent considerable time each week to finding transportation (...) to the Health Center at Silur. After consultation with officers of the Department of Health, it was ascertained that a more efficient solution might be to address the problem of water quality, which in many villages had declined rapidly with the commencement of logging operations up-stream, and was thought to be a major cause of disease. Project staff devised a system of water reticulation for the villages worst affected by poor water quality. A donor was found to provide assistance. The installation of water tanks in each village, with water piped in underground from a safe source promised clean water and significant time savings as women would no longer have to fetch water from distant creeks, however, when this system was presented to the communities with project staff offering the equipment and technical advice and the village expected to provide labor, inevitably the first question was; 'how much will ICAD pay us to dig the ground for the pipe'? Although the community saw value in the communal water system their recent experiences with the cash economy and the interaction with the logging company, would not allow them, as individuals, to work for the community good. 'We won't work for free, we are not fools. Only fools would work for free like slaves' (McCallum and Sekhran, 1997: 34).The water supply was never built.

The notion of external dependency thinking is an extension of the cargo argument and leads people to regard everything that comes from the outside as good or at least as better, while their own community and lifestyle is regarded as backward and inadequate. In the view of the new community entry approach this lack of pride leads people to think of development as an externally driven process that - per definition - can not be generated from within the community itself. As rural communities come to see themselves as unable to harness development from within, they increasingly wait for the government to bring services, the mining and logging companies to bring money and cargo and - in some cases - the church to lead them into a state of salvation. Development in all its forms has thus come to be seen as the responsibility of outsiders and may also paralyse community initiative, destroying local people's ability to actively take charge of their lives.

SHARING THE BLAME OF FAILURE II

The shift in policy from an expert-driven attempt to establish a conservation area in the face of industrial logging in Lak, to a more participatory and open-ended project in the Bismarck-Ramu area did not go without discussion. It entailed a fundamental shift in the underlying project discourse, the view of people and the make-up of the project team. Whereas the Lak project had been executed from the assumption that foreign conservation managers, driven by a feeling of environmental crisis, could make plans on behalf of local resource owners, such authority was now questioned by those emphasising a more participatory approach. In this view the need for nature conservation is to be determined on the basic of ecological criteria, not on the basis of social considerations. The Biodiversity Program had adapted itself to the PNG situation by recognising the importance of social criteria, but maintained its emphasis on the biological determinants of conservation in its linear succession of

steps. First one had to determine the significance of local biodiversity, then people came in. In this view, the Lak failure could in the first place be attributed to the socio-cultural characteristics of the Lak communities which had made conservation area establishment impossible. The project's main shortcoming lay in the lack of attention paid to understanding these characteristics. In essence, however, the ICAD approach was not considered flawed.

The CD trainer, however, came with a different analysis, claiming that the project team during the Lak project and in the opening stage of its Bismarck-Ramu interventions had manoeuvred itself into an impossible position by basing its conservation pitch on economic incentives. He argued that conservation projects could never hope to beat logging or mining companies at their own game, and that the ICAD analysis underlying the Lak approach led to a 'bribery for conservation' situation. Instead of simply blaming the recipient population, the CD trainer argued that projects and the manner in which they are implemented constitute an essential part of the problem. Projects give people the idea that outsiders are taking over, and reduce development from a co-operative venture to a one-way flow of consumption goods, in the process destroying the motivation of people to decide on their own priorities or generate change for themselves.

The CD trainer illustrated the point that project interventions can be part of the problem through a particularly trenchant analysis of the opening speech used during the first patrols in the Bismarck-Ramu area. These patrols took place while the situation in Lak was still in flux and the speech reflects the emphasis on economic incentives as a means to secure conservation. The speech presented during the preparations of the Bubkile Biological Survey and during the first patrols among the Jimi settler communities in the Ramu valley, of which we have already seen another version in the previous chapter, went as follows:

> 'We come from the DEC. The environment is everything around us, trees, rivers, cassowaries etc. Conservation looks after those things for the benefit of the people now and in generations in the future. We are interested in helping you with the conservation of your bush. The Government of PNG knows the village people largely depend on their bush for food, medicine, cash income & customary purposes. It is understood that the local people need some sort of development, or improvement of their lifestyle, and we can possibly help with this as well. Development can be big or small. Big development happens fast, such as logging and can kill off the bush. Small development might be slow, but it can be done so the bush is not lost. An increase in population and it impacts on subsistence farming, and also big fast development is coming in (which) can be a threat to the natural resources, the bush and to your culture. The Government has realized this and has come up with the idea of conservation and small development to help local people save their bush. We cannot do these things for you, we can only help you. Technical expertise for example, on how to improve gardening practices, or identify economic and other small business projects like chicken farms can be provided. We have come to this first patrol just to meet you and tell you who we are and why we came. We would like to know if you are interested in the idea of conservation and small development' (CRC 1996a: 5-6).

This speech in the analysis of the newly appointed CD trainer, show how easy it is to reinforce certain dependency and cargo notions. His comments follow on statements made in the entry speech:

> The first patrol teams said: 'they were interested in helping people to conserve their bush'. The trainer noted: 'Though we are interested in helping people conserve their bush, this should not be said at this time. We haven't heard from the people yet. Now when we do hear from them they will tell us they want to preserve their bush. (...) Better to say (that) we have come to help you help yourself. We can provide information to help you plan and organize.'
>
> 'The PNG Government knows the village people largely depend on their bush for food, medicine, cash income & customary purposes. It also understands (that) people need some sort of development, or improvement of their lifestyle, and we can possibly help with this'. *The trainer: '[It is] not necessary to bring this at this stage. Also why should we be telling them what they depend on from the bush? Better they tell us - that enhances the dialogue. (...). In addition we have defined development and told them they need it. It is never positive to inform people they need improvement in their lifestyle. Again if that comes at all it comes from them. Let them tell us (at a later date) what they think development is and during that discussion we can dismiss ideas that 'development' is only economic in nature. Lastly it sets up a dependency relationship - 'you need improvement - and we can help'.*
>
> The teams said, 'Development can be big or small. Big development happens fast, such as logging and can kill off the bush. Small development might be slow, but it can be done so the bush is not lost. An increase in population and it impacts on subsistence farming, and also big fast development is coming in (which) can be a threat to the natural resources, the bush and to your culture'. *The trainer: '[I] agree with the pitch -It's simply made too soon. Again we are defining development without hearing what they have to say about it. Who knows they could actually tell us this (about population and resource pressure) themselves'.*
>
> 'The Government has realized this and has come up with the idea of conservation and small development to help local people save their bush'. *The trainer: 'Best to leave the Government out. This item makes it seem as if the Government has seen the problem and come up with an idea to resolve the situation. There is no dialogue. Once again it sets up dependency. We can't help ourselves. Good thing the Government is looking out for us and has come up with a solution to our situation'.*
>
> 'We cannot do these things for you, we can only help you. Technical expertise for example, on how to improve gardening practices, or identify economic and other small business projects like chicken farms can be provided'. *The trainer: 'Good we've said we can't do these things for you. We touch on self-reliance. Yet we say we can help you and it takes away a bit from the self-reliance. How to improve gardening practices or small business projects should not be mentioned by us yet. We have done two things here. One, we haven't heard what they have to say and second, though we were only giving examples the people may now tell us they want to learn to improve gardening practices or start a small chicken project where before they weren't thinking about these. They may have more pressing needs they will now suppress'.*

> 'We have come to this first patrol just to meet you and tell you who we are and why we came. We would like to know if you are interested in the idea of conservation and small development'. *The trainer: 'Are they going to be interested in the idea of conservation and small development? You better believe it. We have steered the entire conversation. They are going to invite us back because they sense a bit of cargo and outside help. We've set it up.'* (BRG 1996a; Appendix 3).

In the analysis of the community trainer, cargo thinking and the resulting apathy may be triggered by the way in which the project presents itself. Many rural people in PNG take a cynical view to development projects, regarding them as a short-lived opportunity to pull in as many material goods, payments and favours as possible, before it collapses. A man from Wandumi village in Morobe Province, for example told the former Director of the Christensen Research Institute how his people had long ago understood that it was 'the nature' of projects to fail. It was just a matter of grabbing what one could and when they fell apart it was up to the local community to attract a new project to the area (PC Orsak).

There were also indications from the Bismarck-Ramu area that the project through its initial patrols had actually been stifling local community initiatives and engendering the apathy that characterises those PNG communities waiting for 'development' to be 'brought in'. An example is the case of the Pimbum airstrip in the Ramu Valley, where community work on the construction of an airstrip started before the project entered, but ceased the very moment the project expressed an interest in 'working together' with local people.

THE PIMBUM AIRSTRIP

The story of the Pimbum airstrip starts with the arrival of Jimi settlers in the Ramu valley in the beginning of the 1980s. Some of them were from the Pala-Maipka clan and settled around Pimbum in the east of the valley, others were from the Kema-Darlka clan and settled further to the west at Foroko-Brimde. The story goes that the Darlka were invited by the Ramu landowners at Foroko to come and live there because one of them was a councillor and the Ramu people wanted him to help them with getting an airstrip built. Construction was started at Pimbum after the Jimi settlers had put some money together and had received a donation from an election candidate. Construction started at Pimbum in about 1991, but was subsequently abandoned due to the size of the trees that had to be cut and the roots that had to be removed. The Brimde Jimi were more successful as they also helped organise the political campaign of the future Governor of Madang who rewarded them with K 6,600 to build the airstrip. In 1992 the first plane landed in Foroko-Brimde. Later an aidpost and also a school would be built. Pimbum, in contrast has very little in the way of infrastructure and services and are envious of the Brimbe Jimi.

The people at Foroko-Brimde complain that the Pimbum people make use of the services without contributing during community work days. The Pimbum people in

turn contend that these services are not really theirs as they belong to another clan. The distance and the many conflicts between the two villages, prevent them from using these services anyway. The people in Pimbum lacking the numbers and community cohesion to build their own airstrip, saw their chance when one of the few Jimi university graduates in the Bismarck-Ramu area visited the area in 1994. As the graduate and later community facilitator to the Bismarck-Ramu project, writes himself:

> 'In July 1994, I got one month annual leave while working at Porgera Goldmine as a Mining Geologist, [when I[decided to visit relatives and step fathers living in Ramu. It was my first time to visit the area and as soon as I arrived [in the Ramu Valley] ... several pigs were killed to welcome me as an educated son .... While I was in the area for two weeks, the Pimbum people realized that having me as an educated man would facilitate a lot in terms of bringing development into the area. Hence, they called a meeting ... and told me all about the change of boundaries and the situation they were in.... They expressed their needs to establish such services [like in Foroko-Brimde] in Pimbum. I at last told them ... I would accept the task to act as facilitator.... The next day the community gathered to clear the bush' (Opo 1996; 2-3).

During the work, the people of Pimbum built the graduate a house, which later, when he came to work for the project, acted as radio house for the project and rest house for the Community Development patrols. The graduate divided the airstrip into small strips of 6 meters wide and 50 meters long. Every household had to take responsibility for the clearing and levelling of one such strip.

Work progressed slowly, and was initially supported by the Bismarck-Ramu project, but ceased totally after the project intensified its presence by establishing the 'base' in the community facilitator's house in Pimbum. It appears that the Pimbum people inferred that the flurry of patrol activity followed by the occupation of the house with DEC equipment, the recruitment of two local labourers and the flying in of the surveyors to map the airstrip in January 1996 meant that the ICAD project was taking things, including the construction of the airstrip, in hand. This led to a wait-and-see attitude, which instead of continuing to work on the airstrip, and if necessary putting money together to buy tools, allowed the grass to grow. To be clear it must be emphasised that it was never said by anybody that the project would construct the airstrip for local people, although the option was discussed within the project and although assistance was promised and given. People at Pimbum, however, believed that the project was going to help them even further in building their airstrip and the first patrol report had to conclude that 'it is not a good sign that since the Biodiversity Program paid the surveyors to stake out the landing strip no work has been done as people are now waiting for the tools to be brought in' (CRC 1996a: 45).

It would have been very easy for the project to provide the tools. The sum needed was tiny, estimated at about K500. The people in the area, however, regularly pay bride prices amounting to K3000 and a number of pigs, each worth several

hundreds of Kina, while the landowners at Pimbum invested no less than K3200 in trying to get a logging company to 'develop' their area. It seemed that local people would be able to put K500 together if they really wanted the tools to finish the airstrip. This was obviously not a popular message for the project to deliver, but one considered necessary if the team wanted to avoid ending up in a situation like that of the communal water supply in Lak. If the team had provided tools it would only have emphasised that the airstrip was really something that the project wanted, and not so much something of the community.

When I talking about the airstrip later in September 1996 with Simbil Apa, one of the big men in Pimbum, it became clear that the CD trainers analysis had its merits. The question now revolved around the ownership of the airstrip and thus the responsibility for its construction. Simbil asked me for whom this airstrip was actually being built, implying that it was for the benefit of DEC, rather than for the community. I in turn replied that that was a good question but better one asked before the people at Pimbum had put in all this work. It was their idea after all, and going to their strip, not DEC's wasn't it? We left it at that, but the implicit attempt to make the project responsible for 'development' in the areas, the hall-mark of 'cargo thinking' as defined by the project would remain an issue.

THE SOCIAL SCIENCES TAKE OVER

The analysis conducted by the CD trainer differed from that of the Lak assessment in one crucial way. Whereas the latter assessments had put a large part of the blame for the Lak failure on the socio-cultural characteristics of the local population, the difficult relations between people and project in the Bismarck-Ramu area were in the first place attributed to manner in which the project had structured its interventions. Grant (1996: 15) lists a number of drawbacks of the initial approach:

- The physical appearance of the initial patrols emphasised outsiders' relative wealth in the form of tents, imported food, helicopter transport, large number of carriers and guides versus villagers' simple lifestyle. This was thought to raise development expectations to unrealistic levels, which the project would not be able to meet during later conservation work.

- The time spent per village during the first patrols was short, usually one night or less and left little time to listen to issues important to local people and made it hard to build contacts between villagers and project staff.

- The 'speech format' used in the initial patrol was one which did not encourage much participation from the side of the villagers, while it was feared that the content itself was 'dictated by outsiders';

- The fact that villagers were in some cases more or less promised some sort of small development such as poultry farms during the first patrols, raising expectations without knowing whether the project could and wanted to meet

these. The problem here is that many villagers will agree with whatever type of development and conservation activities are proposed.

The combined experiences and analysis of events in the Lak and Bismarck-Ramu areas and the recommendations by the 1995 PRM were not only compelling in their own right, but were also supported by a shift in the staffing structure within the Biodiversity Program. The sitting project leader took up a new posting in Asia in February 1996, leaving the resource economist in charge of the Biodiversity Program. A number of social scientists amongst whom the CD trainer, a participatory rural appraisal (PRA) specialist and myself, a sociologist and economist responsible for the Social Feasibility Study, were recruited, while the director of the CRI, an entomologist with a strong interest in community attitudes to conservation and forestry was to design a long-term conservation education program. The two conservation managers for the Bismarck-Ramu area, one a New Zealand conservation advisor, the other a PNG forester would strongly support the CD strategy, illustrating that the fissures that are being described do not simply reflect the differences between professional backgrounds. Later in 1996, an anthropologist was recruited as the new chief technical advisor of the whole Biodiversity Program. Thus whereas the Lak project had been predominantly run by foresters, biologists and conservation managers, the design of the Bismarck-Ramu project expected the social sciences and to take a more prominent role.

This left the project biologist in a rather isolated position. He had until then largely driven the process in the Bismarck-Ramu area and was now told that the project would refrain from further interventions until it had re-assessed its strategy. When by July 1996 the basics of the new community entry approach had been developed, biological issues were put on the back burner, and no expatriates, with the exception of myself and one or two short-term visitors were allowed into the area. As the project biologist pointed out, this also introduced a potential problem, as one might find a community well willing to develop a conservation regime but without the natural resources worth conserving. To the proponents of the new philosophy, however, this was less important, as a first biological assessment had been made and as it was now time to focus on people. Whether this focus indeed leads to conservation is an issue dealt with in chapter 7.

REDEFINING 'DEVELOPMENT'

The shift in emphasis from nature to people and from a top-down planned conservation intervention as had taken place in Lak towards a more open-ended and participatory process approach became visible in a number of ways.

In the first place the shift away from the politics of forest exploitation, away from a frantic awareness drive in the face of falling trees, and the associated crisis management under severe bureaucratic constraints that had characterised the Lak project, led to a much more relaxed and reflective project. Interventions in the area were planned in great detail, much emphasis was put on training and confidence

building of CD workers and project staff, and a lot of time was spent analysing the reactions and questions of individuals and communities in order to come up with appropriate answers. In many ways the project team consistently refused to be hurried into taking steps that would later have to be retracted.

In the second place, the shift from relatively large scale, business-oriented development in Lak, to the more modest community development in the Bismarck-Ramu brought a whole new language with it. In the Lak project and the first stage of the Bismarck-Ramu interventions, the emphasis had been on the 'exchange' of conservation and development, 'early rewards packages', determining the 'incentive price for labour', the need to 'develop infrastructure' and 'the transfer of skills' in order to compete with the logging company in material terms. Development was defined as principally market-oriented in nature and would also have to be sizeable as it would have to compete with the revenues from logging. In contrast, the development language in the new community entry approach of the Bismarck-Ramu ICAD project was framed in terms of establishing a 'dialogue' and 'building trust' with local communities in order to generate the 'self-confidence' needed for 'local empowerment'. Key to this approach was the view that people themselves have to define the issues of importance and generate change for the better. It is not much good to have an outsider explain to local people that they have a 'conservation problem'. Only those issues that generate strong emotions in the form of anger, fear or enthusiasm generate the motivation to really make a difference.

Finally, the idea that economic incentives alone are insufficient to compete with logging operations as conservation projects can not hope to access similar levels of funding led to a gradual shift towards an emphasis on 'moral incentives' for conservation. Sekhran (1996: 17), for example notes that

> If conservation is justified on purely economic grounds problems may arise if people aspire to higher incomes than can be provided by ICADP interventions. In such circumstances, communities would ... sell out to the highest bidder.... Therefore material incentives alone are unlikely to achieve conservation objectives. Other 'moral' incentives are needed to reinforce traditional cultural attachments to natural resources, for example by emphasising customary management practices and the maintenance of sacred groves. It is therefore necessary to challenge communities as a whole to rethink their strategies for development.

The community entry approach, however, went even further by regarding development and conservation in the first place as organisational problems that had to be based on the perceptions and motivations of the resource owners themselves. Its starting premise was that communities and people can only make a change for the better if they organise themselves to make informed decisions leading to joint actions. In such a process donor funds can be used as a means to help people 'organise themselves', but the funds are not to be used to 'generate development', to 'purchase participation' or to 'sweeten' the opportunity cost of conservation. Instead, local communities have to become aware of their predicament, have to be

made conscious of their ability to generate change and have to be led towards a feeling of self-confidence and mutual co-operation which allows them to tackle the problems that they are facing. This change in development philosophy, away from an emphasis on material goods and services in order to secure a conservation area is fundamentally incompatible with the underlying economistic premise of ICAD idea. By taking out development as an incentive or a tool for conservation, the Bismarck-Ramu project team 'exploded the ICAD concept' (VanHelden 2001b).

This turning away from the economic ICAD concept and its 'globalist perspective' (Milton 1996) was partly a result of the severe mistrust of international market relations held by the CD trainer. His view of market relations was one akin to the views held by political economists who see 'development' as a process by which the wealthier nations and multinational companies extend their power over developing countries. By constructing a vision of global degradation which blames the poorer nations for the processes of environmental degradation, and which emphasises the need to tackle environmental problems at the global level, western interest groups - among them professional conservationists - claim the authority to make decisions with regard to other people's natural resources. By defining the solutions to environmental degradation in terms of the transfer of technology, the integration of economic systems and the expansion of the international bureaucracy these interests are seen to seek a continuation of their dominance over southern countries. The very idea of integrated conservation and development, aiming to seek an economic solution to environmental problems by integrating western recreational wants (in the form of eco-tourism) pharmaceutical interests (bioprospecting), resource needs (sustainable timber harvesting) or climatological buffering (CO2 up-take) pushed by the United Nations and the World Bank is inherent to this perspective.

The counter-discourse brought forward by the anti-globalist opponents to the extension of market relations and international regulations into the lives of poor resource-owning rural communities, is one which hinges on the assumption that not poor people that destroy nature, but that the integration into world markets forces people to adopt unsustainable practices. Shiva *et Al.* (1991), in a vociferous attack on the dominant biodiversity discourse, argues that western conservationists are good at blaming poor people for the loss of biodiversity, but fail to discuss the environmental consequences of the economic system within which they themselves operate. In her view, local people are the wardens of biodiversity and it is the introduction of market relations, the uniforming impact of industrial agriculture with its emphasis on mono-cropping and hybrid seeds, and the introduction of new patenting rights over resources developed by farmers around the world, which form the real threat to biological and cultural diversity. Development assistance is thought to play a central role in this process and

> 'can be likened to the AIDS virus: a pathogen that destroys the ability of the host country to resist the invasion of a foreign socio-economic system. Throughout the Third World, the result of large scale AID has been the displacement of traditional cultures and sustainable patterns of land use, along with the rapid

> liquidation of forests and agricultural lands for the benefit of the industrial elite' (Schücking and Anderson 1991: 21).

The policy advice that follows from this view is one that emphasises the need for communities to uncouple from the world system and to go at it alone. This view often emphasises the ecological wisdom of indigenous peoples conflating cultural and biological diversity into one, by arguing that the goals of indigenous peoples and conservationists are 'isomorphic' (Alvard 1993). By preventing a further 'contamination' with western influences, such conservationist behaviour can be maintained. This romantic view of indigenous communities also came to play an important role in the legitimisation of the community entry approach.

It is obviously quite ironic to find a UNDP project, which is based on the idea that an integration of local communities in world markets through the judicious use of economic incentives may lead to the conservation of biodiversity was now being dominated by proponents of a radically opposing view. In a sense, the CD trainer thus 'hijacked' the project, turning the ICAD philosophy on its head, denouncing the use of economic incentives and globalisation, but at the same time making use of the resources and legitimacy accorded by the UNDP and the GEF. It would take three years before the contradictions between the new community-based philosophy of the Bismarck-Ramu project and its donors became apparent.

Tacconi (1998), however, attributes the redefinition of 'development' between the Lak and Bismarck-Ramu projects to much more commonplace reasons, suggesting that this shift towards 'moral incentives' and 'grounding conservation in conviction' was in the first place the result of the fact that the Biodiversity Program had come to realise that it simply lacked the funds to bring economic development to remote areas such as in Lak and the Bismarck-Ramu area. A new definition of 'development' as a form of self-help allowed the project to ignore what was in fact a fundamental design problem in its conservation approach. The lessons-learnt document on Lak, for example, brings forward the view that conservationists working with ICAD methods have to

> 'invest heavily in education to transform communities' ideas about development. Unless communities come to redefine their strategies for seeking development in ways that ICAD projects can support, then 'conservation through development' initiatives will continue to fail'(McCallum and Sekhran 1997: 56).

As is evident in this quote, conservation initiatives are to transform the idea of what entails 'proper' development in order to achieve their conservation objectives. Thus conservation and development initiatives do not adjust their interventions to the needs and perceptions of local people, but communities' ideas have to be transformed to meet the problem analysis as well as the administrative and financial abilities of the project agency.

It is certainly true that the redefinition of 'development' as a form of self-help meant a headache less to the Biodiversity Program, as it was relieved of the burden to seek

large amounts of development funds. In contrast to these practical considerations that may have played a role in Port Moresby, the Madang project staff sincerely came to believe in this new 'non-cargo' approach, treating conservation as a self-help rather than as lack-of-economic-incentives problem. Defining development as an organisational issue, also had the additional advantage that those people 'genuinely' interested in conservation, would clearly stand apart from those professing an interest only as a means to access jobs, money and resources. Once the latter would realise that conservation did not mean jobs, roads or money they would turn away from the project. The disavowal of cargo-oriented development and the emphasis on what communities-can-do-for-themselves triggered a process of self-selection allowing the project to identify those communities 'truly' interested in resource issues.

This shift from using economic and moral incentives for conservation grafted on a careful community entry process as suggested by the resource economist and as laid out in various project documents (McCallum and Sekhran 1996, Sekhran 1996), towards a community development philosophy that did away with economic incentives all together would sow the seeds for a later conflict between the Bismarck-Ramu project team and its donors.

THE BISMARCK-RAMU COMMUNITY ENTRY APPROACH

Field operations were managed by the community trainer, the DEC conservation manager and his New Zealand counterpart. This team was responsible for the recruitment, training and coaching of a number of Community Development (CD) workers and the logistics of patrolling in the Bismarck-Ramu area. The members of the CD teams were Papua New Guineans recruited from a variety of sources, with a number coming from the AusAID funded North Simbu Integrated Rural Development Project, and the Divine Word Institute in Madang. The rate of attrition among the CD workers was quite high and there was a continuous need to train new people in the basic concepts of participatory community development. These teams, however, were to become the key players in the Bismarck-Ramu project as they were to go out into the area and conduct different types of training and exercises with communities. Later the strong personal links between team members, the unusual ease with which PNG and expatriate personnel mixed, and the increasingly prominent and leading role of the PNG staff would be positively commented upon by both Papua New Guineans and foreigners alike.

In the light of the 'cargo' and 'dependency' notions mentioned above and the earlier project experiences, the CD trainer not only posed the question to what extent the project itself played a role in generating cargo expectations, but also questioned how far the project could avoid such cargo connotations. Issues such as the exhibition of wealth, the mode of transport, the presence of expatriates, the language used during patrols became a topic of intense discussion among the project team, finally resulting in an elaborate code of conduct with regard to the way in which

interventions would be structured. In order to limit the level of expectations generated by the project's entry into the area of interest, it was felt necessary to deal with the cargo and external dependency thinking prevalent in many communities. As had been argued by the CD trainer these attitudes and the resulting unrealistic expectations are easily reinforced by the manner in which a project team first enters the area of future work. Once established, unrealistic expectations prove very hard to defuse. The perceptions and mental associations leading to such a 'cargo mentality' and the paralysis that results is generally related to earlier experiences with well-equipped companies, boastful politicians and the well-resourced representatives of foreign dominated projects.

The display of wealth and especially the mode of transport, the composition of the patrol teams and the way in which the teams present themselves during the first few meetings with local villagers dictate the way in which the project is looked upon in the future. Exhibitions of wealth in the form of clothing, project equipment and the consumption of urban foods were thought to give rise to the status of those entering the community, but also lead to unrealistic expectations with regard to the 'share' of wealth that would be made available to the community. It is a painful start for any project to have to bring people back from the daydream of unsuspected wealth and leisure to the harsh realities of self-reliance, everyday life and hard work. As a result the new approach meant that the community workers and other team members had to walk from village to village, were to stay and eat with local people, and were to avoid unnecessary exhibitions of wealth.

The composition of the teams and the presence of 'whiteskins' engendered a similar argument. On the one hand the presence of expatriates was thought to increase both the confidence in the project as well as the level of expectations as villagers tend to compare the colonial patrols before 1975 that were conducted by white *kiaps* with the post independence government missions. A man in Bubulsunga, for example, told the expatriate conservation advisor during one of the first patrols in the Jimi valley that he was happy to see a white man, as it at least meant something would be done (CRC 1996a). In addition, villagers automatically tend to regard the expatriate as the boss and it was felt better to allow the community workers to start work with local communities without having an expatriate present. In addition the project team had a hard look at its presentation and use of language in order to reduce the risk of generating untenable 'cargo' expectations.

In their discussions with local people the CD workers were to avoid certain notions. One was the already mentioned issue of being a 'project', as this term may be associated with short-term opportunities to capture cargo before they collapse; not exactly the mental luggage for a successful self-help community project. The second was the notion of being there to 'help' which was thought to unduly reinforce external dependency. Instead the verb 'to teach' was chosen, indicating that local people and the community workers could possibly 'teach' each other to understand the changes that were taking place in the area, while putting the implementation of whatever action that was to follow on the local community rather than the project. The concepts

of Conservation and Environment were respectively described as '*lukautim*' (to look after) and '*bus, na graun na wara*' (bush, water and land). This seemed a perfectly sensible thing for the Government to do. Many people emphasised that this was exactly what they, the landowners in the area, had always done.

The teams were also to be clear about what they were *not* and, by extension, what they did *not* do. This was to defuse some of the many expectations that would inevitably arise. The community workers thus stated clearly that they were *not* a bank, *not* there to 'bring' money or government services, *not* a logging or mining company, *not* a church that came to win souls and *not* a political party that came to win votes for the oncoming elections. Neither would they *bring* anything. In later months these, and various other notions, would continue popping up and had to be defused time and time again while the communities had to come to grips with the fact that the community workers were there 'only to talk'.

As people became increasingly tired with the CD workers during these meetings, insisting that the project should 'do' or 'give' something to demonstrate that it was serious about 'working together' with local communities it was emphasised that the project would only stay if the people wanted them to. People were always given the option of asking the team to leave. It was their land, their community and their 'development problem'. As the project organisation was made up of a number of different components the project team decided that during the field trips everybody would present themselves as being '*environmen–lain*' (environmental-people) of the DEC. Experiences with another community project in Collingwood Bay had shown that many people there became confused with the number of different organisations and acronyms.

In contrast to the Lak project with its strong awareness drive, the community workers in the Bismarck-Ramu area were explicitly taught not to 'preach' on the issue of conservation. In doing so they would risk steering people into the direction of a conservation agenda whether there was a genuine interest in resource conservation issues or not. The project recognised the fact that recipient populations often act strategically in the face of outside interventions and once communities perceive the project to be after something, there is a risk that groups will simply make the necessary statements to secure the goods, jobs and money that are associated with the project. In that case it matters little whether one talks about the establishment of a logging or mining project, a rocket base or an ICAD project. As long as there is the explicit promise of material benefits at the end of the line people will define the proposal brought forward as exactly that which they had always needed. A type of behaviour which within the project would become known as 'jumping though hoops'. The project team assumed that if people would have an interest in resource management issues this would come out during communal discussions, informal 'storying' sessions and PRA work. Emphasis was therefore placed on the technique of 'digging', asking a series of interconnected questions, to arrive at the root of the problem as seen by local people. This was a significant departure from the intense conservation awareness drive in Lak, in that people in the Bismarck-Ramu area were

themselves to define the issues that *they* rather than the project found important. The topics of this dialogue inevitably touched on the nature of social, economic and environmental changes that were taking place, the good and the bad in those changes and the dreams that communities had for the future.

ORGANISING THE COMMUNITY ENTRY PROCESS

The first CD workers using the new Community Entry methodology were recruited in July 1996 when 7 applicants were trained in PRA methods. This training was followed by a one-week intensive briefing aimed at preparing them for the resumption of patrol work in both the Jimi and the Ramu areas. Since the survey trouble at Bubkile only one patrol had been in the eastern part of the Jimi valley, while the last patrol to the Ramu Valley had led to the locking-up of the two conservation managers in Foroko-Brimde.

The first issue that needed to be resolved concerned the questions of what to do, where to go, and how to behave. In line with the principles of the new community entry approach outlined above it was decided that the first patrols would keep a low profile and would not be accompanied by whiteskins. During these patrols the CD team would merely introduce themselves using the introductory speech described above. The emphasis of this entry speech lay on a two-way process of communication through mutual learning instead of a one-way process of helping, and was to avoid 'conservation preaching' and 'cargo-thinking'. This introductory speech and the different exercises and role-plays were intensively studied.

During the preparatory week, small groups were formed to write up possible questions that would come forward in response to the presence and responses of the CD team. The questions ranged from 'Why are you here' and 'How are you going to bring us development' to 'why do you bother to seek us out' and 'What do you think you can learn from us?' By including such questions as 'We want to see the real boss [the patrol and survey leader] because he promised us....', it was also taken into account that because of the lack of a familiar face, people could try to play different components of the project apart. After the preparation all members of the CD teams were grilled individually and had to come up with suitable answers, which both avoided preaching on conservation issues and the raising of expectations. The teams also looked at the contents of the first patrol speeches, the comments that were made on it by the CD trainer and things that should be avoided this time round. Once the CD teams had clarified their presence to the community leaders they would seek permission to remain a few days in the village to get to know the community.

The idea was not to 'do' much in terms of presentations but simply to spend time talking, working and eating with people in an attempt to get to know both people and their communities. During this stay it was their main task to listen for so-called 'community themes'. Community themes are those matters which people find important and which they bring up themselves. In practice the hearing of

community themes took the form of 'storying'. This usually consists of sitting around a fire and the relaxed sharing of memories, stories and experiences, the asking of questions followed by an open discussion of the answers and mental associations, which would again be followed by new stories and questions. Inevitably the issues that were on peoples minds would come out, whether they had to do with conflicts with other groups, their perception of their place in the world, the problems that communities face in drawing in the necessary Government services, or the difficulties in accessing sufficient gardening land.

Thus during their stay the CD teams were to avoid focusing discussions on the objectives of the project, while keeping an open ear for the issues of importance to people themselves. As a leaflet handed out by the community trainer explained:

> 'One of the keys to discovering the deepest feelings of the community is LISTENING! ...The CD teams must listen for those things which the people have the strongest feelings about. Emotion is linked to motivation. Only on issues which they feel strongly will people be prepared to act. The CD teams must find out what people are worried about, happy about, sad about, angry about, fearful about and hopeful about. It is not possible to go to a person in a village and ask 'what are your strongest feelings about'? It is necessary for the CD teams to be one with the people to listen closely and pay attention to the problems and issues in their lives which bring [up] strong feelings' (BRG 1996a: appendix 2).

In addition to the 'hearing of community themes' the teams would try to respond to the symptoms of a cargo-mentality that had erupted during earlier patrols and the Bubkile survey and that would probably emerge again. While it was already made clear in the opening speech that the 'environment people' were not going to 'help' the communities by 'bringing' any form of development, a number of exercises and metaphors could be used to reinforce the theme of self-reliance.

The first was the so-called timeline. This exercise is aimed at putting all the talk about 'development' in a historic perspective by going back 50,000 years and emphasising that for all this time, with the exception of the last 200 years, Papua New Guineans had been in control of their own lives. It emphasises feelings of autonomy and pride in Melanesian achievements and tries to dispel the feeling that Melanesians are unable to give shape to their lives, by standing on their own legs (BRG 1996a). A number of secondary metaphors and exercises pointing to the issue of self-reliance were also prepared. These included the image of a mango tree with strong roots, pointing to the fact that people have to rely on their roots, their culture and community in order to make change. Cutting the tree from its roots inevitably means it will die.

Two small plays called 'Give Man A Fish' and 'Naked Man' were also presented. The first illustrates the saying that it is better to help people help themselves (by giving them a rod) than to keep them continuously dependent (by giving them fish to eat), the second illustrates how people are disempowered once they loose control over their resources (become naked). These plays were used to liven up the meetings with the villagers whenever the CD teams felt the need to do so. Over time a range

of metaphors, both from the side of the villagers as well as from the side of the CD teams, would be employed to make the point that peoples traditions are valuable and worth maintaining.

TABLE 2: ISSUES AND TOOLS OF THE STEP-BY-STEP COMMUNITY ENTRY APPROACH

1	• Introduction to the leaders of the community; • Use the community entry speech to explain who you are and what you are not; • Meet with the whole community and repeat the entry speech • Spend time with the community; work, story, eat, live, and promise to return. • CD workers meet to assess the community.
2	• Hold a community meeting and again introduce yourself; • Emphasise self-reliance and Papua New Guinea history and culture through the presentation of the time-line exercise and the image of the mango tree; • Spend time with the community and promise to return.
3	• Hold community meeting and repeat the things said and did during the last two meetings; • Use a community mapping exercise to discuss environmental changes that are taking place; • Emphasise self-reliance with the Give-man-a-fish-teach-man-to-fish drama; • Break the community into groups and list the strengths and problems of their community; • Spend time with the community and promise to return.
4	• Take people through their strength and weakness analysis; • Break into groups and discuss the problems and possible solutions; • Discuss these possible solutions with the community; • Suggest that they begin with those problems, which they can address without help. • Promise to return if the community wants you to.
5	• Return for another meeting and ask people to think about their vision for the future. How would they like it to look? • Present the problems, the strengths and the possible solutions and visions that people have come up with over the last few sessions and ask them to prioritise their problems and to focus on those problems which they can tackle without outside help. • Assist the community in formulating an action plan, and promise to return.
6	• From then on the CD workers return to the communities and monitor, encourage and facilitate the action plan. Key is that communities themselves have to take it from there. If they encounter problems or have questions then they can discuss these with the CD workers. The aim is to start with small community projects and build on the success and confidence that results from joint action.

Source: Adapted from Lalley (1999) and Ellis (1998).

There is a risk in such appeals to tradition, as in contrast to the intentions of the project, local people may view the situation of the past in terms of 'backwardness' and a 'lack of development'. Whereas many people, especially the elderly would often respond emotionally and with a sense of pride, in other instances, especially among Jimi youngsters, this call for tradition was deemed unacceptable. With their focus on the use and exploitation of the environment in return for better opportunities and cash, the calls for 'conservation' and 'tradition' would be regarded as antithetical to development. Conservationists aiming to convince people not to pursue destructive options to achieve 'development' may thus be regarded as people wishing to maintain the status quo, of poverty and a lack of services. The extent to which various groups of people were open to these appeals to tradition, however, would be an important criterion for the project team as it was though to say something about the conservation predisposition of the communities concerned.

Through trial and error, a patrol program evolved in which the first patrol would aim at trust building with an emphasis on self-reliance, the second aimed at bringing out changes in resource use and the environment with the use of PRA methods, the third involved the analysis and prioritisation of community needs and wants and the fourth and further patrols would have to focus on aspects of action planning and community mobilisation so as to help people to plan and mobilise resources in addressing some of their local problems. The small problems identified and tackled by local people did not need to have anything to do with conservation but were rather a means to reinforce self-confidence, community cohesion and decision-making mechanisms. The fundamental idea behind this program was the assumption that if people found themselves able to deal with the smaller problems in their daily lives, they would also be able to deal with larger development and resource management issues, thus gradually assisting communities to progress from a state of disorganisation, dependency and environmental neglect to that of an ordered self-reliant and environmentally benevolent community.

In contrast to the Lak project, where the team had actively studied the option of developing conservation-linked forms of income generating activities, this approach left the question what type of 'development' would evolve unanswered. Out of the interaction with local people, the experiences gained with various visualising techniques a program would grow which would take communities through a step-by-step process aimed at building trust, defining problems, raising issues of resource management and eventually leading towards what the team saw as the beginnings of community-based conservation.[53]

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[53] As the community entry approach consisted of a number of sequential exercises, the project team started referring to these as 'steps'. This would lead to several problems. In the first place CD workers began mentioning the use of these steps to people in the field, comparing them to a ladder which you needed to climb to get into a house on stilts. The result was that people were participating not because they saw the value in the exercises themselves but because they hoped for some reward at the end of

PATROL LOGISTICS

Rather than establishing a permanent base in the area, as had been the policy in Lak, the team decided on the basis of the repeated offers by competing groups to provide land and houses for the project, that such would lead to envy and conflict between groups and that it would reinforce the image of the project as a source of 'development'. This analysis proved correct but late, as the establishment of a 'temporary base' in the community facilitator's house at Pimbum was already a fact. Instead of operating from the base and being permanently present in the area the project team opted to conduct a series of community development patrols with the help of the newly recruited CD workers.

Patrols were undertaken for about three weeks at the time at eight to ten week intervals and would be preceded and followed by intensive briefing sessions. During these sessions the patrols were scheduled and speeches, role-plays, and PRA tools were practised. After the patrols, a debriefing session would record the experiences and problems that the teams had encountered and would pave the way for the next round of patrols. The systematic write-up of experiences in patrol reports and the later development of series of village files would allow for a tailor-made approach in each community, and are one of the man sources of information used in this study. There were more reasons to choose for such an approach rather than for a permanent presence in the area. In the first place the permanent presence of the project in one locality, that of the base, would be seen as an indication of the project's loyalty within the clan-based landscape and thus affect the 'neutrality' of the project intervention. Unwittingly, in doing so, the Bismarck-Ramu project copied the ambulations of the colonial patrol officers, who also wandered through the area coming and going without displaying a specific affiliation to one or more clan groups.

The second reason to use patrols rather than permanent field staff was that the CD workers, themselves village people, needed time to return to their villages, maintain their gardens and see their families. Many other development projects recruit personnel, take them out of their respective villages, provide them with housing and thus create 'civil servants' who become increasingly detached from the realities of rural life in PNG. This in its self can be seen as a form of 'cargo thinking', as in many NGOs the institutional interests of the organisation, and the needs of its personnel come to play an increasingly important role at the expense of the needs and wants of local people. By giving the CD workers time to return to their villages such could be avoided. An interesting side effect of this practise was that the CD workers would

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all these meetings. This was just another variety of the 'jumping through hoops' problem mentioned above. A second problem was that at the briefings CD workers started talking about communities in terms of the 'step' they were in. This constituted a problem as it detracted them from giving a careful description of what had actually happened. Thus when asked what had exactly happened during the exercises in a particular community, the CD workers could not answer. Lalley (1999: 16) writes: 'We did not want to give labels to things we were doing. We wanted to talk about exactly what we were doing'. As a result the term 'steps' was eliminated from the process.

take their stories and exercises home. Over the duration of the project a variety of community-based self-help programs and resource management initiatives akin to those discussed in the Bismarck-Ramu area were implemented in villages in Madang, Simbu and Morobe provinces.

During the preparations of the patrols, not only the content of patrol activities, but also the schedule had to be decided on. The logistics of such an undertaking were daunting for a number of reasons. In the first place the Bismarck-Ramu being a large area, with many clan-groups and a scattered settlement pattern is difficult to cover through patrols, especially if one wanted to come back repeatedly. The whole area, about six days walking to get across, has two serviceable airstrips, Kol and Foroko-Brimde, and one point where the Ramu River valley can be entered by motorised canoe. Just organising small aircraft and motorised canoes to drop the team and their supplies off was an intensive operation. Once in the field, the patrols would be largely out of touch as there were three working radio's in the area. Two at the respective airstrips and one at the community facilitator's house in Pimbum installed by the project. Providing the Jimi teams with a portable radio, solved part of the problem.

In addition, things were made difficult because of the dispersed pattern of habitation in the Bismarck-Ramu area. As a result patrols would have to make an appointment with local leaders as to when and where the patrol work would be conducted to give the communities time to call one another together, and often this meant that the teams would have to wait for one or two days before the community could come together. Something which usually happened at night or after church or market. In many cases it would be difficult to call the four or five clans that make up a 'village' together as they live far apart and may not be willing to come to their neighbours land because of conflicts. The first patrol report noted that 'the logistical problems seem daunting but it is clear to all that we are trying something new and are therefore in a constant state of experimentation' (BRG 1996a: 8).

THE SOCIAL FEASIBILITY STUDY OF THE BISMARCK-RAMU PROJECT

It is at this stage, from July 1996, onwards that I became involved in the Bismarck-Ramu project. Having worked in PNG the previous two years, I was recruited in order to conduct a so-called Social Feasibility Study (SFS). Following the Lak experience, the Biodiversity Program had decided that the collection of social and economic data was to be an integral part of the development of the second ICAD project in the Bismarck-Ramu. Between July 1996 and January 1998 I closely followed the work of the CD teams, while collecting my own data from a range of sources. The SFS took place in close collaboration with the community work, and most issues presented in the final document were discussed extensively within the project team during the various briefing and debriefing sessions. At the end of 1997 the Social Feasibility Study provided an assessment of 16 of the 22 communities that the CD teams were working with. This shows how I was unable to keep up with the

work of 12 to 15 CD workers, and had to prioritise among the various areas, meaning that a number of communities were never visited as part of the SFS.[54]

On the basis of a number of considerations, the SFS suggested that the opportunities for conservation in the Jimi valley were limited, and that the mixed communities in the Ramu Valley were also 'unlikely to offer opportunities for conservation due to the high levels of mistrust and/or conflict between the traditional landowners and the settlers' (Van Helden 1998b: 87). The best options for conservation were thought to lie with the Sepu people on the Ramu River, due to concern with Jimi encroachment, a wish to maintain cultural identity and the hope to access better services through conservation-related development activities. Notwithstanding suggestions to the contrary (see Ellis 1998: 64 footnote 140), the findings of the SFS were largely borne out by later events.

THE POLITICS OF PARTICIPATORY CONSERVATION

The nature of ICAD projects in PNG differs from that of mainstream development projects in many other countries, in the sense that the local communities with whom the project team interacts are not in the first place the intended beneficiaries of the project. Something called 'biodiversity' is. In the PNG context, however, the only way conserve biodiversity is by going through the local communities that own that biodiversity. Thus in the ICAD approach people's development tend to be seen as 'a means to', rather than an end in itself. As must be clear by now ICAD projects in PNG thus constitute a *deal* and a *transaction* between the owners of biodiversity on the one hand and the project implementing agency on the other. By demanding conservation from local communities the project team imposes a cost on people who, under the terms of the ICAD deal, are expected to stop logging, hunting and gardening in the protected area. In return the project offers some form of development. If local communities don't like the offer, or find a better offer elsewhere, there is no deal, and the project objective of conserving biodiversity is not achieved.

The revised Bismarck-Ramu ICAD project approach claimed to get out of the negotiating position and away from the idea that there was a 'conservation for development transaction'. It did so by employing a participatory methodology in which the project team sought to assist people in their own attempts to harness conservation and development. Instead of the project being the provider of services, development and conservation, and therefore the opponent at the negotiating table, the project team tried to support communities in coming to grips with the economic

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[54] The Ramu landowners at Foroko, Lai and Karisanga were for example, never visited as part of the social feasibility work. This was partly due to inability of the SFS to keep up with the CD work, partly a result of the initial rejection of the program in that area in September 1996, which suggested that the area was of less immediate importance. In late 1997, however, the Ramu landowners at Foroko would become strongly interested in conservation (See chapter 8).

and environmental changes around them. At such the project had to base itself on the issues that local people find important.

Van Dusseldorp (1981) distinguishes two streams of thinking in participation; 'social planning' versus 'social action'. The first regards participation as an instrument to facilitate outside interventions, viewing participation as the provision of information by the target population as well as its involvement in the formulation, implementation and evaluation. The social action school of thought sees participation as a moral obligation, which not only allows people to part-take in development but which empowers people to take control of their own lives. This view can be summarised as an 'organized effort to increase people's control over resources and regulative institutions (...) hitherto excluded from such control' (Van Dusseldorp 1981: 51). In many ways this typology reflects the shift between the Lak and the later Bismarck-Ramu project. Whereas the first saw participation mainly as a means to get people involved in implementing an expert-driven and predetermined conservation area, the latter meant to give people control, raising questions with regard to the conservation content of its intervention.

A more elaborate typology of participation by Bass *et Al.* (1995: 24) illustrates how the Lak project can be characterised by *participation by consultation* and the *participation for material incentives.* The Lak project took a largely top-down approach in which foreign experts predetermined the location, shape and size of the area to be protected and the type of management regime to be put in place. They even defined the type of development that people should accept as part of this bargain. Once these decisions had been made, the project team tried to interest local people for its conservation plans. The participatory element in Lak consisted largely of a number of plenary hearings during which people could make their opinions known on two possible courses of action: logging or ICAD. As recounted, these plenary forums were hardly successful in generating consent among the highly divided community.

Orsak (1997b) argues that whereas all projects call themselves 'participatory' these days, proposing a single policy option can not be seen as such. Using an example from his own experience he recounts how a group of village people responded enthusiastically to his proposal for a butterfly farming project only to find that

> 'yes' doesn't always mean 'yes'. As I worked with the community I became increasingly disappointed. The villagers showed a lack of interest in carrying out the work needed for butterfly farming. Here I had been using the 'participatory approach' that everyone said was so important and yet my project was failing! Why? .... Later ... I realised, with some horror, that what I thought was a participatory approach was not that at all... Because i) I did not give the villagers a choice of activities. I gave them only one option – butterfly farming. What if they wanted to something other than butterfly farming? ii) I did not give them time to discuss options; and iii) I did not remove myself from the discussion process, so that they could talk about things, without worrying about trying to please me. It was clear that I wanted to hear the answer 'yes' and so they gave that answer even though they weren't committed to [the idea] (Orsak 1997b: 5).

In Lak and during the first meetings with the Jimi communities there was little sensitivity to the dynamics of social control in such plenary meetings with the things people said generally taken at face value. It soon became clear that the main reason why the Lak people were interested in 'conservation' was because it was presented as an economically viable alternative to the logging concession. Without the promises of jobs, money and 'early rewards' people would probably not even have participated at the consultative level. Also during the Bubkile biological survey the project team failed to realise that people act strategically in the face of outside interventions and that there is no one-to-one relationship between what people say and what they actually do.

In contrast, the community entry approach used during the second phase of the project emphasised the responsibility of local people to do something about the issues that they find important. The Bismarck-Ramu project thus operated at the actionist extreme of the spectrum aiming towards self mobilisation. Its community entry approach aimed to create room for local people by temporarily withholding its own conservation agenda. As will be shown in the next few pages this focus on the problem definition by, and empowerment of local people, generated several contradictions inherent to the practice of community-based conservation. Even a relatively open-ended and participatory approach such as that pursued by the Bismarck-Ramu project turns out to be a highly structured and disciplined exercise treading on the fine line between mobilisation and manipulation.

PARTICIPATORY CONSERVATION: THE GENERATION OF INCONSISTENCY?

The shift towards increased community participation in project design and execution emphasising self-reliance, empowerment, and co-operation is also visible in a new drive towards community-based resource management (IIED 1994, Colchester 1994). Although highly fashionable, such approaches generate a number of internal inconsistencies. The first is inherent to participatory methods aimed at the 'empowerment' of local communities, while the second is more specifically related to the idea of 'participatory conservation'.

In the first place, the paradox of participatory methods aimed at 'empowering' people to take charge of their own lives, lies with the fact that such self-reliance is thought to be best achieved by the injection of power and insights from the outside. One of the most often cited definitions of participation is revealing in this respect:

> 'Participation is 'empowering people to mobilize their own capacities, be social actors, rather than passive subjects, manage resources, make decisions and control the activities that affect their lives' (Cernea 1985 in IIED 1994: 18).

In other words, without outsiders to empower local people, these are not even social actors. They are not capable of making decisions and not intent upon controlling the activities that affect their lives. This view of non-western people perpetuates the notion of recipient populations as passive, helpless and in need an enlightened

outsider in order to advance. Some writers believe this the case because communities lack the ability to organise themselves due to a culturally-determined sense of fatalism, others suggest that political and economic factors paralyse community life (Midgley 1986).

The argument that local highlands communities are unable to organise themselves was never taken seriously among the Madang project team and dispelled by an anecdote from the neighbouring North Simbu Integrated Rural Development Project for which a number of staff had worked before joining the Biodiversity Program.

> The community program of the North Simbu Project classified communities according to their readiness for development, with 'A' communities ready for participatory development, 'B' communities needing further training and awareness and 'C' communities the 'basket cases' deemed fundamentally unable to organise themselves and not interested in any form of collective action. As the Chief Technical Advisor of the Biodiversity Program recounted this labelling had to be revised when he witnessed the preparations for tribal war one morning. There had been an incident, and fearing an attack the supposedly apathetic 'C' communities were now collectively organising their defence on a grand scale. Women were bringing in the pigs and hiding possessions, while the men were taking up defensive positions, leaders discussed war strategies and young boys supplied the warriors with buckets of arrows (PC Mike Parsons). Based on this experience the project had to conclude that it was not so much the ability of the 'C' communities which was the problem, but a lack of interest in what the project had to offer that kept these communities on the sideline.

In contrast to the fatalistic views mentioned above, many social scientists emphasise the ability of poor people to analyse their situation, to pursue their interests, to resist exploitation, to make change and to respond successfully to outside interventions, including those of well-meaning development specialists aiming to empower poor people. Berger (in Hall 1986: 103) criticises the empowerment perspective as being a rather patronising view based on the idea that rural communities 'do not understand their own situation', and which perpetuates 'a hierarchical view of consciousness' in which outsiders' knowledge and understanding is considered superior to the perception of local people. Long notes how the shift from blueprint towards process approaches or from dirigist towards participatory management styles does not 'escape from the interventionist and managerial undertones inherent in the idea of 'development'. All they do is replace one form of interventionist thinking with another, in this case they with the 'image of more knowledgeable and powerful outsiders helping the powerless and less discerning folk ... no matter how firm the good intentions, the notion of 'powerful outsiders' assisting 'powerless insiders' is constantly smuggled in' (Long 2001: 89; see also Gardner 1997).[55]

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[55] In the context of PNG, where local people are the owners of the natural resources coveted by both conservationists and companies alike, the fact that a group such as the Bismarck-Ramu CD workers tells communities not to be dependent on other outsiders such as companies and politicians can also be seen as an attempt on the part of the project to limit the competition for the favour of the local community, thus reducing the risk that communities play various initiatives off against each other.

The Madang project staff would no doubt accept these views, and still argue the intermediary position that people certainly have the ability to make change, but may not be sufficiently confident or motivated to organise themselves. In this view it still takes an outside intervention to catalyse local capabilities and motivations. The CD trainer would no doubt point to the fact that the Bismarck-Ramu project tries to keep its interventions as limited as possible, aiming to get communities 'back on their feet', while avoiding a situation in which people become dependent on the project. In 1998, the project would introduce the term to 're-empower' in order to capture this situation more aptly.

In the case of the Bismarck-Ramu project the empowerment-from-within-with outside-help paradox and the views on community-capacity for development can be illustrated by a the contrast between what the project called the cargo versus the community approach. The cargo approach represented the 'wrong' approach in which projects 'buy' participation and conservation with promises of material gain. It is open to manipulation by the recipient population and is deemed fundamentally unsustainable, because such initiatives are not grounded in the conviction that they conservation is good for the community. The community approach in contrast, stands for an approach which builds upon the existing capacities and motivations of the community. The project team thus on the one hand saw people as active and knowledgeable actors, but simultaneously gave itself the role of mobilising this energy and intelligence by asking the right questions (Lalley 1999).

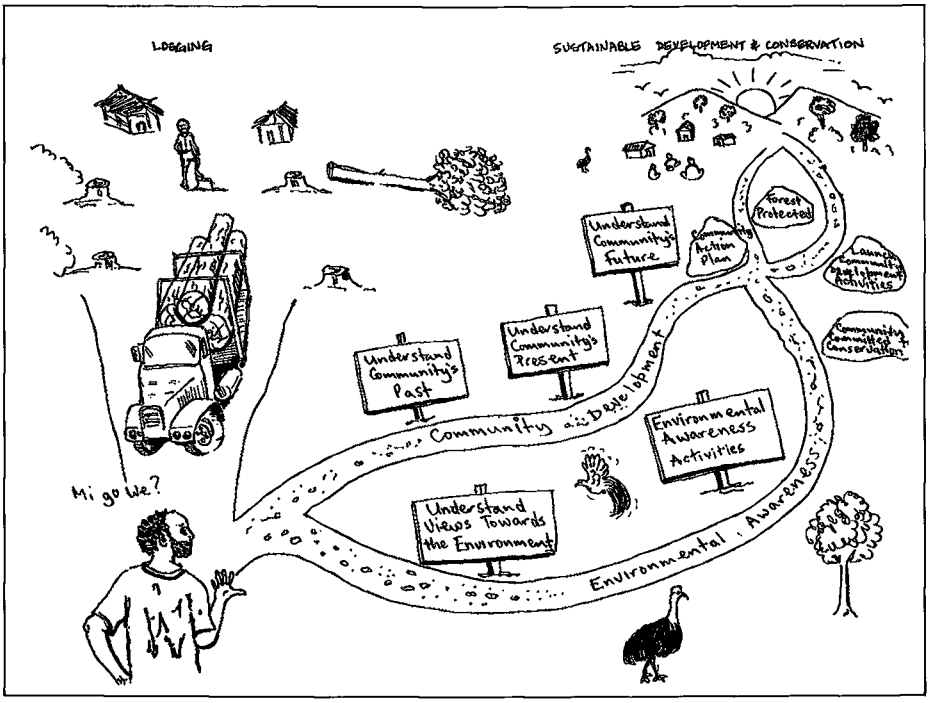
The second dilemma with regard to participatory conservation, arises when the local definition of problems differs fundamentally from that used by the intervening agency and its donors, or when local communities make strategic use of projects to pursue other aims than those ostentatiously voiced. The amended view of the ICAD project as a fully participatory process in which project and people 'work together', does not defuse the fundamental tension between the project's conservation agenda and the various priorities of local communities. Whereas poor people are predominantly occupied with meeting their basic needs, the improvement of their incomes, and a reduction of their workload, donors interested in biodiversity conservation usually clearly stipulate that their funds are to be used for the establishment of nature reserves. As Wells and Brandon note:

> 'Overlooked by most ... [ICDP] projects is the fact that ICDPs by definition limit participation. For an ICDP to achieve its basic objective – biodiversity conservation – people can only be empowered in aspects of development, that do not lead to overexploitation or degradation of the protected wildlife and wildlands' (1992: 47).

A drawing titled 'The Long and Winding Road Towards Sustainable Development' in a PRA guide used for the training of the CD teams reflects the dilemma between the project's conservation agenda and its wish for a fully participatory approach. In almost biblical terms it shows the broad road of logging leading to a landscape of tree stumps and a lying tree, with as alternative two narrow roads veering of to the right. The first path is the 'community development' path, the second the path of

'environmental awareness'. The community development path consists of a number of steps which lead from an understanding of the past and present, to future aspirations. The environmental awareness path leads towards an understanding of local views of the environment and a number of environmental awareness raising activities. The two paths come together in the distance where a 'community committed to conservation', develops a 'community action plan', and launches 'community development activities' which culminate in a 'protected forest' set against a low sun in a landscape dubbed 'sustainable development and conservation'.

FIGURE 5: THE LONG AND WINDING ROAD TOWARDS SUSTAINABLE DEVELOPMENT



Source: Grant 1996: 25

Whereas the author states that the various steps are not to be understood in linear terms, she does not note that development aspirations are not necessarily compatible with conservation. The assumption underlying this vision is that a combination of sufficiently high levels of participation and a healthy dose of environmental education will make both roads meet and will lead local people to opt for sustainable development and conservation activities such as those proposed by the project. The Lak experience had already showed that such is not necessarily the case.

CHOOSING BETWEEN PARTICIPATION AND CONSERVATION

During the many management meetings needed to trash out the Bismarck-Ramu patrol program, the dilemma between participation and conservation would become a point of acute discussion. The first view, was the 'traditional' view which had been used at Lak and which favoured a vigorous environmental awareness campaign before entering into any development and conservation activities. Once people had been informed of the risks involved in mining and logging ventures, they would be in a better position to weigh the advantages and disadvantages of different courses of action. In addition, it would be necessary to identify 'development' activities with a clear linkage to 'conservation' issues, as such constitutes the basis of the ICAD approach. If for example, people voice the quality of health services as their main concern, then it would be very difficult for the project to 'link' such with conservation issues.

In contrast, eco-tourism and eco-forestry projects are predicated on the continued existence of relatively untouched areas and tie issues of income generation in with sustainable use regimes. The opposing view, mainly defended by the CD trainer and the PNG conservation manager, was that as this was a participatory project the project team should not start off with telling people what they were to think, or even what 'the problem' was. By 'preaching conservation', the project would never know whether people were genuinely committed to conservation issues, as communities would simply tell the project what they think it wanted to hear, leading to the earlier mentioned 'jumping through hoops' problem (CRC 1996b: 7).

In other words, the Madang team wanted an open-ended and participatory project in which communities felt sufficiently empowered and motivated to play the leading role. At the same time the team did not want people to by-pass resource and conservation issues either. The GEF after all was funding a project in which development activities were used as a tool to establish a conservation area. This led to a logical problem as there was no guarantee whatsoever that communities engaged in an open-ended process of problem definition would opt for conservation. In due course consensus was reached that - notwithstanding the conservation aim of the project - in the early stages community priorities for change were more important than their linkage to conservation objectives. Thus participation and community development were given precedence over conservation. The main reasons for this position were that by helping community members to identify, understand and address their most urgent problems, the project would be able to build trust with the villagers. This trust was to constitute the basis of their long-term collaboration with the project and would hopefully eventually lead to conservation. As Lalley (1999: 27) explained three years later:

> 'We have not lost sight of what the project is about. We believe any attempt to look after the environment or any attempt at conservation must be done in a real partnership with the community. This means a lot of time must be spent with local people. We must get to know them, share with them and always remember they have a lot of knowledge about the environment which community workers

> in their haste, do not take time to cultivate. Thus, how we enter the community, how we present and how we build the relationship with the community is essential if there is to be any conservation. Rather than entering the community preaching about the virtues of conservation we feel it is important to enter the community trying to establish a real dialogue... This cannot be achieved by us setting the tone, terms or defining the content of that dialogue. We must begin by hearing from the community. Hearing what? What they think about the environment? No! If we steer the discussion towards conservation, they would quickly skew any discussion towards protection of the environment. We have chosen to begin from where people are – not in terms of conservation or the environment, but in terms of their lives, their problems, their struggles and their dreams. From there we can eventually get to conservation.'

At the same time, this approach gave the project the chance to get to know local communities and to find out which held a 'real' interest in issues of resource management. Later, the logical inconsistency between participation and conservation noted above would be 'solved' by adopting the unlikely assumption that traditional communities are intrinsically conservationist in nature.

Over time, in what can be deemed an 'invention of tradition' (Hobsbawm and Ranger 1983), the Bismarck-Ramu project thus developed an artificial construct of the 'traditional community', revolving around the assumption that in the past indigenous groups were characterised by high levels of cohesion, self-reliance, and a conservationist ethic. These pre-colonial communities were unaffected by negative market influences, and therefore thought to be devoid of 'cargo thinking', instead relying on their own ability to make change, solve conflicts and manage nature. It now became the task of the CD workers to lead communities back to this original conservationist state by emphasising the need to fend for themselves and by imbuing them with respect for the traditional features of their communities (Lalley 1999). The romantic view of traditional communities may have legitimised the specific shape of project interventions in the Bismarck-Ramu area, but bears no relation to the realities of local resource-use. It merely strategically deploys one of a number of age-old stereotypes of non-western people.

BETWEEN STRATEGIC AND ROMANTIC ESSENTIALISMS

Next to a firm belief in local communities, there are other reasons why it may be attractive to depict local communities as essentially conservation-inclined. Brosius (1999) argues that we need to make a distinction between 'romantic' and 'strategic essentialisms'. Whereas the first is based on a deep-seated belief that indigenous people are indeed more likely to look after their environment than western people, the latter serves as a stratagem in political struggles. A growing group of indigenous people are actually making use of strategic presentations in the media, projecting upon themselves the image of the 'nature conserving native' in order to gain control over resources (See for example, Conklin and Graham 1995).

In the case of the Bismarck-Ramu project, the CD trainer may have used the narrative of the nature conserving community not only because he strongly felt that such was the case, but also because it serves as a 'motivational device' (PC Hershey March 2000). It gave the CD workers a sense of pride in the community and a sense of purpose in their interactions with local people which would positively influence their work, emphasise the fact that they and local people could 'do it' themselves, and thus feed into the self reliance that constituted the basis for the Bismarck-Ramu community approach. Later, the CD trainer would soften his position, as quite a number of project documents, argued that the form of conservation that the Biodiversity Program was looking for did not exist in the Bismarck-Ramu area (VanHelden 1998a & 1998b), or even in all of PNG for that matter (Orsak 1997c). By then, however, he had a highly motivated and self-confident group of CD workers who could deal with a raft of issues and would not be disappointed if the 'traditional' community turned out not to be as harmonious as initially suggested.

Filer (2000: 26), argues that conservationists may also feel inclined to uphold the 'myth of primitive environmental wisdom', if they believe that this will 'maximise the flow of foreign funds which keeps them in employment'. This latter concern may play a role among many conservation projects but does not appear to have played a role in the considerations of the CD trainer. With his skills he could have become a high-flying and very well-paid consultant any where in the Pacific. Instead, he opted for the relative autonomy of the Bismarck-Ramu project in which he would be free to trial an innovative approach. This brings us to a comment by Brosius (1999: 281) to the fact that anthropologists should be careful with deconstructing the narratives of local people as such deconstruction may be used by

> 'those who would deny any sense of enchantment with nature whatsoever, putting in its place "commonsense" solutions promoting passionless, technoscientifically based management initiatives ... that reduce every form of engagement with nature to an extension of capital.'

This form of self-censorship is argued against by Guha (in Brosius 1999: 293) who suggests that such fears stem from an 'exaggerated respect for activists' and 'should not inhibit the pursuit of the truth'. Filer (2000) notes that the Malaysian situation from which Brosius comments is fundamentally different to that in PNG, where due to the system of land tenure and the lack of a dominant group within society, there is a much smaller chance that anything that social scientists write will endanger the rights or strategies of local resource owners.

THE DISCIPLINING OF AN OPEN-ENDED PROCESS

Mainstream conservation projects tend to restrict 'conservation' to the establishment of protected area with a raft of specifications related to size, location, shape and permitted activities within and outside that area. When such projects pursue a participatory strategy, they do so within the technical limitations defined by the

conservation experts. Thus the Lak people were welcome to participate, as long as the outcome was a protected area in a predetermined location. The choice of the Bismarck-Ramu project team for a wide area of interest and an open-ended approach over the furthering of an explicit and localised conservation agenda, however, did not mean that the participatory process in which the CD workers engaged was totally open-ended and free from strategic disciplining. In practice there is a gap between the ideology of participation which suggest that any outcome is possible, and the reality of participatory practice as it developed.

The Bismarck-Ramu approach was no doubt more open than other conservation projects such as that at Lak. To start with it did not define the nature of 'the problem' for local people, but rather asked local people to define the issues of importance. It did not have a prefab solution called 'conservation' either. In fact, it would prove open to any suggestion that could have potential conservation spin-offs. In the field of conservation thus not only protected areas were debatable, but over time also decisions with regard to modifying behaviour, restrictions on hunting or simply refraining from logging would all become possible outcomes of the participatory process in which it was engaging local communities. Notwithstanding this relative openness, and its emphasis on total participation, the process by which the CD workers engaged with local communities was not free from strategic and political elements. As Pottier (1997: 220) notes: 'Even the most informal and 'open' workshops remain to some extent formal and political in character'. The Bismarck-Ramu team too predetermined the limits within which local participation was acceptable. Power seeps through in a number of ways. Some structuring elements are intrinsic to the very process of participation, or refer to the way in which concepts are defined, others are the result of the explicitly strategic choices made by the project team.

In the first place it is seldom recognised that the implicit assumption of the notion of 'participation' is that there is a difference in power. There are those that 'take' the initiative and there are those that are 'permitted' to participate. As such the very notion of participation introduces and maintains the inequality that tend to characterise planned interventions. If there were a level playing field between intervening agency and the subjects of intervention 'participation' would turn into 'negotiation'. Negotiations are also subject to differences in power, but the word 'negotiation' does not immediately betray who takes the upper hand. In the notion of participation there is always the supposedly more influential side which 'allows' or 'enables' the other stakeholders to participate (PC Inger Stocking Korzen January 2001). In this sense the very notion of 'participation' perpetuates the inequality between project team and local people.

In the second place there is the manner in which key concepts are defined. As the CD workers of the Bismarck-Ramu project were to engage in what was defined as an open-ended process of problem definition, they were not to 'preach' on conservation issues. This did not withhold them from emphasising the issue of self-reliance, to local communities and that people had to make change for themselves. There is,

however, a dilemma with regard to the emphasis on self-reliance as it could potentially generate a situation in which the project would be confronted with a very much self-reliant community, actively aiming to enlist a logging or mining company. It was clear that such was not possible given the objectives of the project and its donors, and that the form of 'self-reliance' promoted by the project was not without normative attachments. On the contrary, it would take a very specific form, allowing people to define their predicament and participate within the limits defined by the project.

As I have already argued earlier in this chapter, the Bismarck-Ramu project saw self-reliance as opposed to an undue dependence on outside forces. Filer (1997: 75) for example, argues that resource dependency is characterised by a situation in which resource owners 'receive a substantial windfall without having to lift a finger', while self-reliance implies that local communities themselves make use of their natural resources in order to improve their lives. Tacconi (1998) concludes that this entails a narrow view of self-reliance as in this view 'a person who receives a royalty payment or a rental income is not self-reliant. In this interpretation to be self-reliant you need to sweat.' In contrast to Filer's definition of self-reliance, Simpson (1997 in Tacconi 1998) argues that landowners in PNG regard the establishment of landowner companies 'as a mechanism for establishing control over local social and economic issues and promoting a truly self-reliant community'. Whether such a landowner group negotiates with a potential mining company or decides to enter business itself is largely irrelevant, as the decision, control and agency lie with the people themselves. The notion of self-reliance as employed by the Bismarck-Ramu team excludes the possibility that people successfully enlist outside agencies.

The project team, however, had a simple solution to the possibility that a participatory process of problem definition would reveal an interest in logging among its clients. It simply argued that those communities expounding an interest in logging or other forms of company intervention were suffering from 'cargo-thinking'. Such communities, after repeated discussions with the CD workers were viewed as incorrigible and left to their own devices. In the words of the CD trainer: 'they didn't get it'. These groups were not prepared to accept self-reliance such as it was defined by the project and were therefore considered too far gone. As such the combined notions of 'self-reliance', 'cargo-thinking' and the view of 'traditional' communities as essentially imbued with a conservationist ethic, provided a rationalisation by which the various communities in the Jimi and Ramu Valleys could be labelled (Woods 1985) and – if deemed necessary - excluded from further project work. Thus when in Sogeram, the leader of one of the local clans told the team that

> 'You are trying to protect our land and we are still living like our ancestors when they lived in bush material houses The team figured out that [this person] has 'cargo' attitudes. He is selling his forest to loggers for money (BRG 1999f: 2).

In some cases, the condemnation of whole villages as 'cargo-thinkers' led to a feeling of unease, which shines through in the patrol reports. With regard to Pimbum, presented earlier in this chapter as an archetypal case of cargo-thinking, it was for example noted that:

> 'It is not fair to simply accuse the people in Pimbum of cargo thinking. They have done an awful lot of work on the airstrip. It seems we failed to explain the purpose of the ICAD project clear enough as we ourselves were still working out how to do it as we went along and may have made what now seem mistakes during the start-up phase' (BRG 1996a: 44).

A similar comment can be made for the Jimi people in general, and especially those at Foroko-Brimde who have always actively tried to take control of their lives, partly by aiming to enrol the colonial administration, the churches, government and law enforcement institutions into their private and collective projects. This approach, however, did not mesh with the notion of 'self-reliance' employed by the project. Ironically, this study argues that while the Bismarck-Ramu project denied local people the ability to deal successfully with outside forces, it would itself become enlisted in the territorial concerns of the Ramu people.

USING PARTICIPATORY RURAL APPRAISAL TO 'SNEAK CONSERVATION IN'

As with other participatory practices, the application of PRA techniques may not be more than product of the desire by donor-initiated development projects to rapidly access social-cultural information to satisfy the requirements of a project document. In such forms PRA becomes truncated to 'a way to get people to do what we want' rather than a means to design the project to meet the needs of local people (Goebel 1988). In recent years, however, attention in the application of participatory methods has shifted more and more towards the need to understand the perception, knowledge, circumstances and values of the target population in order to increase their participation in project definition and execution (Mosse 1994). This a partly a response to the extractive nature of earlier research, but also a reflection of the realisation that rural people themselves are knowledgeable with regard to the issues that affect their lives, and that designing techniques which facilitate communal data collection the local perception of development problems can come to play a role in the design and implementation of projects (Chambers 1997; Pottier 1997).

The recent interest in PRA has had an especially profound impact on the manner and attitudes with which researchers and community workers have entered rural communities. Where in the past the usually foreign experts aimed to find the 'truth' about the local situation, the new focus on local people changed his role from that of an 'investigator' to that of a 'facilitator'. This has resulted in an emphasis on attitudes over methods. The attitudes which are deemed necessary for 'good' PRA usually revolve around building trust, building up a mutual rapport and confidence, on showing respect, on taking time and on listening rather than on preaching,

criticising and 'raising awareness' (Chambers 1997). Many of these attitudes are visible in the Bismarck-Ramu community entry approach.

Today there is an increasing realisation that researchers and community workers are part of the local scene and that 'value-free' or 'neutral' PRA does not exist as values are always implicit in the facilitation process. The simple fact that PRA practitioners aim to include all members of the community rather than the dominant group of decision-makers reveals values related to ideas of western democracy, popular representation, gender issues and social equality. In addition, strategic considerations revolving around the role of the facilitator, the selection of tools, the structure of the meetings, the time accorded to different elements and the group's dynamics and divisions, play a role in framing the process. As a result, PRA is increasingly recognised as a fundamentally political process whereby facilitators with a set of value-based preconceptions, and explicit or implicit strategic considerations, enter into discussions with local people about what reality looks like, what it ought to look like and how to bridge the gap (Pottier 1997). PRA may thus be more about negotiating a common understanding, a 'middle ground' from which 'to work together' than about discovering an objective rural reality.

It is the realisation that PRA should not be seen as an value-free exercise, but can be used strategically in order to interest communities for specific issues that came to play a key role in the Bismarck-Ramu project. The Madang project team realised that people were pursuing their own agenda and that the Jimi people were actively enrolling the project into their private and collective endeavours. By stating up-front that the project wanted conservation, it would be very difficult to separate those communities 'genuinely' interested in resource management issues from those just making such statements in order to secure the funds, jobs and status associated with the project.

Given that the whole intervention could be defined as a clash of agenda's and priorities in which various factions of local people would not hesitate to act strategically in order to further their own interests, the project team had no qualms about using PRA as a means to insert resource management issues into its community entry approach. The team did not simply want to get people to 'do' conservation as it realised that such would never be sustainable in the longer term, but wanted to use PRA tools as a means to select the 'good' pro-conservation guys from the 'bad' guys who only professed a strategic interest in conservation for material considerations. Where people were truly interested in conservation, communities would not be deterred by the fact that the project did not bring development, but would be prepared to tackle conservation and development issues through a process of self-mobilisation.

Next to the choice for a narrow interpretation of the self-reliance concept, the project thus decided to strategically structure its encounters with local people. The CRI director for example, suggested that there were a number of PRA tools which could be used to 'sneak' conservation issues into the interactions with local villagers. Being

responsible for the environmental education component of the project, he noted that one of the main issues in rural PNG is illiteracy. Many people would like to learn how to read. Through the selection of literacy training materials the environmental message that the project was trying to drive home could be reinforced, while simultaneously serving the needs of local people. In actual fact many churches use evangelical materials to teach their congregations how to read and write. Why not do the same with conservation issues? In similar vein the first trust building patrols could be conducted using PRA tools which not only focused on self-reliance, but also on changes in the environment and the role of people in those changes. If one were to conduct the problem analysis after these exercises, communities 'touched' by resource issues would probably express these as part of the problem analysis, giving the project a legitimate point of entry to discuss conservation issues. It is here that a careful selection of PRA tools could play a role.

A PRA training conducted during July 1996 provided two useful tools to bring up conservation issues in a strategic manner. The first consisted of a resource mapping exercise in which communities were to draw their communities and its resources in the past as well as in the present. The difference between these two maps and the patterns of environmental change that become obvious would lead to animated discussions over how those changes have taken place, who is to blame and possibly about what can be done to stem them. In addition, it was decided to ask communities to conduct two timeline exercises. The first to look at the increase of the number of people, the second at the changing rewards from hunting. Thus, equipped with an introductory speech, a series of metaphors and a toolkit of strategically selected exercises the CD workers entered the Bismarck-Ramu area.

CONCLUSION

This chapter has outlined the fundamental shift in strategy that took place between the Lak and the Bismarck-Ramu projects. While chapter 2 has discussed the way in which the Biodiversity Program dealt with the Lak events, transforming the failure to establish a conservation area into a success due to the important lessons learnt, this chapter outlines the way in which this generated room for a new participatory strategy of community development. This strategy was based on the idea that the project should avoid any talk of economics as such would shift the debate away from the issues that mattered to the community towards the issues that people think matter to the project. Mining companies, but also the Lak project and other interventions in rural PNG that from the start define their interventions as a source of income see themselves confronted with highly strategic behaviour on the part of local communities, a range of conflicts, and there where big money is involved with many years of litigation. In addition these processes of intervention tend to affect local people as these stop generating change for themselves instead expecting outsiders to solve their problems for them. This so-called 'cargo thinking' was thought to have played a significant role in the Lak failure. By doing away with the

economic component the conservation program it essentially exploded the ICAD concept.

The Bismarck-Ramu community entry strategy instead did not aim to push conservation, but rather through a gradual process of trust building, local problem analysis and an emphasis on self-reliance tried to find out which communities in the area of interest could have a potential interest in resource management issues, and would therefore be suitable partners for further project work. According to its philosophy, local people have been disempowered as a result of their incorporation into the global economy, a process to which development interventions can actually contribute by displaying excessive amounts of wealth, or by framing their project objectives in purely economic terms. The realisation that projects can play a role in the development of a cargo mentality necessitated the development of an elaborate set of behavioural rules in order to avoid such effects in the Bismarck-Ramu area.

Not only did the project want to help people 'stand on their own feet', it also assumed that by emphasising self-reliance, a respect for traditions and local culture it would re-establish the conservation ethic that these communities were thought to possess in the past. In contrast to the increasing frustrations with local people in Lak and during the opening patrols among the Jimi people, which over time came to perceive local people in increasingly negative stereotypes, this philosophy was based on the combined images of the 'good native' and the 'fallen angel', blaming the outside world for diverting local people from the essentially harmonious lives that they were thought to lead in the past. Only those communities which took to the idea that they could make change for themselves could be expected to look after their environment.

While the whole process was framed in terms of participation, and the supposedly open-ended nature of CD interventions which was to give local people the room to define their own problems, priorities and solutions, the project team also steered communities in a specific direction through its speeches, metaphors and through the strategic use of PRA tools. Used in this manner participatory methodologies, including the use of PRA tools, are not so much about discovering some pre-existing reality in which people live, their lives, but essentially tools in a drawn out process of negotiations as to the conditions under which project team and people may co-operate. The next chapter will outline the various responses to this new approach and the way in which people rejected adapted and co-opted the project intervention to meet their particular needs.

Chapter 7

COMMUNITY-BASED CONSERVATION AND TERRITORIALITY ON THE RAMU RIVER

'That night Alphonse's patrol boots were stolen' (BRG 1997e: 12).

INTRODUCTION

In July 1996, the first two CD teams left Madang. The first team flew up to Kol in the Jimi Valley; the second landed at Foroko-Brimde in the Ramu Valley. Between July 1996 and end of 1999 a total of some 21 patrols, each consisting of between two and four CD workers were held. In addition the conservation area manager conducted a number of separate conservation visits. This chapter will outline the manner in which various groups of local people responded to the new project philosophy. While many of the more specific occurrences described below took place more or less simultaneously I have separated them by geographic area and ethnic group to keep the narrative manageable. The chapter therefore starts with describing CD work in the Jimi valley, and then looks at these interventions among the mixed communities in the area beneath the foothills of the Bismarck-Range. It continues with a description of the establishment of two so-called Wildlife Management Areas on the Ramu River and the role of Ramu territorial concerns therein. The chapter will end with one of the greatest successes of the Bismarck-Ramu project, when it assisted a number of clans at Sogeram to resist a logging company.

The main argument of this chapter is that while relations the Jimi and mixed Jimi-Ramu communities broke down, the project managed to establish a working relationship with the Ramu communities, moving towards the establishment of two large protected areas. The reasons why people and project co-operated, however, and the reasons that underlie this middle ground were very different. Where the project team saw their establishment as proof for the success of its community-based

conservation startegy, local people enlisted the project in their conflict with the incoming Jimi settlers. The community entry approach with its many communal meetings gave Ramu landowners a forum to assret their authority over land and resource, while the actual establishment of two protected areas amounted to a more secure and more formal recognition of their status as landowners.

THE FIRST COMMUNITY ENTRY PATROLS

As the CD teams entered a village, often exhausted after a long day walking, they would usually be welcomed, given a house to stay and would ask to be allowed to see the local leaders. As there are many different leaders even in the smallest villagers, the group of encountered would invariably be large. During this preliminary meeting the CD teams told the group who they were, asked permission to stay for a few days and called for a joint meeting. During this meeting, they gave the introductory speech, which was later repeated to the community at large. To give an impression of the content of their speech this is the CD team's introductory address to the people at Warabruk on the Ramu River:

> 'We are from the DEC, which is a branch of our central government here in PNG; and we are based in Madang. We are not a bank, not a church; we are not politicians, nor are we a logging company. Not at all! We are mere workmen, and we work for the bush/forest, the land and the rivers or waters. We have come to visit and stay with you as friends, to live with you for a few days, to work with you in your gardens or wherever if needs be. We came to listen to some of your stories and we also have some stories to tell you, should you care to listen to those... Our work is primarily educational; but even then everything is in your hands. We can share with you whatever little knowledge we have, just as what friends normally do; but all the choices are yours' (BRG 1996b: 28-29).

Note the difference in approach to the first patrol speeches held in the Bismarck-Ramu area. There is no mention of conservation as something people must do. There is no talk of being careful with logging companies, no talk about small, big, fast and slow development and no notion of an exchange of conservation for development. The CD workers tried to avoid framing the discussion in terms of conservation as they did not want to put the objectives of the Biodiversity Program in the foreground but wanted local communities to voice their concerns. For this to succeed at least a certain level of trust would be needed. The CD workers also said that if people were not pleased with their presence or presentation they would leave, as there were plenty of other communities in the area which the CD teams could work with.

The vagueness of the speech threw up many questions, not in the least because people would question the connection between the new CD workers and the earlier patrols and survey. Usually people allowed the CDs to stay, if only because of the entertainment value that a new group of guests could provide in generally boring village life. During the following days, the CD workers would spend time in the

village, work in the gardens and talk to people about the issues that people wanted to talk about. Later during their stay or after having spent several days in another neighbouring village they would come back to do their self-reliance exercises. In Bubkile, the CD workers recorded their self-reliance talk in the following manner:

> 'The CD team's presentation started off by informing the people that our ancestors inhabited this land 50 000 years ago. They lived a nomadic life then; gathering food and other needs for their livelihood from the forest, rivers, and the whole environment. This understandably meant that the forest and all natural resources therein were very valuable to our ancestors. A noteworthy fact is that our ancestors were highly self-reliant; doing things on their own, without any outside help.
>
> As time went on many changes or developments took place; the greatest one of all came about ten thousand years ago, namely the first ever garden in the world at Kuk in the Wahgi Valley...[56] Our ancestors lived long before Jesus was born. Jesus was born only about 2000 years ago, but our ancestors lived 48 000 years before that. The mere fact that our ancestors inhabited this land and managed to survive throughout the centuries, clearly shows that they were developed just as they were. Our ancestors did not need foreigners or outsiders to bring development to them, because development was already occurring and they were bringing that about themselves.
>
> It is the year 1996 now... Many changes and so-called developments are destroying us, though we fail to realise so. We should now be very careful in accepting changes or developments. Let us see to it that whatever development that comes to us must be beneficial not only to us and future generations, but also friendly to our valuable environment. Let us look into the future; what would it be like if we start using up every resource for today's glory and forget about our children? Let us think of our children who would grow up; ... Let us hope and make sure that they will still have their roots and not depend on or even expect outside help (BRG 1996c: 16-18).

The CD team then displayed the posters of the mango tree to emphasise their point.

> 'The mango tree is our land, our resources and our cultures. When a fruit is picked, the tree would never die. When a branch is chopped, the tree will still be there. But if the whole tree is chopped down from its stump, it would die. Our roots (cultures, traditions, and valuable resources) would die or be depleted if we do not value them anymore. If we destroy our land, we would never find another land to replace it. Let us live on and be careful how we live our lives and make our decisions; decisions that will affect not only us but also generations yet

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[56] Evidence found of drainage trenches and taro gardens at Kuk in the Waghi Valley suggest that Papua New Guinean may have been the first gardeners on earth (Golson 1981). This fact would always provoke much excitement and pride during the CD presentations. At a presentation in Kumdi in Western Highlands Province one of the women present wanted 'to know the name of the first woman that first planted the taro seed in the gardens at Kuk. The CD worker had to tell her that he did not know because she was not his predecessor but that 'the people of Western Highlands in Kuk should know because she was their ancestor' (BRG 1999f: 15).

> to come. Let us clean around the tree and look after it so that it will bear more fruit for us... (BRG 1996c: 16-18)

The speech thus emphasised the ability of local people to take care of their lives while simultaneously warning them to be critical of the changes taking place around them. Only they, being the landowners of the area, could decide what they wanted to do with their lives and whom they wanted to work with. Often people would respond emotionally to these presentations. It was a radical turn around from the thinking of local people which often emphasised that they were *'rabbis lain'* (rubbish people) who in the envious economy of rural PNG felt they were failing to keep up with their neighbours, the rest of the country and the world.

Following a 1999 role play in Sepu, which once more emphasised the importance of people's roots, some would agree that they should maintain their customs and traditions and be careful to give away their land to local companies. Others, however, argued that going back to one's traditions was not easy. As a Banam settler explained

> 'A lot of us have gone to school and our children are educated beliefs of today are from outside and are neglecting our customs and cultures. The educated children of now a days say that our customs are not good'.... The religious people ... are all confused. The role play that we watched has reminded us of our ancestors customs and cultures, it has put something very special in to our hearts and we do not have anything more to say' (BRG 1999c:10-11).

THE RESOURCE MAPPING EXERCISE

Following the initial CD patrols in the autumn of 1996, later patrols would revisit the villages at intervals of about two months, gradually advancing the step-by-step community program. Most villages were happy to see the CD teams come. Following the initial presentations on self-reliance, the teams would move on to the resource map as part of the strategy to make environmental degradation and resource management an issue of debate. People especially followed the mapping exercise with much interest. At Dungo near Bubulsunga, the patrol report recounts how the PNG conservation manager explained that those present had to help the team by drawing a picture of the village and lands as it used to be before, and another one about what it was like in the present. The report notes that

> The elders were very much into this exercise, having the resource map of the past drawn on the ground with bush knives and placing objects within the map to mark the resources they had; whereas the youngsters merely watched.... [Afterwards] a discussion on their land and resources developed amongst the people and we allowed them to get through with it, before proceeding with the next map (BRG 1996b: 24).

After people had finished with their discussions, the conservation manager had them construct the resource map of the present. This second resource map did not take long to construct because people simply removed a considerable amount of

objects representing resources from the first resource map in order to depict the changes that had come upon them. Then the deliberations started all over again, with especially the young men expressing their surprise at the changes that the old men had sketched. Part of their discussion went along these lines:

> 'Almost all our natural resources on this side of the Jimi have already disappeared, and many new things and changes have happened on our land. The fact is, we are never satisfied, always seeking for and moving over to 'green pastures' (new areas) in search of resources. And now, after having contributed greatly toward the depletion of resources on this side of the Jimi, we have jumped over to the other side of the river, in search for those resources. ... We are busy doing our bit from up here downward toward the Ramu plain; and the Ramus are also doing their bit from down there, upward toward us. It is like, the resources and the whole environment (the forest) is caught up between two enemies' (BRG 1996b: 24).

The trendline exercises confirmed the view that the Jimi environment was changing, with especially game diminished. The elderly men told to the younger generations present that in their days the bush was much larger, gardens were located closer to the houses and wildlife was much easier to shoot. Now there were people and gardens everywhere and erosion had become a problem. The bush had disappeared and wildlife could only be found on the northern side of the Jimi River in the Bismarck Fall as 'all the cassowaries have run away'.

THE INFLUENCE OF THE COMMUNITY DEVELOPMENT WORKERS

New in the speech, when compared with the preparatory briefings at CRI, was the fact that not only self-reliance was emphasised but that the CD team's would actively blame 'the white man' for the loss of self respect.

> 'When the white people came to our land about 250 years ago, they 'blind folded' (indoctrinated) our people. Our people were made to believe that our culture and resources are not good, as compared to the white peoples'. Our people never realised the negative effects of the changes that the white people (foreigners) were bringing about. During a very short period of time (the last 250 years), as compared to the very long time (since 50,000 years ago), the foreigners/white peoples' influence has completely changed and even ruined our ancestors' and our lives. Our people thought that the white people (foreigners) have all the answers to all the problems of life, and so we started to wait for outsiders to give us more. This developed what we now call the 'cargo mentality'. Then the time came for PNG to attain political independence; this was in 1975. This political independence meant that we were going to stand on our own; to develop our country ourselves. But where is this independence today? We were self reliant in the past (our ancestors were) but today, dependency is everywhere. White people's money has poisoned our true self-reliance. White people's goods have made us so weak and unproductive, we can not produce our own goods' (BRG 1996c: 16-18).

During this presentation the CD workers were able to tie their self-reliance talk in with contemporary political issues such as the civil war on the island of Bougainville.

> 'People [on Bougainville Island] were forced (or fooled) into signing for the exploitation of the copper resource on the island and now there is a big incurable 'sore' left. The changes that came about were clearly forced on the local people by greedy foreigners. Foreigners' development had come onto our land so fast, we the indigenous people are fast becoming slaves on our own land. We have been greatly disempowered mainly by foreigners' tactical indoctrination, so much so that we have a very low and negative self image of ourselves and everything that is PNG or Melanesian - everything that is foreign seems better than all that is local. We are losing a lot of our wealth, which we get from our land' (BRG 1996c: 16-18).

There is something contradictory in blaming foreigners for the loss of self-reliance, when both the CD teams and the villagers know that the project of which they are part is set-up and funded by the international organisations and led by a number of 'whiteskins'. This inconsistency, however, bothered neither CD workers nor local people. On the contrary, especially this aspect appealed to people as it provided them with a clear explanation for their development predicament. At the village of Pimbum a Jimi village leader replied to the self-reliance speech and timeline:

> 'I can't find words good enough to express our gratitude for your presentations which have indeed opened our eyes to see things more clearly than before. Like my fathers, I have always been taking the whiteskins as my saviors; their propaganda as THE word; and the things they bring in as all-good and beneficial for us. This session has opened my eyes real wide, for me to see and feel the pain and injury caused us by many whiteskins. The whiteskins and their counterparts have sucked up almost all the blood in us like mosquitoes and leeches do, so that now you and I are but skeletons; more dead than alive' (CRC 1996a: 33).

A second alteration introduced by the CD workers consisted of the presentation of a picture of a starving Somalian. Although the environmental awareness documents produced by the CRI director were not to be taken into the field, and an exception was made for a picture taken from one of his papers. The picture, among the CD workers known as the *'bun nating man'* ('the just bones man') or the 'skinny man' shows a starving Somalian man on all fours with the caption reading:

> 'This man is from the Sahel area of Africa. He has not eaten enough food for many months. Now he is nearly dead. What is happening today in Africa may happen in PNG if the population of PNG continues to grow and grow. PNG will never develop if it has too many people to take care of' (Orsak 1997a: 1).

This picture would be shown to people in the field as part of the CD presentations to local villagers. It came to serve as a powerful admonishment to think about the nature of development and conservation. Although I personally felt uneasy with the comparison between PNG with its small population and abundant resources and drought, war and hunger ravaged Somalia, the CD workers felt that the picture was

a powerful tool in capturing people's attention. The second patrol report, for example, notes how in Bubulsunga the picture

> 'truly frightened and troubled the people; for they saw that if they were not careful, they too (and generations to come) will end up becoming like that man. They requested that DEC/CD team continue coming into their place and enlighten them more by way of education and training in order for them to see 'things' and life more clearly' (BRG 1996b: 20).

THE POSITION OF WOMEN

A final personal twist to the speeches entailed the position of women within the teams. During training and recruitment the CD trainer always emphasised the equality of men and women, and gave them equal responsibilities. The project made consistent efforts to recruit new women as the turnover of women proved larger than that of men. Some of the husbands of these CD workers preferred them to stop work while others fell pregnant. As the team gained experience, it turned out that female CD workers were more trustworthy in looking after the patrol budgets. They were less likely to purchase luxury foods such as meat, and were better able to withstand demands for money. Thus after women took over the day-to-day patrol finances, expenditures in the field fell by some 30 percent.

A number of CD workers would make 'women's issues' a central part of their presentations to local villagers:

> 'It was emphasised that women were the ones who discovered the 'art' of making gardens; they were the first ones to make gardens. Almost everywhere in PNG today, men look down on women, unlike what things were like during those ancient times. Womenfolk in PNG had created history; they have always played significant roles in human society' (BRG 1996c: 16-18).

Often female CD workers held these, in order to provide a role model to local women. As the patrol reporter to the second Ramu patrol writes lyrically:

> 'Grace introduced the team members and explained who we were and what we were here for. She then moved on with her presentation of the history timeline; and she did a real good job out of it - we can safely make such an assessment from observing the people's body language. The people, both men and women were speechless and wide eyed throughout the whole presentation. The mere fact that Grace (a woman) could stand up there confidently and address a crowd of no less than eighty people, the majority of whom are men, is itself empowering to the womenfolk as well as enlightening to the men.' (BRG 1996b: 29).

The presence of women in the CD teams did not go unnoticed and was often much appreciated by local women, who during the timeline and in the further presentations were explicitly commended for their contributions to community and family life. The men too could not fail to note the clash between the role that women generally take in the Bismarck-Ramu area and the behaviour of the female team

members. In some instances, the role of the female CD workers took unexpected forms. A female CD worker explained how on the first time she visited Foroko-Brimde:

> 'I joined in a game of soccer. First I watched the men playing, to see how it was done. Then I joined in. Just playing was bad enough – but then I scored a goal! All the old men who had been watching me, very surprised, sang out to everyone else 'Meri scorem boi! Meri scorem boi!' (The woman kicked a goal! The woman kicked a goal!). And the whole village came running, like at sixty miles an hour, to see. I was so embarrassed. And that was the end of the game' (Ellis 1998: 33).

Browsing through the patrol reports one can not fail to note that the CD presentation offered women a chance to voice their concerns publicly where there previously was none. This took a number of forms. In the first place, and not surprisingly, as women are usually the first to suffer from environmental degradation, women would be more reluctant to engage a company than their menfolk. During a 1998 session in the Upper Jimi Valley, a patrol report collected the following comments from the various groups attending its presentations:

> 'Young men were first to speak out and their concern was how they get money to cater for their family needs and wants. Thus, their intention was to allow companies of some sort to get their resources to get money. The women strongly voiced their concern about their future generations... they said that companies come destroy and go, but what about our future generation?... The elder men fully supported the women. One of them made it clear that they don't need money for every day life. He questioned why they should need more money. He ended his talks with 'I will live a simple life and I don't want to make money as one of my problem' (BRG 1998c: 3-4).

In Sogeram in the Ramu Valley, 'some of the elderly women would be very vocal about the future of their environment, especially about the gardening and firewood collecting areas' (BRG 1999f: 14). In the second place, women are more likely to think in terms of the benefit of the whole community. Men in contrast tend to focus on how they may personally benefit. In Sepu, notwithstanding the wish of many men to go and work on the oil surveying operations near Banam, the women insisted that they should go ahead and construct a classroom because that has what they had decided (BRG 1997e).

At Sepu, things were made easier as there was one very outspoken female landowner, who at times would pull the men into line. On one instance, when the men were complaining that the CD workers were 'not bringing any development' she jumped up to argue that the project was providing them with good ideas and that they should be ashamed of themselves. Finally, and more generally, the attention paid to women by the CD teams gave local women a forum to argue the importance of their place within their communities. Thus in Ganz in the Bismarck Fall, women stated in public that 'the men do not respect or listen to some of their knowledge and skills' (BRG 1998e: 46).

Although these effects could not bring about a fundamental change in the position of women, the attention paid to gender issues and the position of women with the CD teams did not go unnoticed among local people.[57]

THE CHURCH LIAISON AND EDUCATION STRATEGIES

Next to its CD work, the Bismarck-Ramu project was looking at ways to insert conservation messages into the area of interest. At an early stage, it was clear that within the heterogeneous and disjointed social structure of the Bismarck-Ramu area, only the churches formed a rallying point *between* communities. In 1996, the project recruited a church liaison officer who was to develop joint activities with the churches in the area. His task was to collate materials emphasising the link between Christian beliefs and notions of self-reliance, community living and environmental stewardship. In building these links and in developing materials the project aimed to enlist the churches in driving home some of the key messages of the Bismarck-Ramu project. In contrast to the CD workers, the church liaison officer did preach, thus hoping to convince influential church people within the various communities to pick up the BRG message of self-reliance and conservation and carry it further. His materials and sessions would be extremely effective in motivating people through a separate body called Christians for Environment and Stewardship. Excerpts from a session in the Kumdi area in Western Highlands Province give an impression of the manner in which the Bismarck-Ramu CD work and biblical studies were meshed into a compelling conservation argument.

> 'I started the evening presentation with the Bible verse of Genesis 2: 8-9 that teaches God created man and put him in charge of the creation. Psalm 8: 6-8 also talks about God putting man in charge of his creation. I pointed out to them that we the landowners are now in charge of our land and everything on the land and within the land. I urged them to take full control of their land and everything on the land. As it is said in the Bible in the book of Genesis 2: 8-9, God created man and put him in charge of the creation, so now the landowners are in charge of their land and everything on their land including other human beings.
>
> Then I asked them to define the word development. Two men and a woman volunteered to explain in their own language the definition of development. ... They were surprised to know that development could mean being wealthy or become poor, development is a change in ones appearance or living standard. Then I asked them if they knew why some people in rich countries are poor and

[57] Visitors from the UNDP and other agencies would always ask for the number of women involved in the CD work. The community development trainer recalls how during 1997 he was visited by two UNOPS staff – both women- on a familiarisation visit who asked him about the number of female CD workers. When he, somewhat ashamedly admitted, that at that stage only three out of the 11 CD workers were female, the enthusiastic response that 'that was wonderful' took him completely aback (PC Lalley march 2000). A 1999 evaluation team was more realistic when it recognised that the Bismarck-Ramu project was making a great effort to recruit more women, but simultaneously noted that all but one of the management staff were men.

> some countries although rich in natural resources and yet are very poor. ... The most answer they gave was because those rich individuals were so greedy. I asked them again why man wants to dominate the universe and not look after it and work with nature? One of the men answered that this is because they want money and more money. I read the Biblical passage from the book of Timothy 6: 6-10 where it teaches that money is the primary root cause of evil doings. The original relationship between God, man and creation is in big trouble because man wanted to make money and more of it and eventually forgot God. I told them they too that in most part of the white man's countries, they have no sense of God, they have made money their God and in the name of money and wealth they have destroyed their entire environment and all the natural resource have gone...
>
> As we went along they got angrier and angrier as they realize what is happening to our environment in the name of money and what tricks the companies are using to imprison our mentality and rip us off our natural resources. ...I finally concluded with the poster of the skeleton man from Africa. I told them that P.N.G has chosen this road ad if we are not firm enough to protect our land and limit the use of the natural forests, we could end up like the Africans, on the streets on fours tipping rubbish bins in search of food. If it will not be us, it would be our children or grand children...
>
> During ... questioning time ... the village court magistrate ... stood up and publicly announced that he would lead a volunteer group to support the work of the environment in the whole of Kumdi area. His group [would] organize environment awareness campaigns ... and would make laws to protect their natural plants and would punish any young children that mess around with fire (BRG 1999f: 13-14).

A second component consisted of the development of an education strategy aimed at local schools. PNG has very little education material on natural resource management and environmental issues and from the long-term perspective of the project, the development of such materials was of prime importance. The Director of the CRI took the lead in developing these materials and produced a series of papers on the importance to preserve the environment. These well-illustrated documents strongly denounced the use of fire in agriculture and the growth of the PNG population, while emphasising the dangers of modern development and to look after the environment as a precondition for development (See Orsak 1997c). The departure of the CRI director in early 1997, however, meant that a series of lessons to be introduced to teachers in the area was never developed.

A BREAKDOWN IN RELATIONS WITH THE JIMI VALLEY COMMUNITIES

The first CD patrols visited areas in which the project had already been working and focused on the Jimi communities both in the Jimi and in the Ramu Valley. The new approach was initially well received and the CD workers returned from their first patrols, in good spirits. They agreed that people's responses to their presentations

had been very positive and that they had 'established a strong relationship with local people' and had built 'a fair bit of trust' (BRG 1996a: 20).

During the debriefing, however, a sense of unease developed with the strangely uniform response encountered. All three Jimi communities visited during the first CD patrol, saw 'conservation' as their dominant problem, while simultaneously expressing a vehement opposition to the possible entreaties of logging companies (BRG 1996a: 28). This was a remarkable switch in comparison to the earlier experiences when a range of issues but few of them having anything to do with conservation had been the topic of discussion. Thus the first patrol to Wambin village in the Jimi valley reported on return to Madang that whereas the CD team tried to broaden the discussion to all kinds of possible themes as they had been taught during the briefing

> 'the community was instead focusing on the environment and its conservation. Therefore we felt obliged to discuss [these issues] with them.... We also discussed the advantages and disadvantages of logging....- this we did in answer to people's request' (BRG 1996a: 19).

At two other villages, the responses were similarly promising and oriented towards 'conservation' with a strong rejection of all possible company activity in the form of logging. At Dungo near Bubulsunga the people

> 'gave us their word that no other government department, company or other private enterprise would be allowed into their section of the area of interest. They further defined their stand by declaring that only DEC can go in at any time ... and also emphasized that DEC keep in touch with them always. The team is confident that it had established strong relationship with the people' (BRG 1996a: 20).

While in Bubulsunga itself, the people belonging to the community facilitator's clan stated

> 'that they would not tolerate any other organizations coming into their village from then on. As they put it "the door is completely closed." They said only DEC was allowed into their village and land from then on' (BRG 1996a: 21).

Upon reflection, it became clear that this unanimous and 'dizzyingly positive' response (Ellis 1998: 27) was the result of two factors. In the first place, it became clear that local people were strongly influenced by the earlier interventions of the project, during which the project staff had talked about conservation, logging companies and development. Thus whereas the project had made a significant turn-about in its philosophy and now wanted to engage in an open-ended discussion on the issues that 'really' interested local people, these thought they knew what the project stood for. Thus all three communities focused the discussion towards conservation.

The single-mindedness and uniformity of the response of what were otherwise widely divided Jimi clan groups, however, was such, that it became clear that a

second and potentially more influential impact stemmed from the activities of the Jimi community facilitator. The latter, it turned out, played a key role in briefing the involved communities as to the type of responses that the Bismarck-Ramu project was looking for in its attempt to select those communities with a 'genuine' interest in conservation. Not only did he brief the communities as to the type of answers that should be provided, he also played a key role in setting up the first patrol schedule for the Jimi Valley.

THE ROLE OF THE COMMUNITY FACILITATOR

Until halfway 1996, the project team had a lot of trust in the work of the Jimi community facilitator. The project had recruited him as he was one of the few graduates from the Jimi Valley and was knowledgeable about the area and its people. As such the project had a tendency to see him as a representative of all Jimi people. During the survey, the community facilitator did his work well, and would later allow the project to use his house in Pimbum as a 'base' and get two Jimi settlers appointed as radiomen. By the second quarter of 1996, however, the community facilitator was more and more absent from his duties.

It turned out that he travelled around the Bismarck-Ramu area for unclear reasons, and visiting a number of development agencies in an attempt to muster funds for the Pimbum airstrip. Communications were difficult and repeated messages were sent out to various contact points and even by provincial radio to advise him of the date and venue of the first patrol briefing. The briefing, however, started without him and the available information with which to plan this patrol was therefore limited. A first patrol plan was devised, but the information necessary for planning the patrol logistics, including the walking distances between villages, the location of bridges across various rivers, and the all important question in which villages to start work was limited. The project team realised that from a conservation point of view the Bismarck Fall was the most interesting area, but did not know which Jimi and Ramu groups claimed use and ownership rights to that area. As such, the strange situation was that the CD workers were sent out to build trust with communities, without knowing exactly whom they wanted to build trust with in the first place.

The CD workers, based on the information provided by the two conservation managers who had patrolled the Jimi Valley in February 1996, suggested starting in the village of Ambulluah near Kol. After this, two more villages would be visited before returning to Madang. Bubulsunga, the community of the Jimi community facilitator was not on the list. After five days of planning, role play and exercise rehearsal, the community facilitator finally arrived in Madang and suggested that the proposed patrol schedule was not the most optimal as it included villages with little rights to the Bismarck Fall. He also suggested that it would be very difficult to call the four or five clans that make up the Ambulluah community together as they live far apart and may not be willing to come to their neighbours land. In addition,

he said that conflicts could prevent people from getting together. These comments threw the schedule of the Jimi patrol into disarray and based on the information given by the community facilitator the project team decided to revise the schedule of the Jimi patrol. The new schedule - obviously - happened to include Bubulsunga, the village of the community facilitator.

During the first patrol, itself the CD teams found themselves confronted with people saying 'oh, [the community facilitator] sent you, didn't he'? (BRG 1996a: 46), a situation which suggested to the CD workers, much more knowledgeable of PNG politics than the expatriate members of the project team, that the community facilitator could very well be preparing for the 1997 National Elections. On return from the field, the position of the community facilitator thus became a point of discussion. When confronted with the question whether he indeed intended to run for office in the 1997 national elections, he declined to answer. Instead, he promised to clarify his position after the termination of his contract at the end of the year. As the report noted, this was unacceptable to the project for a number of reasons:

> [In the first place] 'the credit for what the project does in terms of providing training, paying carriers etc. is not accruing to the project but to the person of [the community facilitator]. A second problem is that once we get closer to the elections the security risk of the CD team being perceived as John's election team makes it vulnerable to attack by supporters of other candidates. There are several other candidates in the Jimi area and the movement of the CD teams could be impeded for the larger part of next year if we come too closely tied in with his election campaign. The election campaign and [the community facilitator's] potential role is the third problem as elections in PNG are based on making empty promises and giving free handouts rather than on self-reliance and community organization. The whole election is contrary to the grain of the ICAD process' (BRG 1996: 46).

The net effect of these events was that the community facilitator changed from being an asset into a liability for the project. The project team, however, was reluctant to fire him as doing such could lead to a violent backlash on the CD workers in the Jimi Valley. The Biodiversity Program therefore decided to transfer the community facilitator to Port Moresby where he compiled a report with detailed information on the Jimi Valley (Opo 1996), until the time that his contract expired.

LEAVING THE JIMI VALLEY

By March 1997, relations with the communities in the Jimi valley were becoming increasingly difficult. The Bubkile area had been largely abandoned as a result of the conflict following the Biodiversity Survey. The repeated compensation claims meant that the security of the CD teams could no longer be guaranteed. As a matter of strategy the project thought it would be better to see if the Bubkile clans would invite the teams back in if the project stayed away for a while. If people would ask them to return, then the project could do so on the condition that the compensation claim be withdrawn. During the year 1997, however, the Bubkile area became the

site of serious fighting between the representatives of various political candidates. One of the carriers on the first Bubkile patrol received an arrow through the chest but, amazingly, survived.

Because of the elections, people were focusing on the material benefits that politicians could produce, a focus that also affected local responses to the CD presentations. The various election campaigns triggered a spate of rumours about the arrival of a logging company as numerous candidates were trying to improve their chances by presenting themselves as representatives of such a company.

> 'At the market place there were talks given by a high school teacher and the Jimi School Inspector. The high school teacher is negotiating to bring a timber company into the area. He is also an intending candidate for the 1997 elections. He informed the people that K12 million is already in the country and that K60 million is coming soon to run the operations. He urged the people to allow the company to come and 'develop' the rich timber resources'(BRG 1997b: 15).

The fact that the Jimi Valley has very few resources, very little timber within the Bismarck-Ramu range and as far as presently known no mineral resources was obviously not part of the various campaign messages (See chapter 3)

The activities of the Jimi community facilitator exacerbated the situation even further. Although he had been withdrawn from the area and set to work in Port Moresby, the project had offered him a useful opportunity to present himself as a leader. Following his resignation from the Biodiversity Program at the end of 1996, he thus had six months and the savings from his UNDP wages to run for office. During his time at the Biodiversity Program in Port Moresby, the community facilitator developed a pamphlet outlining his Curriculum Vitae and a number of policy statements. This pamphlet, written in English, a language which few Jimi command, obviously mentioned his work as a Consultant to the United Nations Development Program and the DEC. The 'policy platform' that followed, detailed his political intentions, which were very clearly at odds with the anti-cargo policy of the Bismarck-Ramu project. Item 2, for example, outlined his intention to

> 'find investors and markets to develop our rich resources like gold, copper, timber, develop tourist industries [through which] money would be generated/better standard of living; Employment would be created for school leavers/local people, youths, etc, Developers can bring development like roads, bridges, schools, health centres, etc. You can enjoy spin-off businesses from the operations' (Opo 1997:2).

Item 4, with an interesting interpretation of the notion of 'self-reliance', dealt with the need 'to secure funds and technical support abroad/overseas and not only waiting to get everything from Waigani [the Government centre in Port Moresby]'. He also added that 'if the wish of the Jimi people to see a more effective and efficient approach then I will not boast, but I know where to start'. Item 5 dealt with the need to develop a 'formula' to 'fruitfully' distribute the Electoral Development Funds to 'people's needs and aspirations' (Opo 1997).

The campaign would have serious implications for the project. In the first place, this campaign made it harder and harder for the CD teams to move about freely. The CD workers were continuously associated with the community facilitator's political campaign and consequently received threats from other contenders. In addition, it became clear that his period in Port Moresby had also given the community facilitator an additional piece of strategic information, namely an idea of the total budget of the Biodiversity Program. At first, he flagged the figure of 1.2 million Kina, but as the elections approached, this figure doubled to Kina 2.5 million in his speeches to potential voters. He - not unreasonably - asserted that this money was intended for the Bismarck-Ramu area and that he would make sure that the Jimi people would receive 'their share' once he was elected into office. As time went by, he increasingly asserted that in fact he was responsible for the projects arrival. As a CD report notes:

> 'The people in the Jimi area have been told, by [the community facilitator] that the Project has funds of K2.5 million... He told the people that the money is used by the DEC in the Bismarck-Ramu area. He said that he got this money from the World Bank and employed expatriates and locals to work in the project. Radios were also bought using this money, two being used by the patrol teams and one that is stationed at Pimbum' (BRG 1997d: 36).

In such an environment, it became increasingly difficult to argue for self-reliance and a non-cargo approach and discussions with the Jimi turned increasingly nasty. At Bubulsunga, a community problem analysis stalled when local youngsters simply told the CD workers that they wanted what the CD workers had education, a job with a fixed salary and shoes at their feet. Increasingly, the CD teams became a symbol for what the Jimi lacked.

While some people were becoming increasingly aggressive, others tried a more subtle tack by arguing *mipela nidim wanpela kampani bilong environmen*; 'we need an environmental company'. This was clever form of rhetoric that illustrates how some Jimi responded to the ICAD notion, which too bases itself on the idea that material wellbeing and conservation be linked. This strategic use of language is not fundamentally different from rhetorical attempts by the Bismarck-Ramu project to dispel the apparent opposition between development and conservation by arguing that development is only possible if one starts with conservation. One of the educational papers produced by the CRI Director for example had the title *Conservation or Economic Development? No! Conservation for Economic Development!* (Orsak 1997c). By the time these various statements were made, however, the Biodiversity Program was pursuing a non-economic approach to conservation and that an 'environmental company' was not on the cards.

As time went by, a growing number of communities became impatient with the CD presentations and exercises, instead demanding a '*han mak*', a material expression of the fact that the Biodiversity Program was serious in its work with them. The fact that the CD workers went to great lengths to discuss community development issues was seen as insufficient in an environment where social relations are

expressed through material gifts. It is thus not surprising that the location of the 'base' and the fact that the village of Pimbum now possessed a radio continued to pop up in discussions. Many communities argued that they too needed a base and a radio in order to part-take in the project. At Bubulsunga, for example,

> Pastor Kulinge said, since there is a radio at Pimbum in the Ramu area, there should be one placed at Bubulsunga as it is a centre place in the Jimi area. Since there are a lot of people and groups coming into the Jimi to talk about logging, a radio stationed in Jimi area would help to give information to the DEC in Madang (BRG 1997d: 13).

When the CDs persisted in their attempts to convince people that they should not look towards outsiders to make change, there were increasing demands to see the 'boss'. In many instances people would question the continuation of the earlier patrol work, the absence of the patrol and survey leader and his companions, the community facilitator and other staff. People regarded especially the survey leader as 'the boss'. With the new approach, which aimed to minimise the number of whiteskins in the area, people had to adjust to the idea that the PNG Conservation manager was now 'the boss'. On some occasions people thought that as the project biologist was staying away, the project was reneging on its earlier promises. This was to a certain extent was true as all talk of development activities had disappeared and was now replaced by a much less rewarding discourse on 'what you can do for yourself and your community'. Possibly, because of this contrast in presentation, but also because of his leadership qualities, the survey leader was often asked for. His tall stature, his many speeches and lectures on a variety of issues, his decisive and sometimes forceful responses during disputes and discussions earned him much respect. In many ways he exhibited the characteristics of leaders in highland society, where oratory skills, combined with strength, aggression and decisiveness are the hallmarks of bigmenship. For months to come, people in the area recounted the tales of his exploits and asked him to return. He could not do so, because of the project's new strategy.

As time went on, relations became increasingly difficult and the CD workers had to note that the Jimi people simply did not buy into their non- cargo approach

> 'The team's observation of the attitudes and body language of people during meetings gave an indication that there is really little interest in any community development if it requires the people to get organised or do actual work. The community has said again that, "The CD team come and come again and nothing is given to the villagers". It appears that in spite of the amount of time put into the village development process, the communities still have an overwhelming reliance on 'cargo' and they are waiting for the CD team to bring something (BRG 1997b: 39).

As Jimi impatience grew, there were increasing fears on the part of the CD teams that they might be held up. During a patrol in March 1997, a team visiting the Jimi received a warning by portable radio from the Ramu valley about the possibility of being attacked, forcing the team to withdraw in a hurry. At first the project

responded to these fears by excluding women from patrols to the Jimi, as the risk of sexual assault was deemed too large, later during the national and local elections, patrols ceased altogether. At the end of 1997, a number of issues came together, leading the Biodiversity Program to scale back its activities in the area. The ongoing fighting, the 'cargo mentality' on the part of the Jimi communities and the safety concerns that resulted from the elections led the project team to end their work in the Jimi Valley. The only activities further employed were those of the church liaison officer.

The findings of the social feasibility study, which came available at the end of 1997, further reinforced decision to halt community work in the Jimi Valley. The study concluded that the Jimi valley is a difficult location for conservation initiatives, because of the large population with its high economic aspirations, the prevailing patterns of competition and conflict, and people's instrumental attitude towards both nature and outsiders (VanHelden 1998b and 1998c). One wonders if the Biodiversity Program would have entered the valley if this socio-economic information had been available before April 1995. A related issue concerns the question whether the Bismarck-Ramu community entry approach, based on notions of collective action and a non- economic approach to conservation, had any chance of success at all among the highly fragmented and materialistic Jimi communities.

COMMUNITY WORK AND CONFLICT IN THE MIXED JIMI-RAMU COMMUNITIES

The community entry process among the mixed Jimi settler/ Ramu landowner communities in the Ramu Valley proved similarly difficult. This, especially because of the ongoing conflicts between Jimi settlers and Ramu landowners on the one hand, and among the Jimi settlers themselves on the other. Especially the establishment of the 'base' and the radio at Pimbum would become a source of contention. Notwithstanding the fact that the Pimbum area was seen as doing 'best' in terms of linking up with the project virtually everybody in the area was unhappy with the project. The various disputes that arose had little to do with conservation. Instead, People increasingly enrolled the project in local conflicts.

This came out very clearly during the second CD patrol to Foroko-Brimde and Pimbum when the team became involved in no less than four conflicts. Immediately after the team touched down in Foroko-Brimde, it was besieged by two groups of angry young men. The first problem arose when Jimi youngsters told them clearly that now that the project had established a base at Pimbum, they could not use the airstrip any longer:

> 'Now listen to this! The next time you people are coming into this area for your work, make certain that you come in through another route, and NOT via this our Foroko airstrip. Is that clear? This is the last time you used this airstrip, no more, you hear' (BRG 1996b: 30)?

The second issue revolved around the payment that the community facilitator and thus the Biodiversity Program still owed local people for the carrying of equipment from Foroko-Brimde to Pimbum. When the community facilitator stocked the Pimbum base in January 1996, he had asked people from his own Maipka sub-clan to carry the goods from Foroko-Brimde to Pimbum. Due to a local conflict, his people could not travel and instead people from another Maipka sub-clan came to do the work. The community facilitator had told the Madang staff that there was no need to pay the people for the carrying as he regarded it as a 'community service'. The project team interpreted this as an expression of interest in working together with the project on the part of the Pimbum people. The people who did the carrying, however, did not agree with this explanation at all, and insisted on being paid. This issue came up during the subsequent installation of the radio and the conservation manager provided the community facilitator with the funds to settle the issue. The community facilitator, however, travelling around the Jimi Valley had not come round to paying the carriers, meaning that the CD team ran into trouble.

> Moli their spokesperson said it all: 'Have you brought our money for the carriers? Hand it all to us right now! If you have not then you are not coming to our place. You can do your thing here but you are not coming the Pimbum way - that is if you do not have our money with you'(CRC 1996b: 30).

As these threats were made, the CD team just listened, not saying much, but finally stating that they would think things over and repeating the line that if people wanted them out of the area they would willingly leave. Unlike the two conservation managers in January, they could move on to Pimbum (BRG 1996b).

DISPUTING THE BASE

Other Jimi people tried to capitalise on the obvious disagreement between the various clans at Pimbum by arguing that the project would be much better off leaving establishing itself at their village. The CD report records how one morning, the old man Poko came to talk with the team, arguing that those that were complaining were 'mere settlers' as all land belonged to the Ramu landowners. 'We are mountain people from the Jimi.' He then, however, goes on to qualify his own position, which according to him, is very different even though he is a Jimi settler too:

> 'My case is quite different though, because I paid for the land I am settling on and am using: ten pigs, and K 1000 and a daughter whom we married over to [a Ramu landowner] from Foroko, and she died just recently. [The Ramu] Councillor is the sole landowner here at Pimbum area, all the others are settlers, the complainers are just settlers' (BRG 1996b: 36-37).

Finally, he comes to the purpose of his visit, which is to assert that the project would be better off establishing its base at his own hamlet in Yangal.

> 'I am just fed up and infuriated by their baseless and childish complaints - this loudmouth Moli, he never carried anything, only his mother did; you know what that idiot is real good at? Talking, yes talking, that's what he is good at, nothing else but talking... If they are still complaining, let us give them all these stuff in this house...they are ever complaining about these stuff, so give it all to them. That will shut them up...give it all to them...except the radio, which we can bring over and install at Yangal' (BRG 1996b: 36-37).

The team simply stated that they would see how things were in Pimbum. The above statements again show how social fragmentation and competition among the Jimi is not just limited to inter-clan issues but may also play a role in the relations between sub-clans of one and the same clan.

During the same patrol, a third problem arose concerning the community facilitator's house, now in use by the project. While the Ramu landowners gave permission to build the bush material house, Jimi settlers belonging to the community facilitator's clan did the actual work. The Biodiversity Program never owned the house and simply used it free of charge for as long as it had not decided where it was going to set up a permanent base. Local people, however, disagreed with this interpretation of things and when they realised that the house was being used by the Biodiversity Program they stopped seeing it as the community facilitator's house, instead redefining it as the 'base'. They now wanted pay for the work that they had put into it in the first place. The project team saw such a demand as typical of cargo thinking and yet another Jimi attempt to wheedle money out of the project. During the next patrol, the visiting CD team flatly refused the request stating it would rather pull back the radio and the project. A thing, which it would eventually do in 1998 as discussions over the radio, the house, the airstrip, the division of labour would dog the project for the better part of the next two years.

The fourth and final problem in Pimbum concerned the choice of two Jimi workmen to man the 'base' and its radio. The two labourers were selected by the community facilitator, one from his own Maipka clan the other from one of the Kema clans. The two men performed well and were an asset to the project. The Ramu clans, however, bore a grudge as the project employed two Jimi settlers, while their own people were left out. Therefore, they threatened to burn the house and the radio if the project would not meet their demands for employment. The villagers of a Maipka sub-clan other than the community facilitator's own, were also annoyed that no member of their sub-clan was working for DEC. They at least were temporarily pacified by the community facilitator's promise that one of them would be appointed to the position of airstrip supervisor once the airstrip opened.

Again, as had happened during the biological survey, the project suffered from a lack of understanding of the local situation and the position of the community facilitator. By leaving him the choice of workmen, the project was now stuck with a built-in bias in favour of the Jimi settler groups. Once the team came to understand this situation, it was too late to make changes. First, there was no justifiable reason to change the existing labourers as they had done very well and it would not be

acceptable to these men and their respective clans if a Ramu landowner replaced one of them. Secondly, the DEC was facing serious budgetary cuts and any vacated position would be lost without replacement due to the reduction of the department's staff ceiling. The team thus concluded that there was not much prospect of solving this problem. The New Zealand conservation manager pointed out that the project would have this problem all the time, as whatever it did, 'people would always be jealous' (BRG 1996a).

RADIO TROUBLES

The above events show how during its interventions in the life of local communities, the project had to continuously grapple with the unintended consequences of its activities. Another example of such an issue concerns the use of radios. By the time that the CD patrols had started there were quite a number of radios in use by the project. There was one in Port Moresby, one in Lak, one in Madang, one in the 'temporary base' in Pimbum, and a portable radio used by the patrol teams during their travels in the Jimi valley. As could be expected the placing of the radio in Pimbum led to continuous demands by other groups who felt that they too needed a radio and base as a precondition to their ability to participate in the project.

The first radio-related surprise came when the radio at Pimbum just after installation at the beginning of 1996. Local people used it to request the community facilitator and the Biodiversity Program for further assistance with the building of the airstrip. A request that was not honoured (See chapter 6 on the case of Pimbum). The second issue came about when during one of the first CD patrols people enthusiastically inquired about the outboard motor and the four-wheel drive land cruiser which were being shipped from Lak. It turned out that the radiomen in Pimbum took their work extremely seriously and kept a continuous watch on the radio. One day in 1996 they overheard communications between the Port Moresby office and the remaining personnel at Lak concerning the shipment of excess equipment, including an outboard motor and a vehicle. They had inferred that this equipment was now destined for Pimbum. It had after all been part of the 'base' in Lak which was now being abandoned, and the new 'base' was located at Pimbum. This focus on 'things', however, was exactly the type of 'cargo thinking' which the CD workers were trying to dispel. It had to be made clear that the car in question was going to be used in Madang, and that an outboard motor was not forthcoming either. Anything happening in Pimbum would have to be the making of local people themselves.

A third set of issues arose over the use of the portable radios during patrols. The CD workers obviously enjoyed the use of the radio as it gave them a feeling of security, as they could communicate with the other teams and Madang while on patrol. This led to a situation where the CD teams used the radio almost every night. After the first patrols, the fear arose that the elaborate setting up of the aerial wire and the operation of the radio would become part of the 'cargo thing' that the project was

trying to avoid. A view which proved correct as the radio at Pimbum became a status symbol, and many of the discussions between CD workers and other communities would be over the need for a radio in their village in order 'to work together'.

A fourth issue of concern arose when villagers requested the radio to transfer messages for them. This was risky as it threatened 'to politicise' the radio in the same manner as had happened with the base. An example occurred on the second patrol when the Jimi team was asked to radio down to the Ramu Valley. It turned out that 8 young men had abducted a woman and her children from Omin. The Omin people now asked the team to relay the message to the Ramu Valley that they should send these men and the woman and her children back up to Omin to sort their troubles out. The relay of these types of messages, however, could also be explained as the project being partial to one particular group and could thus lead to retaliation against the teams. Especially during the election period there was fear that the project would be seen as the community facilitator's personal message and broadcasting team. Consequently, the project had to minimise the use of the radio.

LANDOWNERSHIP, LEADERSHIP AND CONSERVATION

Next to the endless discussions over the material aspects of the project intervention, the Biodiversity Program would also become an asset in the struggle over territorial issues between Ramu landowners and Jimi settlers. As recounted in chapter 4, relations in the area between Jimi and Ramu people are difficult. There is an implicit brides-for-land deal whereby the Jimi provide women to Ramu landowners, in return claiming land and resources. The number of Jimi following those initial settlers leads to strong feelings of unease among the Ramu. It also triggers a generation conflict among the Ramu people, as the elderly men oppose further intermarriage with the Jimi, while the younger men generally see intermarriage with the Jimi as their only option to acquire a wife.

The entry of the project with its discussions of 'looking after the land', gave the Ramu landowners a welcome opportunity to reassert their authority and ownership over land. This became most clear among the mixed Aidem clan-cluster of Pimbum. This cluster is made up of a combination of lowland and highlands clans and groups who used to live in the Bismarck Fall, and who returned to Pimbum at the end of the 1970s (See VanHelden 1998b for the details). Whereas the initial interventions by the project had been biased towards the settlers, the CD workers quickly came to see that the Ramu people were being marginalised on their own lands. The second patrol report describes the Ramu Valley as 'a colony' and the Jimi as 'the colonizers' (BRG 1996b: 43).

In response to the CD interventions, one of the Aidem big men suggested forging a special link between the DEC and the Ramu in order to manage the land, forest resource, and wildlife. He however, twisted the conservation discourse towards the need to secure Ramu resource rights in the face of Jimi immigrants.

> 'Folks, did you understand [the CD team's] point? You see, we have been very generous and just too friendly. We have been allowing and even inviting foreigners into our land and even befriended them. We have taken them into our forests, shown them our rivers, our wildlife and our resources. And what have they done after all these? They simply capitalized on our generosity and our ignorance; they took our guria pigeons, our cassowaries, our crocodiles, our birds of paradise, and other resources in order to sell and make big money. My goodness, how stupid we were' (BRG 1996b: 39-40).

Related to the landowner issue is the authority issue. As discussed in the section on migration, immigrants fall under the authority of the true landowners (See chapter 3). In principle, the Jimi respected this situation, but as time went by the Jimi proved not only to be much more numerous, but also economically and politically dominant. As many of the younger Jimi had been born in the Ramu Valley, especially those at Pimbum liked to see themselves as landowners in their own right.

As the Ramu clans felt that they were losing control over events, the arrival of the Bismarck-Ramu project gave them an opportunity to reassert themselves as 'true landowners', branding the Jimi as 'mere' settlers. Especially one of the Aidem men from Pimbum, councillor Alu Opo, who was formally recognised as the 'main' landowner in the area, but who was in practice not taken very seriously by the Pimbum Jimi, saw his chance. One of the CD teams happened to be in the area on Monday 16 September 1996, which marked the twenty-first anniversary of PNG's independence. The team in conjunction with councillor Alu Opo saw this as an excellent opportunity to call together a large meeting: the CD workers to do their introductory exercises, Alu Opo to make clear he was the only true landowner. In the meeting that followed, people from all over the area came to Pimbum, where Alu reasserted his authority as councillor and landowner by presenting the crowd with two decisions. The first were that all people, Ramu and Jimi alike, were to work together with the 'environment people', the second that the complaints about work done for the community facilitator, the base and the radiomen were to cease. As Alu Opo stated metaphorically

> 'This land is my land, I am the bird and all these my [Jimi] in-laws are but mere feathers... I hereby 'plant' this kwila [teak] pole to mark the constant collaboration between the CD team/DEC and the Pimbum people now and in the years to come. No more complaints from now on...I repeat, no more complaints! I have given my word and that word shall last and shall never be disputed' (BRG 1996b: 34).

Unfortunately, for Alu and the Biodiversity Program, the Jimi settlers were hardly impressed by his speech. Nor did it keep the Ramu landowners from disputing events. During later patrols, for example, an adopted brother of Alu Opo presented a letter to the CD team expressing his concern with the fact that all the benefits were accruing to the Jimi settlers. During this patrol two other Ramu men told the team that the radio and house issues would have to be renegotiated and that the two Jimi

employees would have to be replaced by landowners (BRG 1997b). The conclusion of a May 1997 patrol report notes that:

> 'the situation at Pimbum including the community facilitator's house, the two DEC employees, the land owners' feeling of being left out, and the obvious tension between the landowners and the Jimi settlers has to be dealt with before any progress can be made in the community development process' (BRG 1997b: 46).

In another attempt to gain control over events one of the Ramu landowners at Pimbum brought up the idea of forging an '*environmen komiti*' as people professed to being very worried about their environment.

> 'It is just that we are very concerned about our forest.... We are therefore proposing to set up a committee responsible for land and environmental matters. This committee will see to it that no 'idiot' comes into our land and does his own thing as if he owns the place. Any developer and anybody at all interested to come into our land MUST consult that committee first.'[He then mentioned the names of the Ramu men that would be on the committee] (BRG 1996b: 33).

It is not entirely clear where the notion of environmental *komiti* came from,. It was first mentioned during the very first patrol that visited Pimbum in April 1995 (Filer et Al. 1995) but it certainly caught the CD workers off guard. As in many community development programs there was the idea that at some stage it would be necessary to establish some sort of Village Development Committees. These would then facilitate work between communities and the project agency (See Arlyne Johnson 1997 for an example from Crater Mountain). Nobody, however, had expected this to come in sight so fast, and certainly not the have this suggested by the very people that the project was trying to educate on matters relating to development and conservation. The attempt to establish a committee was also an attempt to structure the relations between project and people in such a way that it excludes the Jimi settlers. In response, the CD workers downplayed the role of committees as they argued that communities have their own decision making means and as there was no reason to introduce an alien concept at that stage. In 1999, however, the CD workers would get involved in setting up so-called Wildlife Management Committees (WMC) as part of the development of two Wildlife Management Areas (WMA) on the Ramu River.

WITHDRAWING FROM THE RAMU BUSH

Alu's speech and the many other speeches that followed, the multiple CD visits to the area during 1996 and 1997, and the continuous attempts to engender self-reliance, did not lead to any activity on the part of the communities. Over time, the CD workers became increasingly exasperated. The Pimbum and Brimde communities had gone through the whole program of needs identification and priority setting, had been 'sensitised' to environmental issues with the use of PRA

tools, but would not do what they were supposed to be doing according to the community entry philosophy.

In Pimbum, the focus of these discussions would become the construction of an aidpost. During the PRA exercises both the Jimi and Ramu people there had agreed that health was the central issue to all involved and had decided to construct an aidpost next to the unfinished airstrip. Each consecutive patrol, however, had to conclude that nothing had happened, triggering increasingly harsh judgements on the part of the CD workers. Where the people were initially though to be 'blinded by cargo-thinking' they were now deemed 'lazy'.

> 'The CD team then asked why the aidpost was not being built. The people said there were three reasons. The first was that the national elections had unsettled everyone and there was no time to do things. The second reason was the problem of the very long dry season... The final reason was the local council elections. These are reasons that were given at the community meeting, but during informal discussions ... the CD team were given the general impression that the people are just too lazy to do the work in order to help themselves' (BRG 1997d: 20)

In Brimde-Foroko, where similar divisions between the Ramu landowners and Jimi settlers played a role, people again and again professed to not know what the CD workers wanted, but each time still asking them to return. By the end of 1997, here too frustration started to feed through in the CD reports.

At Pimbum, complaints about the base, the radio and the workmen, which were essentially conflicts between rivalling Jimi groups and between Jimi settlers and Ramu landowners would go on and on. Every patrol would go through the same discussions as to why and for who the house was built, why these two radiomen were employed and not others, and who should receive compensation for some purported grievance associated with the state of affairs. During the drought of 1997, a fire used to clear the airstrip under construction at Pimbum, swept through the compound destroying the community facilitator's house. One of the radiomen just managed to salvage the radio equipment, subsequently setting it up in his own house. The loss of the 'base', however, did not solve the problems associated with the base and the radio. It rather opened a new repertoire of complaints, revolving around the question who was to blame for the fire, why the radio was now set up in this particular house and where the new base should be established.

> 'The problem of the house and the project radio at Pimbum had to be heard again. At [Bubulsunga] six young men approached the CD team and said that the DEC workers at Pimbum had not taken proper care of the house and that is why it burnt down. They want [to be paid] for work they claim they did on the house. If they are not paid they say they will take the radio and keep it until they are paid. It is unfortunate that people are still ignoring the fact that the house was built by [the community facilitator] and is owned by him. The CD team has been unable to overcome this fixed idea that people have '(BRG 1997d: 36).

Over time, the Ramu landowners would become increasingly adamant that they were to be the focus of CD activities and not the Jimi as had been the case until then. In November 1997, as the CD workers were becoming increasingly unhappy with the lack of progress, one of the landowners once more explained that

> 'during the past eighteen months the visitors and the settlers led the activities in the community, but from now on the landowners are going to lead the community and work with the CD teams. [He] also said that no work had been done in the past eighteen months because there are problems in the community. There is a problem between the settlers and the landowners and with the two men manning the radio' (1997e: 11-12).

By January 1998, the Madang team became so tired with the ongoing disputes that it decided to pull out all equipment and fire the two DEC workers. This in the hope of focusing people's minds on the ethic of self-reliance that they were trying to establish. In subsequent months CD discussions would focus on the construction of the local aid post, while the Pimbum community would request the health authorities at the District Office in Walium to supply them with a health worker. It, however, proved difficult to get work started due to the continuing mistrust among people, eventually leading the project team to decide halfway 1998 that it was better to pull out altogether.

Whereas the Pimbum area was left to its own devises in the hope that people would later on invite them back, the project made a different strategic choice with regard to the mixed Brimde-Foroko community. Here the CD workers suggested to start treating the Jimi settler (Brimde) and the Ramu landowners (Foroko) as separate communities (BRG 1997d). Relations with the settlers living around the airstrip were difficult as they were with all Jimi communities, but the Foroko people now saw their chance and became increasingly interested in the project. Whereas they had stood in the shadow of project–Jimi interactions since the start of the Bismarck-Ramu project, the Foroko, together with the Sepu people would become the focal point of the project's conservation strategy on the Ramu River.

COMMUNITY ENTRY ON THE RAMU RIVER

In hindsight, it is remarkable how long it took the Bismarck-Ramu project to make contact with the people of the Ramu River. Already in April 1995, the NRI anthropologist joining the first patrol had concluded that 'the most obvious priority' for the project would be to conduct meetings with the Ramu communities (Filer *et Al.* 1995: 59). A view, which was, reiterated during the February 1996 patrol by the two conservation managers (CRC 1996b). Project activities, however, had focused on conducting the biodiversity survey in the Bismarck Fall and on setting up the base at Pimbum. The first CD patrols using the new participatory methodology were also aimed at the Jimi Valley and at the mixed Ramu-Jimi communities in the Ramu Valley. A number of short meetings with members of the Ramu River clans had

been held, but no action had been undertaken to meet these people in their own villages.

It was thus in September 1996 that the first CD patrol entered the Ramu River area. The first visit to two of the Ramu communities took place when the team visiting Brimde and Pimbum decided to visit a number of Ramu river settlements for the first time. The team first walked to the Ramu River to visit Katinga, one of the most influential Ramu people. On arrival, Katinga made clear that he only wanted to meet with the CD workers once the Jimi carriers that had guided them had left. The animosity between Jimi and Ramu clans had already become clear, when the Jimi, hearing of the teams intentions to visit the Ramu River group gave the CD workers a 'piece of advice', stating that:

> 'The Ramu (river) people are uncivilised, they are primitive, they are like wild people who know no hospitality. They will not feed you, they will not house you. And if they ever do house you, this will mean you sleeping underneath their houses. They don't even have food anyway, for they know no gardening. We were the ones who taught them gardening and all other skills; we civilized and 'tamed' them. They live only on sago. They can't even talk sense with you like we do, and they will never understand your message. Anyway, go ahead, visit them and see for yourselves' (BRG 1996b: 41).

Once the Jimi had left, the team introduced itself, using the now familiar entry speech, gradually drifting into presenting to the people the pre history and timeline, as well as the posters of the mango tree, and the starving man. The old man welcomed them in a manner that was very different from the usual hard questions fired at the teams by the Jimi.

> 'They [the Jimis] always want to know exactly what we are after.... To give an example; Kumbo and Mark... keep coming and asking questions such as: 'After you had visited us for so many times and have had enough of that, what will come next? What are you going to do; what are you going to establish?' (BRG 1996b: 41).

The there wee the rather aggressive demands by the elderly Jimi who were in a hurry to enjoy a state of development before dying, and who 'again and again' emphasised the fact that they 'wanted to see things happen' before they died (BRG 1996a: 36). In general, Ramu responses to the CD team's presentations were baffled but inviting. In contrast to the willingness encountered in most Ramu River villages, however, the first visit to the village of Karisanga would be an unmitigated disaster.

THE KARISANGA REJECTION

Karisanga was a village that had not yet been visited by the project and which therefore expected to be more susceptible to the community entry approach than villages which were already 'spoilt' by earlier contacts with the project. A youngster paddled the CD team downstream from Katinga's homestead and on arrival, they were warmly welcomed with plates of sago and fish. People were surprisingly

hospitable and the CD workers noted that 'the community spirit was very much alive'. It appeared to become a promising visit. In the evening, the team met with the whole community, some forty men, women and children. After the opening prayer ended, the *komiti*, the village representative on the Local Government Council, officially welcomed them with the words:

> 'Dear friends, as the 'komiti' of this village, and on behalf of my people, I welcome you to our place and invite you to address us. But just one more thing before you begin; you can go ahead and say what you want to say. If your words are sugar sweet, we will take it, and you will know that. But if your words are not so sweet to us.... this too you will know later '(BRG 1996b: 43).

The team presented itself in the usual way, with the help of the timeline and mango tree exercises. Quite a few people had questions or comments, and the meeting went on for hours. The people agreed that the team would meet them again the next day and promised to tell them whether they would want the CD workers to come back in the future. After supper the next day people gathered again for the meeting and the *komiti* spoke up on behalf of his people:

> 'Thanks a lot for coming and visiting us; it was indeed a pleasure for us to have met with you. On behalf of my people, I have just one little word to tell you. Yes, I am a government officer myself, being the representative of the councillor in my village. And as such, I am quite knowledgeable as regards government regulations, policies and structures.... My people and I have the right to know whoever comes into our land and also know why he or she comes in. We asked you to clarify to us your work and you claim that you have done so. The fact is, we are ever more confused, because your words are like complete nonsense, they are absolutely meaningless *'toktok bilong yupela i nogat as or tel, na i nogat het bilong em'* (Your talk has head nor tail). Therefore we ask you not to come again here in future; I mean not for your work. But please do not get me wrong! Our doors are always open to any visitor' (BRG 1996b: 44-45).

The stunned team could only thank the *komiti* for his words and reply, in line with their training; that these were people's land and resources, and that the community had the right to do whatever it wanted to do. The team left the next day.

Later it appeared that the *komiti* who had thrown the team out, did so because the CD teams had been perceived as a sort of cargo-cult known as 'Bembe'. This is another name for the Yaliwan or Yali cult, which took hold of Wewak in the 1970s (See section of cargo cults in chapter 4). The suggestion was that the CD workers were spirits that had come back from the dead (*'daiman'*) and sinners (*'sinman'*). People would fall ill if they spent the money that the CD teams had paid them for accommodation and food. People along the Ramu River were confused and in a number of places waited with giving the patrol food until they had heard their side of the story. At Yawetama, the CD workers were refused entry with the argument that the houses were 'full'. Later it appeared that the various metaphors and speeches had backfired on the project team in the sense that local people had interpreted them as part of the magic that we were using to bring them under the

spell. One of the patrol reports notes that: 'It is obviously quite ironic that the strong emphasis on avoiding unrealistic expectations and self-reliance makes people think we are a traditional cargo-cult' (BRG 1997a: 42).

COMMUNITY ENTRY IN SEPU VILLAGE

Not perturbed by the Karisanga rejection, regularly visited the other Ramu River communities from November 1996 onwards. In order to get there, the teams used a new route. Whereas they had previously flown into Foroko-Brimde, the Bismarck-Ramu project decided that to reach the River communities by canoe. This also reduced the risk of hold ups at Foroko-Brimde as had happened to the conservation managers during their visit to Pimbum in January 1996. The CD teams were dropped off at Brahmin Bridge, close to the mission station with the same name, and from there transported down the river to the village of Sepu. In contrast to the continuous troubles experienced in the Jimi Valley and among the Jimi settler communities of Brimde and Pimbum the Sepu Community received them with open arms. People were aware of the CD visits to the mixed communities, knew they belonged to 'the environment and conservation' and were glad to meet them. As the team looked on during the first visit in November 1996, one of the Sepu big men

> 'drew a big circle with four smaller circles inside and then scratched a star inside one of the four smaller circles. He then explained to us what he meant by that drawing: "The large circle represents the Sepu community. These three smaller circles right here with no stars in them represent three groups that had visited us before you: 1. An oil company; 2. Highlands Gold which is a mining company; and 3. The Forestry Department in connection with a logging company. Representatives from all three have visited Sepu, expressing their interest in exploiting various resources on our land. This fourth circle right here with the star, represents you (CD team); you are the fourth group and we were looking forward to your visit. After your visit, we will be in a better position to decide whether or not to allow any operation or project of any kind on our land and in our area' (BRG 1996c: 23).

During subsequent visits, it appeared that the Sepu people were indeed very welcoming. In contrast to the Jimi who were all the time trying to find out when the project would provide some 'development', the Sepu community patiently went through the step by step community entry process. In addition, there were fewer conflicts within the community than among the mixed communities where any debate concerning the project was always and inevitably pulled towards issues of territoriality and authority between the local landowners and the Jimi settlers.

During the various exercises which followed, the Sepu people expressed their concern with a range of issues, including the neighbouring mine, oil exploration activities and a logging concession in the proximity of their territory. Other issues concerned their low population numbers, the fear of witchcraft, the lack of health and educational services and the many Jimi settlers (BRG 1996c). People also recounted how

> 'missionaries had destroyed a lot of their culture including their *haus tambarans* (sacred houses) which served various purposes: that of a museum or archive where sacred or valuable artefacts such as skulls of ancestors were stored; a place of initiation where the young were initiated into adulthood; and a place of learning where the young were instructed and taught traditional wisdom by their elders' (BRG 1996c: 24).

In contrast to the Jimi ,these groups appeared to take more pride in their traditions. This was of importance to the projects as one of its central ideas was that tradition and conservation come hand in hand. Obviously the emphasis on tradition at Sepu did not mean that the people there did not grapple with the same socio-economic problems and the perceived trade-off between conservation and development found elsewhere:

> 'The councillor said: "You are stopping me from dealing with any of the three groups (mining, petroleum, and logging), but I need money. How are you going to help me find money?" The councillor's question started an argument with ... the catechist, [the latter] arguing for conservation, and the councillor for the oil company to carry out explorations in the area' (BRG 1996c: 26).

During 1997 and 1998 the CD workers would take the Sepu communities through the various steps contained in the process of community entry. Work during 1997 was difficult. First there were the elections which did not lead to conflict as they did in the Jimi valley, but which certainly gave people a lot to think about and would dominate discussions with CD teams. Often people were away on political meetings. Then there were a number of serious conflicts among the Jimi settlers, leading to a number of deaths, accusations of sorcery and the related compensation payments. On other occasions, men worked with a variety of timber and mining companies. In addition, the whole country suffered from drought-related food shortages.

All of these issues made it hard to organise community meetings. Time was running out, however. As 1998 approached, the project became increasingly focused on the conservation issue. Funding for the project would run out by April 1998, and it became increasingly clear that the project would have to show some tangible results if it wanted to secure second phase financing with the Global Environment Facility (GEF). These results could not take the form of a series of 'lessons learnt' as had been the case in Lak, but would have to demonstrate that a conservation area was within reach as a result of the CD strategy. When at the end of 1997 both the Sepu and the Foroko clans expressed an interest in conservation this was an important development. In the next few pages I will argue that these conservation concerns were to some degree genuine, but also to no small extent pushed by the wish to assert land and resource ownership in the face of Jimi encroachment.

TERRITORIALITY AND CONSERVATION ON THE RAMU RIVER

During the first discussions with the Ramu River communities the issue of Jimi encroachment did not take a prominent place. The Ramu people were probably

trying to find out how the relationship between the project and the Jimi stood, as the project had until then almost exclusively dealt with the Jimi settlers, only recruiting Jimi personnel in the form of the radiomen and the community facilitator. During subsequent sessions, however, the Jimi issue would gain in prominence, starting off with the suggestion that the project base should not be among the Jimi at Pimbum, but that the base should be moved towards the Ramu landowners (BRG 1997a). An important development came about with the turn around of the Karisanga community. As the project moved away from its initial focus on the Jimi and came to spend more time among the Ramu people, the Karisanga villagers lost their mistrust and would join the Foroko landowners in their dealings with the project.

The fist connections made between conservation and the settler issues came with discussion over the issues of land registration. As recounted in chapter 2 there was a lot to do about land registration in PNG as a result of the World Bank structural adjustment program which many NGOs explained as an attempt to gain control over PNG resources. Land registration, however, may also come from within communities that see themselves confronted with outside competitors. In the densely populated Jimi Valley, boundaries were 'frozen' in the 1950's when the colonial patrols demarcated boundaries and jailed troublemakers. In the Ramu Floodplains with its small populations, boundaries are much less strictly demarcated and defended and thus more open to mutual usage.

In Foroko, the Ramu landowners themselves brought up the issue of land registration as something worth pursuing. These very small groups of people who own vast areas of land, had in common that they wanted the Jimi out. As far as they were concerned they should then register their clan lands, after which every clan could do as they liked. As a CD report of September 1997 notes:

> '[All of the Foroko clans] appear to want the Jimis to go back to the Jimi River area. Their main concern was the Jimis were causing too much destruction to their forest. Wildlife was also becoming scarce in the nearby bush. Apart from moving the Jimis they have different ideas about what to do with their land. Two of them when interviewed said they wanted to bring in a logging company in order to get money and new road. One insisted that they equally divide their land amongst themselves. After that they must all get their land registered so that each one can do whatever he wants with his share. Two of the group wanted conservation and strongly opposed logging and land registration. The only concern the traditional landowners could agree on was that the Jimi must go back' (BRG 1997d: 23-24).

Registration of land is becoming an increasingly important issue in the Ramu area, not only vis-à-vis the Jimi, but also in relation to possible attempts by other Ramu clans. During one of the first patrols on the Ramu River the CD workers came across Thomas Bunmeri, a settler from the middle Ramu River, who claimed ownership rights to a vast tract of land in the project area. He did so based on his interpretation of oral history, arguing that 'this is my land, this is the land of my ancestors, and I know the story as far back as nobody else here does'. More interesting than his

historical claims, which could be one of many, was the fact that he also told the CD team that he was spending a lot of time and money on getting this land registered with the Lands Office in Madang (BRG 1996c: 30). The exact motivations of this settler remain unclear, but may have been fuelled by the approach of logging companies in the Sogeram Area, as well as the mining and oil drilling prospects in the vicinity of the Ramu River. As most options for development in rural PNG are resource, and thus land-based, people tend to see landownership as their last opportunity to economic development (Ballard 1997, Filer 1997b). Formal land registration, but also a more informal of assertion of territorial rights may thus be seen as an attempt to keep one's options for development open.

It is here that the link between conservation and the registration of land comes to play a role. Because especially area-based forms of conservation, with boundaries demarcated by the Department of Lands are relatively secure, protected area establishment is attractive to local people *as long as they maintain control* over those areas. Unlike in most other countries, where protected areas are state-owned, the PNG *Fauna (Protection & Control) Act* contains a number of mechanism which do just that. The most important of these is the Wildlife Management Area (WMA).

THE PRINCIPLES OF WILDLIFE MANAGEMENT AREAS

Wildlife management areas established under the *Fauna (Protection & Control) Act* provide a legal mechanism for local control of fauna on land and in waters held under customary tenure. WMA establishment has been the most used form of area-based conservation tool in PNG. WMAs are always established at the behest of local landowners and may contain a variety of faunal management regimes.

In order to establish a WMA, local people need to undertake a number of steps. These steps include in the first place the demarcation of social and spatial boundaries. The first may be dealt with through the drawing up of genealogies and may be formalised by registering the clan group as an Incorporated Land Group (See footnote 13). The latter entails long term negotiations with neighbouring groups, the resolution of outstanding conflicts and a formal survey of the area. After the marking of boundaries people have to form a Wildlife Management Committee (WMC) and draw up a schedule of rules and penalties. The WMC has the right to make and enforce rules concerning the taking of wildlife and may collect fines. The WMC must also appoint an agent to issue hunting licenses and to collect fees and may also appoint rangers to enforce hunting rules.[58]

Following the establishment of the WMC, the resource owners together with the DEC and the supporting conservation NGO develop the rules and penalties, which

[58] These provisions are a typical reflection of the western idea of protected areas as a 'playground for hunters'. They have little or no bearing on the situation in most Papua New Guinea hunting areas where outsiders are allowed to hunt through personal contacts and where there is little scope for collecting license fees and hunting royalties at the level of the community (See VanHelden 1998b).

have to be gazetted to come into force. The act, however, also gives the Minister the right to 'make rules for the protection, propagation, encouragement, management, control, harvesting and destruction of fauna with in the WMA'. This implies that landowners cede part of control over wildlife resources to the DEC on establishment of a WMA. In practice, however, the DEC lacks the field capability to monitor and enforce rules and regulations within WMAs while many WMAs lack gazetted rules (Whimp 1995, VanHelden 2001d). The enforcement of WMA rules is thus only feasible when executed by a motivated and organised community.

Wildlife management areas have a number of advantageous qualities over other forms of protected areas. Firstly, WMAs allow resource owners to maintain control over their resources. In the second place, WMA rules are not necessarily restricted to fauna conservation only. WMCs can make a range of other rules relating to management of resources and land if they wish to do so. The act itself, however, only regulates the rules relating to the licensing and taking of animals. Rules not relating to these issues are not likely to be upheld in court, but are dependent on social controls within the group.

Wildlife management areas also have a number of disadvantages of which the most important are that a WMA may be degazetted at the behest of resource owners, allowing them to pursue other development activities if they wish so. In addition, WMAs without approved and gazetted rules are legally defunct. Wildlife management rules are a form of delegated legislation which have no legal effect unless they are gazetted. The inability of the DEC to process the WMA applications, draw up the boundaries, and formalise the WMAs and their rules, means that there is a sizeable backlog in WMA applications, while many of the existing areas are without formal rules and thus legally hollow shells (Whimp 1995, VanHelden 2001d).

THE STRATEGIC USE OF WILDLIFE MANAGEMENT AREAS

Because the registration of landownership is part of WMA establishment, conservation proponents thus offer an indirect means to local communities to assert their ownership over land and resources. I am not arguing here that the Ramu people are aware of the articles of this act and intentionally developed some premeditated plan to enlist to Bismarck-Ramu project in registering their lands, but that such enrolment gradually evolved in the course of events. Even if people do not manage to acquire title through the provisions of the act, also in an informal manner each step in the conservation process allows landowners to reassert their position in the face of competing claims. This explains the increasingly common attempts by rural clan groups to enlist green NGOs and conservation instruments in their attempts to gain control over land and resources (See for example Banks in Press, Kalwij and De Koning 2000). Fisk, quoted in the 1993 Biodiversity Program project document (!), already reached the same conclusion with regard to WMAs, when he wrote that

> 'At the bottom of many communities' interest in conservation and protected areas is a basic land rights/ownership issue. Most Wildlife Management Areas arise from the desire of a community to consolidate ownership over a parcel of land and regulate the use of that land by outsiders. These outsiders may be visiting hunters or squatters' (Fisk in UNDP 1993: 3).

The establishment of protected area thus does not necessarily have anything to do with conservation, and may rather be a strategic attempt to regain control over land and resources. In some instances such protected areas are merely used as a vehicle to gain control over resources in order to subsequently commit them to more rewarding forms of resource use. An example of such a case took place in Garu village near Kimbe on West New Britain. The colonial government leased part of local clan land to develop oil palm, but also left a certain area under forest cover as a breeding locality for megapodes. In order to reclaim this land after Independence in 1975, the Garu people declared it a WMA under the *Fauna (Protection and Control) act*. This WMA however, did not have management rules, and would subsequently become the site of eco-forestry activities sponsored by the European Union. The villagers have since planned to convert the WMA to oil palm blocks. A similar strategy may play a role among some of the Foroko landowners, as some of the local leaders saw land registration as a first step in getting a logging company in.

During 1998, a number of queries come forward with regard to the exact nature of land registration and the role of the DEC therein. Thus, the people of Lai and Karisanga villages near Foroko said

> 'that they heard that we the workers of environment and conservation would register their land and the Government will take it over' (BRG 1998g: 16). [To which the] 'CD teams replied and said, we have told you several times that the land belongs to you and the power is in your hands. If you want us to still work with you or not it is up to you' (BRG 1998g: 15).

The nature of WMAs, the levels of control held by local landowners and various rumours would continue over the better part of 1998 and 1999:

> Question: 'We have heard that the project would lock the WMA and throw the key into the Ramu River". Answer: "That is not true, do not listen to false rumours. These WMAs are yours and you are in charge of them. You made the laws and penalties, and if the WMAs are owned by the Government, the Government workers would come and settle in the area and take care of them. You landowners would not be allowed to go into your own forest!' (BRG 1999b: 17-18).

As people became more confident that they were indeed in charge of the process the option of pursuing a WMA became increasingly attractive.

The Jimi in Brimde, who had until then been focusing on the material benefits that would hopefully be derived from the Bismarck-Ramu project, saw this as a threat. Not in the sense that the project would help the Ramu people to evict them, but more in terms of the chances that the environment on which they depended would

be logged. As they continued meeting with the CD teams and increasingly agreed to recognise the Ramu Landowners as the true spokesmen for the area, they also voiced their concern that these would register the land *in order* to get it logged (Chitoa 1998a). This would impinge on their interests, as the Jimi realised that they would not receive the benefits from logging, but would be affected by the negative changes to the Ramu environment. They thus changed strategy and decided to support the Foroko landowners in their aim to establish some form of conservation area, hoping that this would keep the forest companies out (Ellis 1998). To the cynical observer, these concerns appear to open an interesting scenario to the Foroko landowners. They first use the WMA to assert their ownership over land and resources, subsequently seeking to develop a timber concession in order to kill two birds with one stone. As 'real' landowners they gain the perceived benefits from logging in the form of royalties, compensation for damages done, service delivery, infrastructure and wages, while simultaneously making their lands much less attractive to further Jimi encroachment. This scenario did not eventuate. Logging is (yet) to reach Foroko and the Brimde Jimi decided to move back up to the Jimi Valley at the end of 1999.

The people of Sepu were also motivated by territorial issues, but to a much lesser extent. Living on the other side of the Ramu River at a day's walk from the nearest Jimi settlement, they were not confronted with the presence of Jimi settlers on a daily basis. Instead, they worried about the impact that the neighbouring the oil-drilling venture and mine would have. What also played a role was their earlier experience with the Wildlife Division of the Department of Agriculture, Stock and Fisheries which tried to establish a national park in the 1970s. Over time, it appears that the people at Sepu came to see the establishment of some form of conservation area as a means to preserve their group identity and culture through the preservation of their sacred sites. Setting aside land for conservation would allow them 'to show their children how they used to live', implying a view of conservation which, in contrast to western ideas of biodiversity conservation, includes strong notions of culture and identity. In addition, they thought they could afford a conservation area because they would find work in the nickel-cobalt mine or with the oil companies drilling in Banam to the north.

Thus during the latter half of 1997, a number of Ramu River communities started to express an interest in conservation. The Bismarck-Ramu project, uncertain of the Ramu people's motivations for conservation, decided to take a pragmatic approach. It argued that conservation could be interesting for other reasons that environmental protection, but could still constitute the basis for future work (See VanHelden 1998a for this argument). It thus laid the basis for the 'middle ground' that would evolve between project and people. The only motivation that the team excluded constituted the use of material reasons for conservation as such was deemed incompatible with its self-reliance strategy. Having become much more careful following the experiences with the community facilitator, and the strategic behaviour of the various Jimi communities, the project decided to gauge whether people were

interested in conservation matters.[59] The CD workers thus told the villagers to make and pay the two-day trip to Madang themselves in order to discuss their concerns with the DEC conservation manager. Only when people were motivated would they be prepared to make the effort (See Salafsky 1997 for this argument in the context of community-based forestry).

COMMUNITY-BASED CONSERVATION ON THE RAMU RIVER

Whereas the Ramu communities were familiar with the CD workers, and many friendships had developed, the conservation manager took on the role of DEC conservation expert, thus separating the community entry work from conservation discussions. In the beginning of 1998, both the Sepu and the Foroko people made the trip to Madang. Here the conservation manager briefed them on the various mechanisms available under PNG environmental law to conserve their resources. Over 1998 and 1999 these visits were followed up with a number of village meetings by the conservation manager. The main aim of these first conservation patrols were to i) explore the reasons given to set aside certain areas for conservation, ii) to get the landowners to talk about the ways in which their forefathers looked after the environment in the past, iii) to present to the landowners the different ways that were nowadays used in protecting the environment; and iv) to hear from the landowners what option they would like to use (Chitoa 1998b).

In preparing the conservation meeting at Foroko –Brimde, the CD workers talked to the Ramu landowners at Foroko as well as to the Jimi settlers at Brimde. The team, fearing that the Ramu landowners were enlisting them in their conflict the Jimi settlers, made clear to the former

> 'that it was not the project's aim to help them remove the Jimi settlers from Foroko-Brimde. They said the project would only be involved with them if they want to conserve their natural resource. In that meeting, the landowners proposed that the team should not meet and work with the Jimi settlers, however, the team decided against the landowner's proposal and went right ahead and met with the settlers. [Upon hearing this the Jimi settlers] 'agreed to support the landowner's idea of conservation. They reported that there were rumours that some of the landowners had interests in logging. Those landowners had liased with the logging company operating in the Sogeram area. The settlers see that if logging is brought in ... hunting and gardening practices would be affected' (Chitoa 1998a: 5).

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[59] In general, experiences in community development point to the rule of thumb that things for which people have not had to make any effort have little value, are rarely 'owned' by the community and seldom looked after. An increasing number of donors in PNG is actually discouraging communities who seek help for certain purposes, by insisting that people spend considerable time, money and effort in obtaining assistance. This serves as a process of self-selection which separates the motivated communities from those regarding development aid as a temporary source of cargo (Cf. Salafsky 1997). This changes the emphasis from what aid organisations can do for people, to what people can do for themselves.

When the actual conservation meeting started with forty-six people, comprising four small Ramu clans present and with a number of Jimi settlers present, the conservation manager explained that he was there because the Foroko landowners had invited him to talk about conservation, what it was and how it could be done. In line with the usual approach of the CD workers, which tends to draw on historical parallels and traditional customs the conservation manager started by talking about the past.

> '[The conservation manager] used a bush knife to draw a circle on the ground. He labelled that circle *bipo* (the past). While standing in that circle he said, "let us look back at how our ancestors lived in the past." He asked, "did your ancestors have sacred places?" [A number of people] responded yes they did. The Pastor went further, "our ancestors had sacred places and people from the Maring area still have such places today." Mek added, "In the past, there used to be a *hausman* [men's house] in each village. The *hausman* was like a school where village elders taught the young ones about village traditions. Among the lessons on village traditions was the subject that dealt with sacred places. There were rules laid out concerning sacred sites that people adhered to. Any breach of those rules resulted in sickness and sometimes death' (Chitoa 1998a: 6).

He drew another circle on the ground and labelled it *nau* (the present). He then asked: 'if we want to protect our environment now, is it possible to use the same practices that your ancestors used in looking after the sacred sites?' In Sepu this question would be answered elaborately by the eldest man present:

> 'during the times of our ancestors, Sepu was Sepu, Warabruk was Warabruk, Banam was Banam and Yawetamen was Yawetamen. You could not find people from Sepu entering the areas of Warabruk, Banam or Yawetamen except on special occasions. If people wanted to go hunting, fishing or if they wanted to do other activities, their activities were confined to their own areas. However, today you see people from Banam, hunt, fish and make gardens in the areas of Sepu. Likewise, people from Sepu, hunt, fish and make gardens in the areas of Banam." He said that the village elders were the ones that set out rules that governed which areas people went to. There were certain areas that were totally prohibited from other clans other than the owners of those areas, places that were allowed to men only and places accessible to men, women and children. He said all classes of the society respected the rules set by the elders' (Chitoa 1998b:2).

Now however, things are different. Both in Foroko and Sepu people argued that the youth was different nowadays and that past practices were of limited use.

> 'there are lots of outside things that have entered our places. Children speak different kinds of languages such as *tok pidgin* and English. Children of today learn too many things from the outside and tend to forget their culture... children nowadays are slowly losing respect and rarely listen to the village chiefs and elders. For this very reason, I think we are going to find it very difficult to adopt practices used by our ancestors to protect our environment today' (Chitoa 1998a: 7).

The conservation manager then introduced the concept of 'conservation', arguing that this was not a new thing as people's ancestors already practised it. He said that even though he would introduce many new names for conservation people should not be confused because it all boiled down to the practice of looking after the environment (Chitoa 1998a).

He subsequently presented the notion of national park, explaining that this was one way of protecting the environment and there were several others. He did so by linking up the sacred sites of local people, arguing that these and protected areas were more or less the same thing. During the subsequent meeting he took his audience through the range of set-asides available under PNG law, discussing the features of each mechanism, gradually building up the matrix represented below. The conservation manager found that both in the case of Foroko, as well as in the case of Sepu, villagers were most interested in the option of establishing a wildlife management area (WMA). This is not strange, given that this mechanism allows landowners to register their land, while maintaining the greatest level of control over their resources vis-à-vis the Government (See table 3).

TABLE 3: THE MATRIX OF CONSERVATION OPTIONS UNDER PNG LAW.

Options for Reservation	Aims to protect?	Land ownership	Management	Decisions and regulations	Is hunting allowable?
National Park	All biodiversity	Government	Government	Government	No
Fauna Sanctuary	All fauna	Landowners or Government	Government	Government	No
Protected Area	Some fauna	Government	Government	Government	Within Regulations
Nature Reserve	All biodiversity	Government	Government	Government	No
Conservation Area	All biodiversity	Landowners or Government	Landowners or Government	Landowners or Government	Within Regulations
Wildlife Management Area	Fauna	Landowners	Landowners	Landowners	Within Regulations

Source: Chitoa 1998a: 7 & Ellis 1998: 55

THE DEMARCATION OF BOUNDARIES

Following the choice for WMAs in both Foroko and Sepu, the conservation manager moved on to the designation of boundaries. This is a potentially difficult step as it may bring up conflicts over land between the participating clans, or between these clans and their neighbours. Often development intervenors are not aware that by discussing issues with the help of PRA tools, simmering conflicts come to the surface, in some case leading to open violence (see for example Shah and Meera 1995). The boundary aspect of the conservation process, however, was also likely to interest the participating Ramu clans most, as it would give them the chance to openly assert their ownership over their land. If the project could assist them in formalising these claims with the Registrar of Lands, then these would be recognised by state law.

> 'The conservation manager introduced the other idea of making a boundary map. He stated that the map would give them a general picture of how each clan's land laid on the ground. He asked the participants if they ever did a resource map with the CD teams. The participants said they had. The team explained that a boundary map was a little bit different from a resource map. In a resource map, all features are shown but not on the boundary map. The boundary map shows the land boundaries only. Michael from the Motunga Clan began by using a knife to draw his clan's land boundary. When he finished, Jeremiah took over and did his clan's area. When the boundary map was completed, it showed the areas from the Marum River along the Ramu River towards the Laplap River and extending to the west ending at the Wendeng River' (Chitoa 1998a: 10).

In many instances, the demarcation of land boundaries is difficult because boundaries can not be interpreted by strict lines of separation between two or more groups. Boundaries should thus more be seen as zones in which the influence of one group grows while that of another wanes but are not always easy to establish in great detail on the ground (Giddings 1984). Because the establishment of strict boundaries of a WMA could lead to conflicting interpretations and conflicts among the groups working together in the WMA, it the project team decided to resort to a combination of external and internal boundaries. External boundaries are those boundaries that are shared with groups not taking part in the WMA. These boundaries need to be mapped clearly and preferably surveyed. The conservation manager continuously emphasised the need to talk to neighbouring groups outside the designated WMAs in order to avoid conflict (Chitoa 1998c). The internal boundaries are those that the clans who share in the WMA have in common, and which do not need to be established firmly. Boundaries were first established on maps drawn on the ground, then transferred to paper and very gradually marked on maps with the help of a Global Positioning System (Chitoa 1998d).

While the Foroko landowners were generally able to mark their boundaries without to many problems, the Pimbum area would introduce a problem in the Sepu WMA. This problem did not exist between the Aidem, who having come down from the Bismarck Fall accepted the fact that the Ramu River clans were the real landowners

and that they would follow their lead. The lead in this case came from an old woman living at Sepu who was one of the few remaining Kankul clan members that used to live in that area and who thus claimed ownership over the entire Pimbum area. As a spokesman from the Aidem put it, recounting the Aidem story also told in chapter 4

> 'We the landowners at Pimbum are not sure with our land boundaries because we were still [in the Bismarck Fall] when all our ancestors died. After all our ancestors died, ... Mr. Katinga brought us down here to Pimbum. When Katinga brought us to Pimbum, ... the old woman at Sepu gave us land which is Pimbum and told us to settle on Pimbum alone. This is the reason why we are not sure on which land to give for Conservation/WMA. We are just depending on the old woman at Sepu on what ever she says, then we will just have to follow her' (BRG 1998d: 37).

The conflict however, arose between the Sepu people and the Jimi settlers at Pimbum who felt threatened by this turn of events. In order to counter this threat they made use of Poko's story which suggests that the Jimi actually come from the Ramu Valley before moving up into the Jimi Valley (See chapter 4). This story was especially forcefully related by Gabriel Kenzegna, 'the president of the Ramu-Oipo association' . Kenzegna originally from the Bubkile area, had recently taken it upon him to organise the construction of the Pimbum airstrip and who now saw the position of the Jimi in the Ramu Valley threatened. He would step to the fore to argue the Jimi case, telling

> 'the team that Pimbum is their land. People regard them as settlers because they came down from the mountains... [But] "after many of our ancestors passed away our forefathers moved up to ... [the] upper Jimi. We are beginning to come back to our land Pimbum and this is our land"' (BRG 1998d: 36).

These men thus reversed the historical patterns of Jimi migration in order to present themselves as landowners. They then suggested that even though the Kankul lady obviously knew what she was talking about, she had no right to be seen as a landowner because 'She went and got married at Sepu and she does not have any rights to talk about the land at Pimbum area' (BRG 1998d: 36). This is a highland interpretation of the Ramu marriage patterns, which tend to be much more flexible than the marriage patterns that characterise the Jimi Valley. Kenzegna rounded off by resorting to simple threats arguing that it would be better for the lady to forget her clan's history or 'she will be sorry' (BRG 1998d: 36).

Like the settler from the Middle Ramu who was trying to register the land along the Ramu River in his name, the two men suggested that recourse to local district authorities would be used to strengthen their case. This 'invention of tradition', was brought in a very aggressive manner, ending with the comment that as the Jimi were landowners in the Pimbum area, they would decide what portion of land to allocate to the WMA. These events did not make CD work with the Pimbum community any easier and would contribute to the decision to leave that area. The CD workers, in drawing up the Sepu WMA area, would to 'solve' the problem by simply

subsuming the Pimbum area into their maps. Obviously, this leaves serious questions concerning the enforcement of WMA regulations among the Pimbum Jimi.

The WMAs as they were drawn up by the Ramu landowners, and as they were measured with the GPS system were transferred to butcher paper and aerial maps and from there on to a computerised mapping system of the area. The waypoints provided by the system were used to draw up a legal schedule that described the boundaries of the WMA. Measurements from this system suggest that the Foroko WMA covers some 30,250 hectares, while the Sepu WMA covers slightly over 39,000 hectares. Later just under 2,000 additional hectares were added to the Sepu WMA as the Banam people decided they wanted to be part of it. Rather than having the CD workers take people through the whole conservation process, the Bismarck-Ramu team decided to let the Sepu people themselves take their neighbours through the process. The Banam people, after almost a year of discussions and consultations decided to adopt the Sepu rules and join in what is now known as the Sepu-Banam WMA. To the Madang group, this was proof of the fact that good ideas might actually be adopted by neighbouring groups and that the momentum for conservation in the Ramu floodplains was growing.

DISTINGUISHING WILDLIFE MANAGEMENT AREAS FROM CONSERVATION

The intention of the WMA contained in the *Fauna (Protection & Control) Act* is to provide a mechanism to which allow local landowners to put *part* of their lands into a so-called WMA to secure the conservation of specific fauna. In this area, hunting is regulated, while gardening and other practices may continue on the remainder of clan territory. The WMA and its rules thus cover only part of the clan's territory. In practice, communities wishing to secure their territories in the face of encroachment, however, prefer to put *all* of their lands into the WMA, using it as a legal 'holding vessel' for their land rights. This is what happened on the Ramu River where over time all of the clan lands were entered into the WMA. This outcome may not only have been a consequence of the wish of local people to secure their territorial claims, but may also have been a consequence of the actions of the project staff. In particular the wish to have a contiguous WMA, while also the project stance against a dual strategy of development and conservation may have played a role.

The first issue came up in discussion over boundary marking, when the result of the work by the local community was that each clan group selected a small area to protect. The conservation manager, however, explained that

> 'it is much easier and better to have them connected. To explain he used the example of animals. Animals have the freedom to move around, if there is a space in between and used heavily by people it people will scare all animals. After the explanation the landowners understood and agreed to connect the land areas that were not connected (BRG 1998e: 17).

Consequently, a single large Sepu WMA appeared rather then several small ones, the boundaries of which were mapped and transferred to an aerial photograph. The

second issue leading to large WMA, preferably covering all clan lands, had to do with the fact that people were told that a choice for conservation by part taking in the WMA, meant a choice against the companies. Because the Bismarck-Ramu team rejected the use of economic incentives, and actively spoke out against all company activity in the area, people were discouraged to follow a dual conservation and development strategy. A Foroko landowner, for example, explained that

> 'My land is on the new road, can I give half to the WMA and half to the company? The company which builds roads has no gravel and I have allowed them to get gravel from my land and they have paid K15,000'.

The CD team replied that he was the boss of his 'own land, forest and rivers', and that it was his choice, but also that to commit part of his land to conservation and another part to the company 'would be very hard because we educate you to protect your resources while the company destroys your resources' (BRG 1999a: 12).

It appears that the Ramu people did the obvious thing in the light of these pressures. They first put their clan lands into the WMA, thus publicly who owned what, to later address the issue of what would be done in what part of the WMA. Thus soon after the WMAs had been marked and rules and penalties had been established (see below), discussions would take place to the effect that people had now put all of their lands into the WMA, but did not want the conservation rules that they had made to apply to their whole territory. Thus, they wanted the WMA to recognise their land holdings, but conservation to be restricted to a number of areas within the WMA. At Sepu one confused person, mixing up the WMA with the more strictly protected areas therein, explained:

> 'Our problem now is on the laws and the penalties. We thought that we would make the laws and the penalties for the restricted areas only and not [for the whole] of the WMA... We now have realised that the laws also cover the outside of the [restricted areas but inside the WMA], which now gives us a bit of problem' (BRG 1999b:18).

Others more bluntly, stated that:

> 'We, the landowners, want these rules to apply to the conserved areas only, while the outside [the WMA] will be taken care of by us... The company can come inside the WMA, outside the conserved areas and operate under our care' (BRG 1999b: 19).

In line with their training, the CD workers could only reply that they, the Sepu landowners, could change the rules if they wanted, but that they should be careful with the type of companies coming in. What this illustrates, is the manner in which the WMA concept is co-opted to secure territorial rights, while subsequently the conservation content of the WMA mechanism is reduced to the conservation sites within the area. What is missing in the WMA set-up is a detailed land use plan that outlines the various uses to which the different areas can be put, and the rules and means to enforce these various uses.

RULE SETTING, PENALTIES, COMMITTEES AND ENFORCEMENT

In their treatment of WMA regulations and penalties, the CD workers started by consciously separating the establishment of rules from a discussion of penalties. They felt that the people first had to decide on what they actually wanted to protect within their WMA, only to look at the penalties they would impose on people not abiding by the rules later. This part of the process was largely left to the communities. The CD workers simply explained the need for rules and told people that they would return in three weeks time to see what they had developed. These rules were then extensively discussed and modified if such turned out necessary during the meeting.

TABLE 4: RULES AND PENALTIES OF THE FOROKO WILDLIFE MANAGEMENT AREA

No	Law and penalty for infringement
1	No-one is to take, kill or injure an adult cassowary, goura pigeon, cockatoo, possum or crocodile. This is only allowed for the purpose of holding big celebrations. *Fine for infringement: Landowners of the WMA pay K50, outsiders pay K200. If payment is not made, the matter is determined by the Council Court.*
2	No-one is to take, kill or harm wildlife in the sacred areas of the WMA. Fine for infringement: One pig, two young cassowaries and K200. *If payment is not made, the matter is determined by the Council Court.*
3	No-one is to take, kill or injure wildlife within the WMA by using: 1) nets 2) traps (this is only allowed around the edges of a garden) and 3) shot guns. *Fine for infringement: Landowners pay K50, if no payment is made, a pig worth K300 is given.*
4	No-one is to take, kill, injure wildlife using poisonous vines or plants in stagnant waters. These methods, however can be used in running streams. *Fine for infringement: Landowners pay K40,outsiders have to give a pig worth K110. If payment is not made, the matter is determined by the Council Court.*
5	Oil, mining and logging companies are not allowed to carry out exploration, surveying and operating activities within the WMA. *Fine for infringement: The company is taken to Council Court*
6	Outsiders are not permitted in the sacred areas of the WMA. *Fine for infringement: K500 or ten young cassowaries. If payment is not made, the matter is determined by the Council Court.*
7	No-one is allowed to light unnecessary fires in the WMA. *Fine for infringement: K50. If payment is not made, the matter is determined by the Council Court.*
8	No-one is to damage plants and trees that wildlife feed on. *Fine for infringement: K50. If payment is not made, the matter is determined by the Council Court.*
9	Landowners within the WMA shall not permit outsiders to make new settlements in the WMA. *Fine for infringement: K100 or a pig worth K100 or two young cassowaries; If payment is not made, the matter is determined by the Council Court.*
	All proceeds go to the clan that owns the land where the offence took place.

Source: Chitoa 2000 (see also BRG 1999b)

A look at the rules as they were developed in Foroko, shows that they include a range of different mechanisms. Some of these show remarkable similarities in the mechanisms available under existing conservation legislation, others are in conflict with official law.

- Certain animals can not be hunted unless there are ceremonial occasions for which they are needed. This includes the crocodile, which used to be an important source of cash for Ramu River communities. This mechanism is also reflected in the *Fauna (Protection & Control) Act*, which under section 29 exempts automatic citizens from the prohibition on taking protected animals as long as the animal is taken for use in 'traditional native ceremonies' or 'for sale, not including money', to another citizen requiring the animal for customary purposes.

- Certain devices are also prohibited such as nets, traps, guns and poisonous compounds. This too is a mechanism for which there exists a precedent in PNG state law, as under section 27 of the *Fauna (Protection & Control) Act* the Minister of Environment and Conservation may limit or prohibit the devices, equipment, and methods used for taking wildlife. If this were to be adhered to it would mean a serious reduction in Jimi incomes as many of them sell live birds caught with the help of traps and snares.

- Sacred areas are totally off limits to hunters and outsiders. It is not clear whether these areas were defined separately or whether the people assumed that everybody, including the Jimi settlers, knew where these were located. Such areas may also be exempted from resource exploitation under forest and mining legislation.

- Rule five states that oil, mining and logging companies can not enter the area without permission. This rule is partly incompatible with State law as unlike timber resources, mineral resources are vested in the State. Local people are only compensated for damages done in the process of resource extraction. This rule alone would probably make it impossible to declare the WMA.

- Settlements, the use of 'unnecessary' (?) fire and damage to plants and trees are also forbidden. With regard to the penalties, one has to realise that none of these rules can be enforced in court until such day that the WMA and its rules have been gazetted. In this, the project would dependent on the DEC.

- One can also wonder whether it is a good idea to penalise conservation breaches with a penalty consisting of two young cassowaries (rule 9).

A similar process led to the drawing up of a schedule of penalties related to these various rules. The CD team, however had to make clear that it would not act to enforce those rules, as people would have to do so themselves. The CD team

> 'told everyone that the WMA is theirs and the CDTs are always there to help educate them... There would be no one like policemen, CDTs or DEC officers to enforce the WMA rules and penalties. He told them that every one of them have responsibilities over their WMA' (BRG 1999b: 32).

By mid 1999 the CD workers moved towards establishing Wildlife Management Committees (WMC) as stipulated in the *Fauna (Protection & Control) Act*. Committee formation would lead to problems within communities because in general community meetings the distinction between the various sorts of leaders is diffuse and multi-interpretable. The membership of formal committees, however, becomes an indication of local status, often outstripping the issue for which the committee was appointed in the first place (see for example Ellis 1998: 37 on attempts at committee formation in Pimbum). When committees are appointed these often serve as an excuse for the remainder of the community not to do anything. People will argue that the committee should take the lead, but because they have done nothing, nothing has happened.

An additional issue may have to do with the fact that 'committees' are associated with 'sitting fees' as for example the members of local council committees receive a three monthly cheque for their work. In Lak, McCallum (1996) notes how the establishment of a local management committee not only led to debates on who is in and who is not, but also triggered protracted debates on 'sitting fees' and the use of vehicles. One and a half year after the CD work had started, and notwithstanding the endless repetitions by the CDs that they were not going to 'bring any form of cargo', some of the Brimde Jimi still thought they would be paid a wage if they established an environmental committee (BRG 1997e: 10). In some ways, this assumption is not so strange given the fact that two other Jimi were employed as radiomen. The distinction between those that were to do things for their own sake, and those that were being paid to do similar things may thus have appeared rather arbitrary.

Consequently, committee formation became a source of dispute. Time and again the CD workers would return to hear that there were arguments about who was on the Wildlife Management Committee, that the chosen representatives had to be changed, that the relations between the community and the committee were unclear, or that the WMC had not met. This proved a frustrating experience in which the CD workers could little else than emphasise that if people 'really' wanted conservation, they really had to 'organise themselves' and 'work together'.

> 'The team told the [Foroko] people that the WMA is not for the team, its is for them, the landowners. [The] team asked the people how they could look after and protect their WMA if there is jealousy, ignorance, laziness and divisions amongst themselves? ... The landowners have seen their failure and pleaded to the team to continue to work with them' (BRG 199d: 14).

On subsequent visits however, little had been done. Over time some sort of management groups emerged, but in general the appointment of official committees

proved a source of difficulties. Obviously the problem did not only lie with local people, but also with the unrealistic stipulations of the *Fauna (Protection & Control) Act* which the Bismarck-Ramu project was trying to implement.

It is at this stage, with the area boundaries, as well as the rules and penalties in place, and two management committee's appointed, that the CD worker handed the WMA over to local people as it was now 'up to the landowners to enforce those rules and regulations' (Lalley 1999: 46). How they were going to do this, and especially in respect of the forceful and numerous Pimbum Jimi settlers, is a question that remains to be answered.[60] This poses a question concerning the conservation content of the two Ramu River WMAs, an issue that will be discussed in the final chapter. Before entering into that discussion I will first describe how the project played a significant role in the emancipation of the Ramu landowners and the subsequent decision of the Brimde Jimi to move back up to the Jimi Valley. I will end this chapter with a description of an event at Sogeram, which the Bismarck-Ramu team regards as one of its greatest successes.

THE IMPACT OF THE PROJECT: HOW THE BRIMDE JIMI LEFT THE RAMU VALLEY

After the CD workers left Pimbum and focused on working with the Foroko and Sepu clans, things appeared to go well. The CD teams recognising the Ramu clans as the 'true landowners' and the Jimi as the 'settlers' emphasised the dominant role of the former in developing the WMA. Initially it appears that the Jimi settlers from Brimde, who were present at the first conservation meetings in Foroko agreed to follow the lead of the landowners. One of them, uncharacteristically meek, is quoted as saying

> '"We are not from here, we are settlers we do not have the authority to make decisions on what to do regarding your presentation. It is now up to these people to decide," he pointed to the representatives of the four clans that own the Foroko/Brimde area. He mentioned that whatever decision the landowners came up with, they would appreciate being informed' (Chitoa 1998a: 7).

Notwithstanding this hopeful comment, which would lead some to suggest that the troubles were now over and conservation was about to take place (See Ellis 1998), relations with the Jimi in Brimde would not be very fruitful. In the beginning of 1991 for example, a CD team noted that the Brimde Jimi told them that

> 'the CD teams have been going in and out of the area and there has been nothing done so far by them. [They] worked in the Jimi area and did not bring any service or development, that is the reason why the Jimi people do not want us.

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[60] One or two people were indeed fined for breaches of WMA regulations. In one case some outsiders were taken to task over illegal hunting and fined Kina 148. The penalty system, however, also introduced new problems. During one of the last visits in 1999 a Ramu landowner explained that in a creek at within the WMA, some women used fishing nets to catch fish. This was forbidden by the rules of the WMA and when shortly afterwards one of these women died, her people claimed compensation from the owners of the creek as they regarded her death their doing (BRG 1999f: 42).

> [The CDs] replied ... that [its] role is not to give money or cargo to people, but only to help them with ideas. The Jimi people do not want to work with the CD teams because they want money and cargo' (BRG 1999a: 9).

Moreover, they would feel threatened by the WMA process

> 'The Brimde people in seeing the [WMA] laws and penalties felt threatened and accused the CD teams and the [Ramu] clan leaders for collaborating to throw them out. [One of the Ramu landowners] told the team that Brimde [Jimi] people threatened to provoke a fight between the clan leaders and the CD teams' (BRG 1999c: 3).

During 1999, the conflicts between the Jimi from Pimbum and those from Brimde, as well as those between the Jimi settlers and the Foroko landowners hardened to the extent that a number of serious fights took place. These continuing conflicts would make CD work among the Jimi settlers in Brimde very difficult, leading the Bismarck-Ramu team to focus on the Ramu landowners. By the end of 1999, the Brimde Jimi having suffered a number of deaths, some of which were attributed to sorcery, moved back up to the Jimi Valley. In doing so, they abandoned the various 'services' that they had brought to the area. Two Jimi men, wanting to remain behind asked to Foroko landowners permission to stay, but were told to leave as well (BRG 1999f).

It is difficult to see what the exact influence of the Bismarck-Ramu project has been in this conflict. One can not escape the conclusion, however, that the Ramu landowners were largely able to reassert their authority over the Jimi settlers through the many sessions held by the CD workers. These sessions, emphasising the fundamental rights of landowners, and underlining issues of empowerment, self-reliance and organisation, not only gave the Ramu landowners the self-confidence, but also the forum to speak up against the Jimi settlers. Thus where Filer *et Al.* (1995: 34) note during the first visit to Foroko-Brimde that the 'true landowners observed the proceedings in silence from a short distance away' and preferred to talk in private rather than public, over time the Ramu clans became increasingly vocal. In their assertions of authority, the project became a supporting factor. The CD workers, associated with the Government, deferred to the landowners as the key decision-makers and thereby implicitly, and at times explicitly, told the Jimi settlers to know their place.

Events in Pimbum and Foroko-Brimde took different turns for a number of reasons. In the first place the position of the Kema Jimi in Brimde was more tenuous that that of the Pala Jimi in Pimbum. The latter had entered a virtually uninhabited area as the owners either lived further away on the Ramu River or still resided with the Aidem in the Bismarck Fall. When these later came down, they were thus more or less confronted with a *fait accompli.* Thus where the Brimde Jimi acknowledged that they lived in the Ramu valley by virtue of the permission given by the Foroko clans, the Pimbum Jimi argued that they bought the land or were born there and should thus be seen as 'true' landowners.

Whereas the Pimbum area initially appeared to be the most successful area in the Bismarck-Ramu, managing to attract the base, the endless squabbles finally led the project team to withdraw from that area. The teams kept coming to Foroko-Brimde, however, and due to work on setting up the proposed WMA, including the registration of all 'true landowners', the drawing up of borders and the rules and penalties associated with WMA management, made clear that the Jimi were outsiders. A serious spell of bad luck in the form of a number of conflicts and deaths and the associated fear of sorcery was the straw that broke the camel's back, finally leading the Brimde Jimi to return to Bubkile.

In a sense, history repeats itself. When the April 1995 patrol visited the area, Filer, following a conversation with a member of one of the Foroko groups suggested that due to the levels of Jimi-Ramu intermarriage these groups were being absorbed by the Jimi. This because children whose parents have different languages normally speak the language of their mothers. Filer's informants however did not see the identity of their ethnic group at risk, arguing that they had experience with such uneven relationships as previous to the arrival of the Jimi settlers

> 'they had participated in another 'symbiotic' relationship with Gainj people who had migrated down to the floodplain from the Tagui valley (see Johnson 1982). We were told that ... the number of Gainj people has been much reduced, either because of death and disease or because they have returned to their homes in the Tagui valley. These statements are apparently confirmed by the 1990 national census data' (Filer *et Al.* 1995: 52) .

THE SOGERAM CONSERVATION DEED

By the end of 1998, the Biodiversity Program was not only active in establishing the two WMAs in Foroko and Sepu, but the CD workers were also visiting many other areas around the initially selected project area. Rather than selecting these areas based on biological of social indicators, they would follow the invitations of local people, who hearing about their work would ask them to come and visit their communities. CD work thus expanded into the Maring and Simbai areas to the West of Foroko-Brimde and the Jimi Valley, into the Garaligut and Usino areas to the east of Sepu and further north towards the Sogeram area. The latter area is of specific interest, as it is here that the Bismarck-Ramu project would book its greatest success (BRG 1999c, 1999e and 1999f).

The Sogeram area north of the Ramu River, lies adjacent to a number of large logging concessions operated by the Madang Timber and JANT forestry companies and was the next area that the National Forest Authority was trying to consign to logging. In order to do so, forestry officers were surveying the area, some of them already being seen as far south as the Ramu River close to Foroko in the middle of 1996 (BRG 1996a). They also told local leaders to create landowner companies that could serve as a legal vehicle for the application for a timber permit. As with many logging concessions there was much debate among local people about the question

whether this was a good thing or not. Having heard of the work that the 'environment people' were undertaking on the Ramu River, a number of Sogeram people invited the project to come and talk to them about these logging plans.

This was an exciting and also frightening request to the Bismarck-Ramu project, as it had until now operated in an area in which it did not have to compete directly with local forestry interests. The Lak experience still weighed on the project's mind. The project team, however, decided to go in with the same philosophy used in the Bismarck-Ramu area, discussing the pro's and con's as people saw them, allowing the involved communities to come to a decision on their own account. A major difference in their approach was that due to a lack of time they also decided to warn local people about the dangers of logging and the way in which logging companies operate. Various teams went in, emphasising self-reliance with the usual tools, spending time to get to know the local clan structure, at the same time building up a range of social relations.

Over time, 11 clans expressed an interest in conservation, following which the conservation manager took them through the matrix of conservation options. The community was divided with some clans expressing an interest in establishing a conservation area, while others favoured logging. The CDs visited the area repeatedly over 1999 to find out whether people could come to an agreement, telling people not to waste their time but to come sort of decision:

> 'We applaud your decision but is it a true decision or a fake decision? We'll be back in May. You sit down and talk seriously about it. We are coming back to work with 2 clans for sure and 4 clans maybe. Now 6 more clans say they want in. Do you really? We'll see! It's easy to say yes we want to look after our bush now, but when the loggers come with their big promises and money and alcohol ... what will you say then? That's the test.
>
> "You begged us to come.... You said please help us - we don't know what to do - we can't keep the loggers out. We told you then - believe in yourselves. We told you then all you have to say is NO! You are the bosses of this ground - no one can tell you what to do. We'll be back in May - ... only those clans who are strong and clear ... will not bow down once the loggers come"... The men put their heads down and not a word was said. The silence, said [the community area manager], was deafening. When the silence was broken it was from someone far in the back - a woman. She said this was the first time she had ever said anything in a meeting, but hearing Grace talk gave her the courage as a women to say what she felt. She thanked the CD teams for their work over the last 5 months. She said you have given us much to think about - and you are right - this is not a game for you CD teams or for us - it's about our life - and I support the strong words of our sister - we need to make a decision and we need to talk a lot more about it before the CD teams come back '(Lalley to VanHelden 21 April 2000).

It was at this stage that the project decided to introduce a new legal instrument. Rather than trying to develop a WMA or Conservation Area, which would never be a legally recognised instrument in time to halt the logging, the project decided to try and use a so-called Conservation Deed, based on an idea by Brunton (1998). A

Conservation Deed is an agreement among resource owners themselves as to how to manage their jointly owned natural resources. The only thing it entails is a contract between all the members of a number of landowning clans to refrain from certain resource uses. Unlike all other forms of conservation legislation that define a variety of protected area regimes, a Conservation Deed is grounded in private law. The Deed falls under the PNG *Law of Contract*, which protects and enforces agreements not only between the parties that enter these agreements but also protects such agreements from third party interference.

As the Constitution of PNG recognises the ownership rights of resource owners, and as these land-owning clans have made an agreement among themselves; the Deed can not easily be undone by a third party such as a logging company. Not even the Government of PNG is able to do so, for exactly the same reasons that it has so few possibilities to enforce state-led forms of conservation without communal consent. Attractive is also that the facilitating NGO itself is not party to the agreement either. Only if all involved parties agree that the Deed should be rescinded can such be done. Any unilateral violation of the Deed is punishable in court as a breach of contract, either triggering the enforcement of the contract, or forcing the defaulting party to pay damages. As such, it provides an interesting legal vehicle to protect resources.

In the Sogeram case, a growing consensus developed against the timber concession, thwarting representatives of the local landowner company and the national and provincial forest authorities in their attempts to collect the necessary signatures. The BR team played a role in preparing local people, role playing the usual pattern that the interactions between logging proponents and rural communities take. Realising that especially the women opposed the forestry operations as they are usually the first to suffer from a loss of subsistence resources, a contamination of waterways and the drunkenness of their husbands, a drama team recruited by the Biodiversity Program presented the story of a fictitious African village. In this village the men were weak and said 'yes' to the offers of beer and money, only to see the women and children suffer afterwards. According to the CD workers that witnessed these plays the silence was deafening afterwards as everybody recognised the pattern of events taking place in other villages in the area. Not much later the role plays turned into reality in their own community:

> [In April 2000] a chopper dropped into Sogeram. On it were two representatives from the Forest Authority (FA) - one from Madang and one from Moresby. With them was the President of the local Landowners Association. A man who has been bought by the company and has been very uncomfortable with the CD teams. The two FA reps get out of the plane - tell the people who they are and why they are there. They are there for the people to sign a Forest Management Area [agreement]. There are 100's of people there. The FA people hand out some booklets and bring out 1 1/2 bales of rice. After making their pitch about development etc. the landowners (very friendly & politely we are told) informed the FA folks they were not interested in signing [the papers] and did not want their bush logged. The FA representatives gave the same tired old bullshit pitch

> – "So you want to live like our ancestors huh? you don't want development to come huh? you don't want roads and a school and a clinic huh?
>
> Upon completion of that pitch the landowners said we've seen Madang Timbers here for many years, we've seen JANT here for 20 years. Where are the schools you talk about? .... Where is the house sick you talk about. We don't even see an aid post. And roads - do you call these roads - these are simply constructed to get the timber out - only logging trucks can use them. No we have seen your so called development and we say no ... Not expecting that response and not knowing what to do they took off saying they would return tomorrow. The people said fine and the FA representatives took off. The next day from the sky falls the FA representatives and Chairman of the Landowner Company again. They give the same pitch. When they finished the people began collecting the books the FA representatives gave them the day before: .... "Here you can go now and take these with you ... ". The FA boys and the chairman took the books - got on the helicopter and took off (Lalley to VanHelden 21 April 2000).

The deed that was drawn up, not only registered the various clan groups and their landholdings but also outlined a number of management rules which would be covered by the Deed. This there was a complete prohibition on logging. In Sogeram too the earlier noted pattern of using conservation mechanisms as a means to keep outsiders out shines through. As one commentator noted that many different people with their dogs hunted in his forest 'despite the fact that they have been asked not to hunt in other people's land' (BRG 1999e: 10).

In May 1999, when the team emphasised the fact that local people should decide on its rules the Sogeram people added one more rule to the list. This rule said 'that the people from out side who are now settling on our land must leave and go back to their own land where they have originated from"' (BRG 1999d: 17). In June 2000, eleven clans from the Sogeram area signed a Conservation Deed in which they agreed amongst themselves that they would not have timber harvested from an 18,500-hectare large area. As the CD trainer recounts

> It was quite a day - very festive. 3 company men were there to disrupt, but were shouted down by the people and sent on their way. ... I think one of the most remarkable things is that over signatories were all there to sign. Only those of us that have worked in Melanesia can appreciate what a feat that is. The Forest Authority went in 3 weeks ago with K40,000 cash and papers demanding they sign. They were thrown out. The day prior to their arrival (they informed the people they were coming), the women called a meeting and told the men - "you know damn well why they are coming- now don't weaken, stand up, be strong etc. etc." - and the boys did that. We role played possible scenarios and they played themselves out. For instance the people were told "okay if you don't sign - when the schools do come and the *haus sik* and the roads - any clan in the Conservation Area can not use these facilities. "The people said, "fine - now could you please leave – and don't forget your money!!! ... It proves what we have been saying all along. We don't have to start with economic incentives. There are deeper reasons to look after the bush' (Lalley to VanHelden 21 April 2000).

CONCLUSIONS

The chapter has started of with a description of how the CD workers presented themselves in the new community entry approach, what modifications they introduced in the process, and how gender played role both on the side of the CD workers as well as within the various communities. This was followed by a detailed account of how the Jimi communities responded to the change in project strategy. Where the Jimi were used to talking to the a expatriate–led project team which framed conservation in terms of an exchange for development, they were now confronted with a group of fellow citizens that had ceased talking about conservation and had carefully deleted economic notions from their presentations. Not surprisingly, relations between project and people deteriorated, a process further exacerbated by the fall-out of the biological survey, the national and local elections, tribal conflicts and the strategic agenda of the community facilitator. By the start of 1998, the project decided to leave the Jimi Valley altogether.

Among the mixed communities living the Ramu area beneath the foothills of the Bismarck Range things did not go much better, be it for different reasons. Here too past interventions by the project played a role, especially as a result to the establishment of the base at Pimbum, the appointment of two Jimi settlers as radiomen and again the activities of the community facilitator. The resulting conflicts over project-related assets, jobs and opportunities, however, were in the first place an expression of the conflicts between people in the area, into which the project was enlisted. Under these circumstances, the project team had little chance of establishing a community-based and collective-action type of conservation arrangement. In the end to project had to withdraw from the mixed Jimi-Ramu communities too.

It was, however among the Ramu River clans at Foroko and Sepu that the CD workers, more or less coincidentally, stumbled across a fertile 'middle ground'. While project interventions had until then been heavily biased towards the Jimi, the CD meetings would increasingly offer the Ramu clans an opportunity to speak up against the encroaching Jimi. When these clans realised that a conservation arrangement could help them to assert their rights as landowners in the face of Jimi migration and competing claims within the floodplains, the project and Ramu people quickly found one another. The Jimi living at Brimde decided to support the local drive for land registration and the establishment of a WMA, as the alternative of land registration and logging was much less preferable. The remainder of the chapter outlines how the project developed a slow, participatory and step-by-step conservation approach. This approach would lead to the proposed establishment of two proposed WMAs, the drawing up of boundaries, the establishment of committees and the development of a number of rules and related penalties. The chapter ends with description of the manner in which the Bismarck-Ramu project used a new legal mechanism to thwart a logging company in the Sogeram area, thus keeping some 18,500 hectares of forest from being logged.

I have argued that the coalition between project and Ramu people has its roots in the 'expedient misunderstandings' that enable such middle grounds (White 1991: x). By bringing a number of different strategic goals under the catch-all notion of conservation rather disparate agenda's could be reconciled forging an alliance which was attractive to the involved parties for different reasons. To local people, the project became an ally in their attempts to keep highlands migrants at bay and to secure legal rights to land and resources. To the executing project team it confirmed the success of its participatory conservation strategy, while at the level of the program administration it facilitated an application for donor funds, as the program now appeared to meet the conservation goals defined by its donors. The question whether this indeed constitutes conservation in the sense intended by the donors and a discussion of the question to what extent such conservation on the Ramu River is sustainable constitutes the topic of the final chapter.

This chapter will discuss a number of critical questions with regard to the conservation content of the Ramu River WMAs. The underlying debate over who drives the conservation and development agenda, matters of institutional control as these affected the Bismarck-Ramu project itself, and the all important discussion over how to secure the 'sustainability' of such community-led initiatives would bring to the fore how far the Madang project team, the DEC, and the international donor agencies had grown apart. It will be argued that these debates fall back on the two opposing views of local people introduced in the first chapter. The donor agencies, in line with the dominant conservation narrative viewed local people as the cause of environmental degradation, while the field staff of the Bismarck-Ramu project saw local communities as the point of resistance against the destructive and disempowering activities of foreign companies.

The people responsible for the development of a second phase funding proposal to the GEF, especially the chief technical advisor of the Biodiversity Program and a UNDP project development specialist, were caught in the middle. Having to frame the environmental situation in the Bismarck-Ramu area in terms of the narrative employed by the donor in order to secure funding, they lost the Bismarck-Ramu field staff on the way.

Chapter 8

NARRATIVES OF CONSERVATION, SUSTAINABILITY AND CONTROL

INTRODUCTION

By early 1998, as the events outlined in the previous chapter took place, the matter of future funding became an issue of concern to the Bismarck-Ramu project. This chapter will outline how in the attempt to secure second phase funding from the GEF it gradually became clear that the intervention philosophy of the Bismarck-Ramu project and the dominant conservation narratives applied by the international donors were incompatible. The project team in Madang worked from the idea that communities are intrinsically conservation-inclined and that 'leading people back to their tradition' would secure conservation in the form of two Wildlife Management Areas (WMAs). Representatives of the GEF and the UNDP were impressed by the community entry strategy, but less certain of the conservation content of the suggested WMAs, and of the extent to which such management regimes would prove sustainable in the longer term. Consequently, they emphasised the need to use economic incentives in order to secure the sustainability of such conservation regimes. An additional problem was that the Bismarck-Ramu project did not meet three requirements necessary to make it eligible for GEF funding. In the first place it lacked a reliable co-financing partner, in the second place the project needed to define a set of 'baseline activities' which would be amenable to GEF 'incremental cost funding'. Thirdly and finally, there was the issue that the GEF only funds biodiversity initiatives in areas under threat, while the Bismarck-Ramu area had been selected because of its low levels of threat. All of these problems had to be addressed if the Bismarck-Ramu project was to be eligible for second phase funding.

This chapter outlines how the chief technical advisor and the former resource economist of the Biodiversity Program, now a GEF project development specialist at the UNDP, made a concerted attempt to bridge the gap between the philosophy of the Madang group, the administrative requirements of the GEF and the realities in the Ramu Valley. They did so by entering into a coalition with The Nature Conservancy (TNC), that was developing an ecologically friendly timber operation

to the north of the Bismarck-Ramu area. In doing so, they reproduced the Lak idea where a sustainable timber operation was to fund the establishment and management of a protected area. Notwithstanding a careful management of the proposal, the proponents of a joint BR/TNC proposal underestimated the extent to which the Madang group believed in its community-based conservation philosophy. Seeing itself as the guardians of the Ramu communities, pointing to the supposed incompatibility between economic and conviction-based conservation strategies, and fearing a loss of control over their relations with local people, the Madang staff eventually decided to opt out of the GEF proposal.

MEASURES OF SUCCESS

At face value, the Bismarck-Ramu project had achieved some impressive results by mid 1998. Local people had agreed to designate some 122,000 hectares to the establishment of two WMAs, and were going through a rudimentary boundary mapping exercise. The combined emphasis on community organisation and the local interest in conservation meant that the Bismarck-Ramu team considered its work largely done. This view led the Bismarck-Ramu team to develop what it called 'an exit strategy', allowing it to withdraw from communities once these were at a stage where they could do things themselves. In this view, some communities had become self-reliant because of the CD work, and were therefore no longer in need of further assistance. As a patrol report from late 1999 notes:

> 'The team is working very slowly to leave the [Sepu] community because: a) The community has organized and is working together to solve some of its problems, b) they have realized that they have the power and strength to be self-reliant and bring development into the community, c) they know the importance of their resources like rivers, land, wildlife and forests' (BRG 1999e: 3) .

The Bismarck-Ramu project thus based itself on a rather static vision of communities, hoping that once local people had been 'led back' to their 'traditional' lifestyles, these values and perspectives would remain in place. Such a view is unrealistic not only, because it entails a reinvention of tradition (see chapter 6), but also because local perspectives of nature may change rapidly (See chapter 4). The very same type of social pressures that led to the establishment of the WMA on the Ramu River and the signing of the Sogeram conservation deed can also undo these achievements.

Whereas the Madang project staff thus argued that it had helped the Ramu river communities to organise themselves, and as a result, now had 'more than 100,000 hectares under conservation', not everybody was equally impressed. According to the conservation manager of the Bismarck-Ramu project, a lawyer working at DEC exclaimed that the Bismarck-Ramu project 'had achieved absolutely nothing' (PC John Chitoa March 2000). From a conservation policy perspective, this was indeed the case as there was no official designation of these areas as WMAs. In the parlance of conservationists, the Ramu River WMAs would not even achieve the status of

'paper park' until they were gazetted.[61] More important than the view of the more or less defunct DEC, which itself is responsible for an enormous backlog in WMA applications, are questions with regard to the actual conservation content of the management regimes on the ground. There are a number of problems that make it difficult to equate the present situation with conservation.

In the first place, there is the problem that the project biologist already warned for in early 1996. The WMAs are established in an area about which very little is known in terms of biodiversity. It is lowland forest, and lowland forest in PNG is generally rich in species, but that is about as far as biological knowledge now goes. It is thus unclear whether the area that is now being presented as a WMA was actually worth the effort. Such a study needs to be made, not only to answer the question whether these areas are worth further investment, but also to serve as a baseline to measure the impacts of human activities as well as the effectiveness of conservation measures in the future.

A second and related question concerns an analysis of local threats from an ecosystem and species perspective in order to design and plan the best possible conservation mechanisms. At this moment, all clan lands are subsumed under the proposed WMA, without a land use plan that manages gardening, hunting, and conservation activities. The discussions over the extent to which land within the WMA would fall under 'conservation', and whether other parts could be used for 'development' illustrates how the WMA itself functions more as a 'holding vessel' for local landowners than as a conservation mechanism. Developing such a land use plan may be a difficult exercise given that the WMAs are inhabited by a number of different Ramu and Jimi clans, probably requiring detailed negotiations between the various groups. It would also require ecological input. While local people have considerable knowledge of their environment, they do not have specialised knowledge concerning conservation area design. Neither does the Bismarck-Ramu project have such expertise anymore. Whereas the Lak project suffered from a lack of social scientists, it appears that the Bismarck-Ramu team now suffers from a lack of ecological knowledge. To some people within the Bismarck-Ramu project these questions may appear irrelevant as they are predominantly interested in the process of community development and the way in which the CD workers could get people organised. To conservationists and their donors, however, this is an unsatisfactory answer.

A third issue concerns the question of enforcement. How will people make sure that everybody involved in these WMAs abides by these rules? Social control may play a role, but it concerns a large area with often scattered households who can pretty much do as they like. In addition, it is unclear whether the Jimi settlers are susceptible to such social controls. The Ramu people, often avoiding conflict rather than seeking it out, are unlikely to trudge into a Jimi village to demand

[61] The IUCN defines a 'paper park' as 'a legally established protected area where experts believe current protection activities are insufficient to halt degradation' (IUCN 1999a:7).

compensation for illegal hunting. How effective have the CD workers and local people been at establishing wildlife management committees, and do these committees manage to mete out punishment for breaches of regulations? Experience to date shows that management committees constitute a source of confusion and conflict and are often ineffective. Their establishment is however, a requirement under the *Fauna (Protection & Control) Act.*

If we look at the earlier proposed definition of 'western' conservation as something which is *intentional* and imposes a *short-term cost* in order to avoid a *demonstrable* loss of resources in the longer run, it is difficult to see how the events on the Ramu River can be equated to conservation. The WMA establishment was certainly intentional, and may also have been motivated by conservation concerns, but appears to be in the first place driven by local territorial considerations. Up to this day the WMAs have not imposed a direct cost on people, other than through the time and effort spent with the CD workers in establishing these areas. This should not be underestimated, but is not comparable to the difficult trade off between resource development in the form of logging or mining on the one hand and conservation on the other. The question whether the WMAs lead to long term conservation and if there is any difference between patterns of resource use before and after the Bismarck-Ramu intervention remains unanswered due to a lack of baseline data and ecological analysis. The situation at Sogeram is different. People there have wittingly incurred considerable opportunity cost by signing the conservation deed, and in this sense, it is here that the Bismarck-Ramu team has scored its most significant results. In terms of its conservation effect, it is clear that any day without logging is again. Thus looking at the situation from this perspective, considerable conservation success has been booked at Sogeram.

This brings us to the fourth and final issue concerning the conservation content of the Bismarck-Ramu program, which has to do with the issue of long term sustainability. Conservation activities entail a cost for local people while logging projects or other resource uses bring an immediate benefit. How can the project ensure that people continue to support these conservation ideas in the face of social change, the monetisation of the economy, the pending break-down of previously existing leadership structures and social controls and growing feelings of relative deprivation? This question would come to dominate during the negotiations over a second phase proposal to the GEF.

BETWEEN CONSERVATION AND CONTROL I

The Bismarck-Ramu team was obviously not unaware of the critical questions concerning its conservation success, but was not sure what to do about them either. The real matter turned out to be one of control rather than conservation. On pressing the issue, and posing the question whether there was really a change in communal resource management practices between the pre-project situation and the present, the CD trainer wrote back: 'the answer is we don't really know what they [the local

communities] are doing'. The remainder of the answer made clear that his reluctance to drive the conservation management issue more vigorously had to do with the trade-off between conservation and control. By bringing in the biologists, the Bismarck-Ramu team runs the risk of losing control over the community process, thereby compromising its philosophy and achievements. The team would like to transfer the Ramu River WMA process to a conservation agency with the necessary know how and the 'right' set of attitudes, but is afraid that such will compromise the self-reliance that people have been developing.

> 'Let's not go in like a [mainstream conservation organisation] and overstructure and fuck em up.... if another organisation can assist – really assist we're happy to move out. But the fear is if a [mainstream conservation organisation] goes in - it could spell disaster. So lots going on and good debates - as usual' (Lalley to VanHelden 12 July 2001).

The Bismarck-Ramu team's perception of a trade-off between conservation and control and its reluctance to invite conservationists back into the project is not unique. The IIED (1994: 55) for example also argues that:

> 'The study of biodiversity, its monitoring, and the implementation of measures to conserve it in the future are seen as the legitimate domain of natural scientists, most often expatriates, who have the skills of Western scientific methods to carry out these tasks. Thus, the aim of maintaining biodiversity militates against the empowerment of communities to manage their natural resources'

These questions, about the nature of present day resource management on the Ramu River and whether the Bismarck-Ramu interventions have made a difference in terms of conservation, would come together in a discussion of the notion of 'sustainability'. It was not just the question whether these WMAs actually conserved biodiversity, but especially whether they could be deemed 'sustainable' over the longer term, what the role of local people and economic incentives in securing such sustainability were, and - not unimportant - the question who decided what to do and where to go, that would introduce a fundamental break between the Bismarck-Ramu project team and its donors.

SECURING SECOND PHASE FUNDING

From the end of 1997 onwards, the chief technical advisor in Port Moresby and the UNDP country office started working on the development of a second phase proposal for the Bismarck-Ramu project. Although the Biodiversity Program had also contained a number of other objectives, it was clear that the Bismarck-Ramu project was the most interesting aspect of the program and the one that most warranted a continuation in funding.

Initially, the aim was to apply to the GEF for a so-called medium-sized grant of U$ 750,000 for a period of three years. The project team in Madang, the chief technical advisor in Port Moresby and the UNDP were under time pressure to develop the

proposal, as the Biodiversity Program would officially end by April 1998. Although the chief technical advisor managed to extend the program until the end of the year, and although the UNDP country office continued funding the project after that time, it was unclear how long these funds would last. Priority was therefore given to continuing the fieldwork in the Ramu Valley and to keeping the chief technical advisor in the Port Moresby Office for another 8 months in order to facilitate development of a second phase proposal to the GEF.

During the writing of the proposal, however, it became clear that the chances of getting a second phase of the Bismarck-Ramu project funded through a medium-sized grant application were slim. The main reasons were firstly, that the GEF insists on co-financing arrangements. It will not fund projects without other parties putting their money and resources into the project, and a stand-alone project such as that suggested for the Bismarck-Ramu, was unlikely to receive funding. Related to this was the need to secure post-project financial sustainability. The Bismarck-Ramu project could obviously argue that the DEC was its main co-financing partner, but this turned out to be a hard pitch to make given the simple fact that the DEC had for years been withholding funding to the Biodiversity Program. As a project brief on GEF criteria for eligibility noted: '[GEF funded] projects require a supportive policy framework, that abets rather than retards conservation' (UNDP, no date: 6). Resource politics in PNG, however, tend to be characterised by constant policy flip-flops, while conservation issues are accorded little priority. This became clear during the ongoing financial crisis, which saw funding to the DEC cut time and again. In 1998, the DEC was downgraded to the status of Office of Environment and Conservation (OEC), while 50 percent of its staff was retrenched. The likelihood of the new OEC being accepted as a counterpart to a second phase of the Bismarck-Ramu project thus became smaller and smaller. Although the OEC did not even on paper look like a stable and reliable partner, this issue could probably have been dealt with in the medium-sized grant proposal, were it not for other problems.

More difficult was the second fact, namely that the GEF only funds the incremental costs associated with making an otherwise environmentally damaging activity more ecologically friendly. Thus, so-called 'baseline' activities can be made more environmentally friendly with the help of GEF financial assistance. The GEF, however, will not fund the baseline activities themselves. Problem to the Bismarck-Ramu project was that it had no set of environmentally unfriendly operations that could be modified to become more environmentally benign.

Thirdly and finally, there was the issue of sustainability such as that contained in the ICAD notion. The GEF only funds biodiversity projects that are likely to lead to long term conservation. Over time, there developed a concern with the question to what extent the community entry process produced conservation results, and even if it did, how sustainable these results were. This is not only a philosophical debate on how and when to bring economic activities into community-based conservation projects; it is also an administrative requirement on the part of the GEF. A UNDP brief for example states that projects must 'include an incentive-based design' to

ensure sustainability after GEF support ends (UNDP no date: 5). In other words, without economic incentives, the donor does not think that conservation projects can be sustainable in the longer term. The only answer the Biodiversity Program could come up with in the context of PNG land tenure was to assert, in line with the ICAD notion, that it would make it economically advantageous to local communities to pursue conservation. This, however, clashed with the community entry approach that denounced the use of economic incentives for conservation. It is here that the analysis of the donor and that of the field staff in the Bismarck-Ramu came to diverge to an insurmountable extent.

The biosphere reserve and The Nature Conservancy

At the end of May 1998, the Minister of Environment and Conservation, the chief technical advisor of the Biodiversity Program and a number of DEC officials paid a visit to the Madang office of the Bismarck-Ramu project. During this visit, it was proposed that a much larger proposal had a better chance of being funded by the GEF than the small stand-alone project previously proposed. One of the DEC officials, explained that it was DEC's policy to think in terms of Total Catchment Environmental Management, and that the second Bismarck-Ramu proposal was too small to fit DEC's main policy towards conservation (Ellis 1998). Instead the chief technical advisor and DEC suggested to expand the proposal to include the whole 2500 square kilometre Ramu River basin in a new and much larger GEF proposal centring on the idea of a Biosphere Reserve. Although this suggestion came out of the blue to the Madang group, it is likely that it was premeditated between the chief technical advisor of the Biodiversity Program and DEC.

This proposal entailed a close collaboration with The Nature Conservancy (TNC), an American conservation agency of world renown that was looking into conservation issues in PNG by taking a novel approach. Where most conservation projects aim to resist logging endeavours, in some cases such as in Lak, trying to use sustainably operated forest projects to fund conservation activities, TNC wanted to develop a sustainable timber operation itself. The central idea in this strategy was to demonstrate to local people and the Government of PNG that timber concessions could be both profitable, socially beneficial and ecologically sustainable if they were managed properly. In order to pursue this option, the TNC vied for a concession in the Josephstaal area in the north of Madang province through the same administrative and political channels used by Malaysian and Korean companies. By 1997, the Josephstaal people had had their area slated for logging and the contract was being tendered by the National Forest Authority in order to select the best qualifying company. In entering the fray, the TNC got mixed up in a highly political process, whereby landowners, the provincial government, local politicians, factions in the national forest administration all tried to influence the outcome of the tendering process. The Biodiversity Program supported TNC by funding an

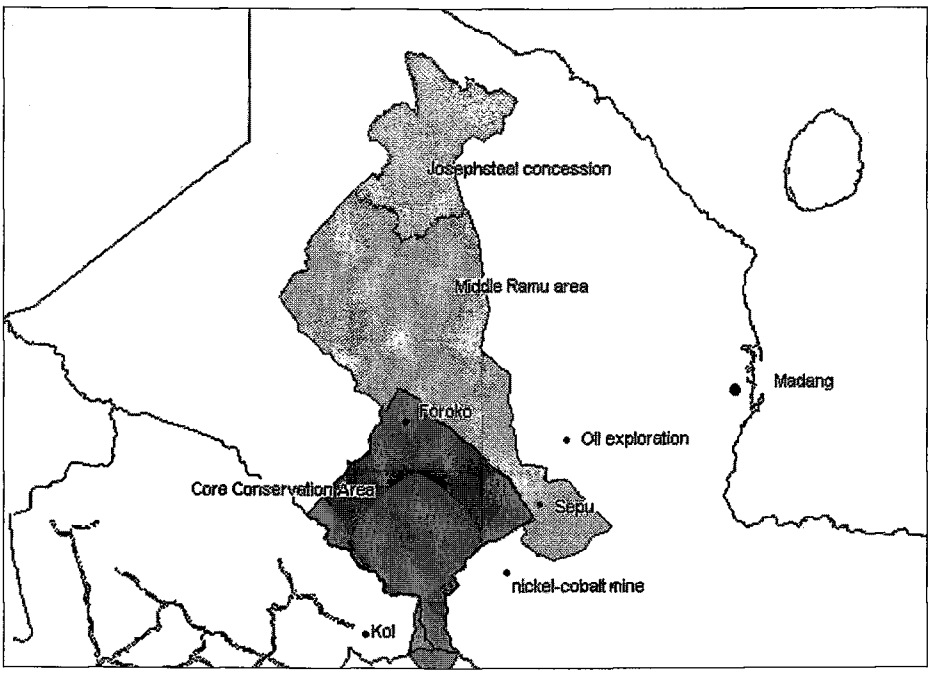
economic analysis of the Josephstaal logging operations, in line with its earlier design of the Lak sustainable forestry project.

The TNC tender on the Josephstaal concession, the new DEC policy of Total Catchment Environmental Management, and the establishment of the two Ramu River WMAs through the Bismarck-Ramu community entry process came together in the idea of a 'biosphere reserve'. Key to this concept, already introduced in the opening chapter of this study, is the old idea of the national park, in biosphere language called a 'Core Conservation Area', surrounded by a number buffer zones, within which limited economic activity is allowed. In this plan, the Bismarck-Ramu area of interest and especially the proposed WMAs on the Ramu River, would constitute the core area of the biosphere reserve, while the area to the north, including the Josephstaal forest area would serve as a buffer zone. This was not the first time that the Biosphere Reserve concept had been mentioned in conjunction with the Bismarck-Ramu area project. Already in 1995 the site selection analysis mentioned that: 'The DEC Resource Inventory Branch is of the opinion that the new site should employ the Man and Biosphere model of zones of protection and zones of regulated multiple use. This model will have to be modified to fit within the PNG land tenure system' (DEC 1995: 27).

This area, consisting of the Bismarck-Ramu core area, the unassigned Middle Ramu area and the Josephstaal timber concession would be surrounded by an Outer Transition Zone covering the full Ramu River Watershed and of some 2500 square kilometres, involving no less than four provincial Governments and numerous local level governments. The Outer Transition Zone would also contain a number of private sector partners, such as the nickel-cobalt mine in the Bismarck Fall, the oil ventures being developed in the Banam area, Ramu Sugar on the Upper Ramu River and a subsidiary of the Commonwealth Development Corporation which was looking into the potential for oil palm development near Usino.

From an administrative point of view this was a brilliant strategy, which not only enlisted the DEC through the use of its Total Catchment Environmental Management concept and the Biosphere Reserve idea, but by including the TNC also 'solved' the three problems with the GEF submission listed above. By becoming partners with the TNC, the Bismarck-Ramu project would acquire a trustworthy partner with whom a co-financing arrangement could be drawn up. In addition, it could present its conservation activities as 'incremental' to the TNC forestry operations and those of other industrial ventures operating in the Outer Transition Zone, while the post-project sustainability issue would be much easier to defend as the expected profits of the forestry operations in the Josephstaal could be applied towards developing income generating activities and social services in the Bismarck-Ramu area. This strategy would 'make conservation pay', in line with the dominant ICAD philosophy which regards 'development' as a means to off-set the opportunity cost of 'conservation', and was thereby thought to keep communities on board even when faced with competing logging proposals.

FIGURE 6: MAP OF THE PROPOSED RAMU BIOSPHERE RESERVE



Explanation: The Bismarck-Ramu project area was to become the Core Conservation area of the Biosphere reserve, while the Josephstaal concession was to be part of the buffer zone protecting the conservation area. The Middle Ramu area was of yet unassigned but could get a combination of sustainable logging and conservation designations. The Outer Transition Zone that covers the Ramu River catchment area is not indicated.

BIOSPHERE RESERVES IN THE CONTEXT OF CUSTOMARY LANDTENURE

During the development of this proposal, nobody talked about the question to what extent the biosphere concept is applicable in the context of PNG land tenure, or about the fact that the Biodiversity Program was coming full circle in its design of conservation areas. Whereas the 1992 CNA workshop in Madang had featured the first serious discussion of the need to integrate social and biological indicators in protected area design, and while the Lak experience had emphasised the need to collect socio-economic information which had led to the community-based approach in the Bismarck-Ramu area, the TNC-Bismarck-Ramu proposal was back in the mode of conservationists drawing boundaries on maps.

Together with the TNC, the Biodiversity Program produced a map outlining the various zones that the biosphere reserve would contain. One of these maps contains an overview of all known villages, but one wonders whether the resource owners

living in those villages would be happy at being included in this endeavour. The plan not only carved up Madang province, but it also determined the development options which local people would be allowed to pursue in the various zones of the reserve. People in the Josephstaal area would be involved in reduced impact logging (Development > Conservation), people in the Middle Ramu would have to develop in a sustainable manner yet to be determined (Development = Conservation), and people in the Core Conservation Area to refrain from pursuing destructive development (Development < Conservation).

Such a map thus details the intentions of the conservation agency, but has little to do with project outcomes. The conservationists concerned have no means to enforce or restrict certain behaviour and can for example, not stop a community from pursuing a logging concession dead in the middle of the Core Conservation Area, nor can they include communities in their forest operations if these would not want to be included.[62] The only thing they can do is develop differentiated packages of incentives in an attempt to steer communities in the Core Conservation Area to conservation and those in the other zones towards sustainable development. In other words, nothing more than yet another area of interest in which the outcomes of project operations were entirely unpredictable and dependent on the interaction with local people. The only thing that was certain was that if the TNC would secure the Josephstaal concession this would take place in the area designated under the permit.

What is missing is these maps is a realisation of the heterogeneity intrinsic to landowner undertakings in these different zones. The options pursued by local people are highly variable and may differ from community to community. Thus while the Jimi communities in the proposed Core Conservation Area were through with the Bismarck-Ramu project, two groups of clans on the Ramu River, partly outside the planned Core Conservation Area, were pursuing the WMA option. Their neighbours in Bundi in turn were focussing on mining, while to the north communities were working on an oil company, and in Sogeram communities supporting logging and communities vehemently opposing logging would live in each others vicinity. To lump such disparate communities together in a series of zones may look good on paper, but has no relevance to the outcomes of the project. The experience in the Bismarck-Ramu project suggests that these maps are hardly worth the paper they are printed on, as in the practice of CD work the expansion to new areas would take place on the basis of invitations from neighbouring groups, and thus follow local social relations rather than the geographical and ecological considerations used by external conservation experts.

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[62] This may appear unlikely, but it does happen. In 2001, the Bismarck-Ramu Group met a number of clan groups in the Wenang area. As part of the CD process, they discussed the option of community-based forestry in conjunction with a EU funded eco-forestry programme. Local people, however, wanted nothing to do with forestry small or large (PC Lalley July 2001).

Success of this undertaking depended on two issues. In the first place, the TNC would have to secure the timber permit of the Josephstaal area. In the second place, the project philosophy proposed by chief technical advisor in Port Moresby, the TNC in Washington and the UNDP in New York had to be meshed with the community philosophy of the field staff in Madang. As this final section will argue, the narrative used by the administrators in Port Moresby and New York, which were based on the need to meet the administrative requirements of the donor, were increasingly out of step with the realities as perceived by the field staff.

Beneath the administrative requirements which determine the funding eligibility of conservation projects lies the dominant conservation narrative described in the first chapter. This narrative, based on the assumption that nature is vulnerable, local people's practices are the main threat, and that local communities either need to be coerced or enticed to leave protected areas alone, continues to dominate the international funding agencies. In a textual analysis of several of the first GEF-funded projects, Zerner (1996) notes that many of the narratives contained in the GEF project documents reflect those described in the first chapter as they

> 'are based on simplistic and questionable assumptions about nature: the idea of a steady state, autonomously regulated natural world has been increasingly critiqued by biologists and environmental historians... [but] the development narratives [continue to] project images of an undisturbed, pristine natural world that is no longer regarded as valid in the natural sciences' (Zerner 1996: 73)

While he distinguishes a number of narratives about local people and their relations to nature, he also notes that the 'majority of GEF narratives ... display human communities in a negative light, as major threats to the preservation of prized biological diversity'. This combination of stereotypes are used to legitimise GEF interventions, as they

> 'create the authority for interventions which inevitably affect the economic, cultural and property rights of local communities and nations ... The idea of a disjunct, autonomously developing natural world, easily leads to biodiversity conservation missions in which human groups are marginalized' (Zerner 1996: 72)

In the next section, I will argue that as 'money talks', the proponents of conservation projects are hard pressed to meet the dominant narratives such as these are employed by the international agencies. I will first look at the process of project development, discussing some of the documentation produced in order to sketch a picture of the local conservation problem in such a way that it meets the decontextualised definitions of the donor. This will also allow me to illustrate how the program became increasingly divided over its view of local people and the use of economic incentives. Whereas the Madang team regarded local communities as the key to conservation, the documents drawn up for the GEF were based on the usual condemning descriptions of local people, emphasising the need to off-set the cost of conservation through economic activities.

WRITING A SECOND GEF PROPOSAL

As 1998 progressed, and the debate on how to approach the GEF raged, a number of documents were drawn up. Pulling together support for complex and expensive conservation interventions under the tight bureaucratic guidelines of the GEF is a complicated, highly technical and intensely political affair which requires long lead-times, much perseverance and a feel for the fashionable terminology of the moment. It helps to develop a range of written outputs which build upon each other to provide a coherent and upbeat argument why this particular project is unique, highly promising in its response to severe environmental threats and therefore worth funding.

The first document of importance in supporting the GEF submission produced in early 1998 was the Bismarck-Ramu evaluation by an independent Project Review Mission (PRM 1998). This evaluation was generally positive about the progress made in the Bismarck-Ramu area. The main problem with the review report, however, was the fact that it had to note that the Biodiversity Program had failed to expand the area under conservation in PNG. While the 1995 Framework Plan of the Bismarck-Ramu project (CRC 1995a) had been to set up a conservation area, by the end of the project in April 1998 this had not been achieved. The community entry process in the Bismarck-Ramu had only been going for one and a half years when the Biodiversity Program went through its final evaluation.

A second item, more aimed at public consumption and partially addressing this problem, was a report called *Race for the Rainforest II* (Ellis 1998), which built on the success of the first *Race for the Rainforest* publication. This first report had turned what was essentially a failed experiment into a success story by establishing an original and convincing community-based strategy for future experimentation in the Bismarck-Ramu area. *Race for the Rainforest II* gives a good overview of the CD teams progress in the Bismarck-Ramu area, the variety of issues that had been dealt with and the extent to which the project team was making progress in the field of conservation. The report explains in detail how the community entry approach was followed up with a conservation strategy, the tools used, leading to the proposal of two WMAs on the Ramu River.

It is here however, that the politics of accessing donor funding take over. The report is for example overly upbeat on the size of these WMAs, the extent to which these had been put in place by mid 1998 and the ability of the mixed Jimi-Ramu communities in the Pimbum area to work together. The report simply equates the good intentions of local people with conservation, saying nothing about land use planning, rule making, leave alone rule enforcement. All of these are obviously essential to conservation management in the area, and especially difficult given the strong social divisions among people in the area. The suggestion that a WMA of 122,000 hectares was about to be established, was something of an exaggeration. The area suggested in the report not only contains the areas inhabited by the Jimi between Pimbum and Foroko, but also a large portion of the Bismarck Fall which is

being claimed by a number of highland groups (VanHelden1998b: 236-240). Simply writing up what one group says about the extent of its landholdings, without confirming these with neighbouring groups is a recipe for social conflict in PNG. The suggestion that the achievements to date showed that conservation could be pursued without material incentives (Ellis 1988: 66) was simply premature. The communities involved in WMA establishment had not yet been confronted with the opportunity cost of conservation, and it is entirely unclear what will happen once they are.

Race for the Rainforest II also argues that the Jimi settlers living in the area between Brimde and Pimbum would now happily follow the lead of the Ramu landowners. The fact that the Jimi have refused to do so over the last 20 years, are heavily divided among themselves between those coming from Bubulsunga and those from Bubkile, and the history of conflict between all involved is ignored. The report also carefully omits to mention the fact that the Foroko landowners might be interested in WMA establishment as a means to gain control over resources before committing them to logging (BRG 1997d), nor does it mention earlier attempts at Pimbum to bring a logging company in (BRG1996a). Shortly after the *Race for the Rainforest II* document was written, the Bismarck-Ramu team withdrew from Pimbum, while talks with the Foroko landowners were mainly confined to the Ramu River groups. During 1999, the conflicts between the Jimi from Pimbum and those from Brimde, and between the Jimi settlers and the Foroko landowners hardened to the extent that a number of people were killed. In the end, fearing sorcery, the Brimde Jimi decided to move back up into the Jimi Valley (BRG 1999f). Up to this day, the Ramu River WMAs have not been gazetted and it is unclear whether there is any difference in the management of resources between the period before the Bismarck-Ramu project intervention and thereafter. But then, this upbeat presentation was logical, because as the PNG conservation manager put it, 'the report was written for money to come' (PC Chitoa March 2000).

The third document of importance was an application to the GEF Project Development Facility in order to access funding for the design of the joint submission for what had now become known as the Ramu Biosphere Reserve Initiative. The UNDP project development specialist put together a proposal that was approved for funding at the end of 1998. This document built on the evaluation report and particularly on the suggestion in *Race for the Rainforest II* that a sizeable WMA was on the verge of being been formed (Ellis 1998).

As the application to the GEF Project Development Facility was being written by the UNDP project development specialist in New York, work in Port Moresby commenced on drawing up a fourth document. This last document was to be the 'mother of all documents' as it would contain a detailed project proposal for a six to eight year joint TNC/BR submission. Work on this so-called project brief started halfway 1998 and some of the draft documents produced for the proposal make interesting reading. While most of the administrative issues were thought to have been more or less settled through the co-operation with TNC, there was still the

issue of identifying credible threats to the proposed Biosphere Reserve that had to be dealt with. The GEF would only fund a second project in an area under threat, and the resulting narrative was in the first place geared to meet the conservation vision of the donors rather than to reflect the views of the staff on the ground.

THE CONSTRUCTION OF A THREATENED ENVIRONMENT

Conservation proposals show a general pattern that is very similar to that of development projects (Apthorpe 1986) and of folk tales in general (Roe 1991). In the first place, the proposing organisation identifies the object of its concerns, in this case highly valuable and vulnerable nature, then it presents the serious pressures in the form of population growth, logging or detrimental forms of resource use which threaten nature, subsequently to come up with a solution in the form of awareness raising activities, a spatial management regime and/or ICAD approaches.

Both the draft project brief to the GEF and the PDF proposal started in the usual manner by emphasising the uniqueness of nature in the 25,000 square kilometre large Ramu catchment. Both explained how the 1992 CNA exercise had accorded 'very high conservation priority' to the Bismarck-Ramu area, while the PDF proposal mentioned the fact that the Ramu was now listed as one of the WWF's 200 most important eco-regions. The results of the 1995 site selection analysis and biological survey provided quantitative information on the levels of biodiversity in the Bismarck Fall. The fact that no assessment of the Ramu Valley had as of yet taken place, and that the areas surveyed by the Biodiversity Survey of October 1995 were not included in the Ramu River WMAs, was not mentioned. More difficult than emphasising the uniqueness of the proposed Core Conservation Area and its natural resources, however, was to define a threat sufficiently serious to warrant the investment of GEF funds.

As we have already noted in the opening pages of this study, environmental crises are the lifeblood of conservation interventions. The Biodiversity Program was an experimental program based on a generalised perception of PNG biodiversity being under threat, and had not stipulated the exact locations where the ICAD pilot projects were to be implemented. The Lak project was purposely selected in an area under threat. Following its failure and the resulting recommendation that 'scarce conservation monies should not be invested in areas under severe threat' (McCallum and Sekhran 1997: 51), the second ICAD project was deliberately sited in an area not under direct threat. The area selection document (DEC 1995: 35), for example, stated that there was 'no immediate threat' to the Bismarck-Ramu area, while Sekhran (1996 appendix 1) defines the levels of threat in the Ramu valley as 'low'. By 1998, however, the lack of a substantial and identifiable threat in the Ramu valley became an obstacle to the second phase submission. The experimental phase was over and regulations determined that the GEF only funds projects which 'reduce or eliminate an immanent threat' to biodiversity of global importance (UNDP no date: 5).

This requirement thus led to the need to present a picture of nature in the Ramu Valley as being under serious pressure, ignoring the earlier selection criteria (DEC 1995: 28). This predicament becomes most clearly visible in a number of project briefs developed by the Biodiversity Program during 1998. Like in most other conservation analyses, the threats identified in these briefs take the form of logging and population growth combined with the environmentally detrimental behaviour of local people. Thus whereas the Madang team emphasised the conservationist nature of traditional societies in the area, its office in Port Moresby and the UNDP in New York set about presenting a radically different picture.

In the next section, I will discuss two documents which illustrate the way in which these threats were represented: The first concerns a draft of the GEF project brief from September 1998 which is fascinating in its stereotypical representation of local livelihood practices. The second concerns the Project Formulation Document presented to the GEF, which illustrates the manner in which the Malthusian narrative comes to play a role.

RE-ENTER: THE 'DESTRUCTIVE OTHER'

The draft project brief, held in the archives of the Bismarck-Ramu Group, contains a section on threats to the natural environment. Whereas other aspects of the brief discuss logging and other developments in the area, this particular section provides a caricature of local people and their practices. This description never entered the PDF proposal or later drafts of the GEF proposal, but illustrates the frame of mind from which the author worked. The main threats summed up in this draft document are:

> 'Forest loss due to aggressive swidden horticultural practice, burning unnecessarily large areas for gardens, unsustainable harvesting of fuelwood, housing and garden fencing material, and hunting practices that see over one hectare of forest cut down to capture one cuscus [tree kangaroo].
>
> Degradation of habitat in montane areas due to increasing soil erosion resulting from shortening fallow periods and cultivation of steeper and higher slopes.
>
> Diminishing populations of species such as birds of paradise and crocodiles, both hunted for cash sale of skins, with their eggs collected for food. Birds of paradise are also trapped for live sale. Mammals such as the nearly-extinct black-spotted cuscus (Spilocucus rufoniger) hunted for meat.
>
> Overharvesting of wild plants for medicinal use and as food' (CRC 1998: 8).
>
> Further down in the brief 'aggressive forest clearance' and 'hunting with firearms' is also mentioned as a problem (CRC 1998: 17).

One can not fail to note that this summation is replete with negative qualifications. Horticultural practices in the area are presented as being 'aggressive', marred by the burning of 'unnecessarily' large tracts of land and the 'unsustainable' and 'over'

harvesting of firewood and wild plants. There is no reason to believe that any of these qualifying statements are warranted, while the presentation of threats itself is far from credible to anybody familiar with the Ramu Valley. To start, the amount of work put into cutting large trees by hand in order to grow food is such that 'aggressive' horticultural practices are out of the question. An able-bodied man equipped with a steel axe spends several weeks a year to clear land for his subsistence garden and build fences and will generally aim to minimise the amount of work he puts in. Extraordinarily strong men may enhance their status by clearing gardens in primary forests, or by growing additional foods for ceremonial occasions (VanHelden 1998b, VanHelden 2000). These are exceptions in a harsh environment where people need to be economical with their available energy.

Similarly there is no indication whatsoever that wood collection in the Ramu valley is being conducted in an unsustainable manner, with most firewood and fencing materials generally derived from trees cut in order to grow food. The statement that local people are prepared to cut one hectare of forest in order to capture a cuscus, a tree kangaroo, refers to an observation by the patrol team leader during the April 1995 patrol when the project biologist set out with two local men to look for *goura* pigeons near Pimbum. When this group encountered a spotted cuscus in a tree eight men proceeded to cut down 'almost a hectare of small and medium-sized trees in a vain attempt to isolate and thus capture the animal' (Filer *et Al.* 1995: 31). The draft brief represents this event as if the razing of a hectare of forest is part of daily hunting practice in the Bismarck-Ramu area.

Crocodiles are indeed under serious pressure from hunting, but there are no records of crocodile eggs being eaten in the Ramu area, maybe because the skins are much more valuable. Birds of paradise, are unlike the brief states, not caught for live sale and very few are hunted for their skin due to the declining demand for feathers in the highlands. There are no records of eggs of birds of paradise being eaten. The main threat to birds of paradise comes from habitat conversion, a threat relatively minimal in the Ramu Valley and the Bismarck Fall (VanHelden 1998b: 188-190). The main birds caught for live sale are *goura* pigeons and cassowaries, the main type of eggs eaten are those deposited by megapodes. There is no evidence whatsoever of the 'overharvesting' of wild plants for medicinal use and as food. Hunting with firearms is very limited and restricted to wild pigs and cassowaries and special occasions due to the high cost of cartridges (Van Helden 1998b: 183-184).

This summation was made even though information attesting to the fact that the levels of threat were rather low was available to the project as part of its own selection process (DEC 1995), several publications by its staff (Sekhran 1996, McCallum and Sekhran 1997) and the Social Feasibility Study that was finalised by the end of 1997 (VanHelden 1998b, 1998c). This information however, was judiciously ignored. Filer (2000: 20) suggests that the SFS 'failed to place a sufficiently positive spin on the outcomes of the community development process' and that *Race for the Rainforest II* was commissioned to make 'up for this deficiency'. In a scathing analysis of conservation projects in PNG contained in the same paper,

he comes to the conclusion that many conservation proponents simply do not want to know what the reality of rural PNG looks like, as this would force them to reverse of some of their most cherished assumptions and propositions.

In making this judgement, however, he does not mention the pressures under which project development personnel are placed to comply with the dominant conservation narratives. Even if on-the-ground conservationists would be willing to revise their propositions, it is unclear whether their funding agencies would allow them to do so. As I have argued in the opening chapter of this study, narratives concerning conservation tend to be embedded in law and administrative requirements such as those described for the GEF eligibility guidelines. The project developers involved in the BR/TNC submission, were pragmatic people that simply had to set their priorities. Battling the constellation of beliefs that underpins the international conservation establishment, or presenting a nuanced picture of the situation in the Ramu Floodplains was not one of them. The goal was to write a project proposal, comply with the expectations of the donor and secure funding. All involved knew that once a program is on stream there will be room to adapt actual project implementation to the visions of the field staff and local communities. In doing so, however, the simplistic but dominant international narratives about local people and the manner in which they threaten nature, continue to be reproduced.

The Project Formulation Document and the population argument

The proposal to the GEF Project Development Facility (PDF) provides a more realistic view of the local environment and a less harshly condemning analysis of local people and their practices than contained in the draft brief. It however slips into the same type of argument when it states that communities colonising the Bismarck-Fall are 'engaging in farming methods that are poorly adapted to agro-ecosystems at lower elevations' (UNDP 1998: 4), a comment that stands in total contrast to the findings of the SFS which argue that the rapidity with which the Jimi settlers have adjusted to the ecological opportunities offered by lower elevations is actually quite remarkable (VanHelden 1998b: 165). Like the draft GEF brief, it also suggests that Birds of Paradise are still being hunted, although such hardly takes place anymore. A number of other bird species are the focus of trappers, aiming to sell these birds on the Madang market.

The Project Formulation Document (PFD) also pays attention to the dangers of logging, confirming the views of the SFS that the Bismarck Fall is at little risk due to its steep slopes, but does not mention the fact that much of the lowland forests along the Ramu River may not be at risk either, as they are more or less permanently inundated. In the Core Conservation Area, the main area under threat from logging, the alluvial floodplains just below the Bismarck Fall, is also the area where most Jimi settlers have built their villages (VanHelden 1998b: 156-160). Other areas at risk are areas allotted to logging north of the Sogeram River, where the BRG organised the

signing of the conservation deed, and in the Middle Ramu area.[63] The PFD is much more realistic than the draft brief when it argues that 'it must be emphasised that these pressures are small' (UNDP 1998: 4). In essence, the PFD is based on the assumption that the threats of forest loss due to horticulture and hunting practices are limited but can not be ignored in the longer run. The document thus balances between the need to sketch an endangered environment in order to secure GEF funding and the wish to do so without too blatant an exaggeration of threats.

The main amplification in the PFD lies in the assertion that 'parts of the project area' are exhibiting population growth rates of 3.5–4 percent due to such factors as in-migration and a decline in traditional family planning practices' (UNDP 1998: 5). A possible source of information for this suggestion is Stanhope (1970 in VanHelden 1998b: 136) who found that in the early 1970's annual growth rates among the Breri on the Middle Ramu River stood at some 3.5 %. It could also be an erroneous interpretation of a TNC project document (1998: 10) that argues that 'the situation in general in PNG is one of accelerating population growth. Birth rates average in the 3.5 – 4% range per year'. By only mentioning birth rates, and not child mortality, this gives the impression that growth rates are extremely high, a conclusion that can not be drawn from this figure. The annual growth of population between 1980 and 1990 for Madang province as a whole is thought to stand at 1.8 % (UNDP 1999: 25). It however, is widely acknowledged that this figure may be too low an estimate due to undercounting in the 1990 census.

The available figures from the Ramu valley section of the project area suggest population densities of between 0.5 and 2 persons per square kilometre for the Bismarck Fall and Ramu Valley respectively. At such low densities, and without significant changing technology or the advent of logging, even with high population growth it would take long to significantly increase human impacts on the local environment. The available population data from Sepu village suggest a growth rate of some 1.6 percent for the population on the Ramu River. (For a discussion of the available sources of population information see VanHelden 1998b: 126-129). These estimates may also be too low due to the already mentioned problems with the 1990 census.[64] Even if populations were growing rapidly, what this means to the environment, is a different question altogether. There is no one-to-one correlation

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[63] The forest company winning the Josephstaal concession would also have the right to develop the adjacent timber concession in the Middle Ramu (UNDP 1998). Thus if the TNC had won the Josephstaal concession the middle Ramu could, at a later stage, possibly have been designated to a combination of conservation and sustainable forestry activities.

[64] It will be interesting to see the population figures from the 2000 census when they come out. These will likely show a much higher national growth rate than that standing at 2.3 % at the moment. Important for an analysis of the situation in the project area would be to break these down by census division in order to get a picture of what is happening on the Ramu River rather than at the national or provincial level. It might be necessary to omit the 1990 figures altogether in order to get an acceptable idea of average population growth over the last 20 years, as the underestimates for the period between 1980-1990 will otherwise result in an overestimate for the 1990- 2000 period.

between population numbers and environmental degradation as the Malthusian argument suggests.

This fear of growing populations is also present in the draft project brief which suggests that montane slopes in the Jimi Valley are under threat from erosion and declining fallow periods due to population growth (CRC 1998). While such is indeed taking place within the Jimi Valley, the available information on downward migration does not appear to suggest exponentially growing populations in the Ramu Floodplains. In the first place, those Jimi who are able to appear to orient themselves on the Waghi rather than the Ramu Valley. Secondly, many of those migrating into the Ramu valley die of malaria, while there is circumstantial evidence of a general decline in population among some of the Ramu River clans over the last couple of decades. Following a spate of deaths, migrants may move into the Ramu Floodplains or back up into the Jimi Valley, in an age-old response to misfortune. Such happened in the Foroko-Brimde area during the 1970's when Gainj settlers moved back up to the Tagui Valley (Filer *et Al.* 1995) and such happened again in 1999, when a substantial part of the Kema clans decided to return to their ancestral lands in the Jimi Valley. There may thus be a process of populations spilling over the highlands fringe into the Ramu valley, a pattern which combined with high mortality rates may be referred to as a 'population sink' (Stanhope 1970, Filer *et Al.* 1995, VanHelden 1998b: 136-138), but it is highly questionable whether this migration constitutes a major threat to the Ramu environment.

What both the mentioned draft project brief and the PFD ultimately have in common is that they regard 'the lack of understanding' by local people as the main threat to local natural resources. According to the PFD landowners in the Ramu Valley lack the 'basic capacity' and 'basic awareness' (UNDP 1998: 4) to manage their resources in a more conservation-oriented fashion. This illustrates the fundamental difference in approach of the GEF project designers and the Bismarck-Ramu team. Whereas the former claimed that nature in the Ramu valley is under serious threat, and argued that local people are to be blamed, the Bismarck-Ramu team saw communities as essentially conservation-inclined and regarded the unequal power relations that result from international market incorporation as the main threat to communities and their environment.

Another difference of opinion between the GEF proposal and the BRG approach concerned the use of financial incentives. The use of financial incentives is fundamental to the ICAD approach and it is in this vein that the proposal argues that 'without financing mechanisms such as community trust funds, micro-credit facilities etc. even communities that have interest in pursuing conservation and sustainable use options can not do so' (UNDP 1998: 5). Thus, while the Bismarck-Ramu team tried to practise conservation without the use of financial mechanisms, the latter argued that such could not be done without financial incentives to guarantee sustainability. The GEF draft brief mentioned above also contains this contradiction as it on the one hand argues that the Bismarck-Ramu project pioneers 'a holistic participatory approach that openly repudiated ... the provision of material

incentives for conservation' (CRC 1998: 9) and on the other hand argues that 'for conservation measures to be sustainable rural livelihoods will need to be enhanced' (CRC 1998: 11).

It appears that both sides of the argument about the disposition of local people towards their environment are prone to simplification and exaggeration. Those that think that local people are 'natural conservationists' tend to regard the absence of degradation as proof of their environmentally benevolent attitude. As I have argued in chapter 4, this is an untenable conclusion for the simple reason that many rural people in PNG simply have never had the ability or motivation to degrade their environment and thus never had to prove their conservation mettle. Conservationists regarding people as the main threat to the environment continuously fall back on facile population arguments and over-the-top descriptions of local livelihood practices to make their point. In this clash of caricatures, both tend to ignore the available information that suggests a much less exciting intermediate position.

THE BREAK AWAY PROJECT

For the Bismarck-Ramu project team in Madang things were moving far too fast. Whereas until May 1998 they still thought the Biodiversity Program and the UNDP Country Office were looking into the option of developing a small-scale stand-alone project, they now saw themselves thrown together with a much larger partner in what would become a complex and expensive undertaking. While the Madang staff had been busy in the field and dealt with collapse of the CRI, the chief technical advisor in Port Moresby was working on the new proposal and trying to meet the GEF requirements. Once he developed the basic principles underlying a joint TNC/BR proposal, these were presented during the ministerial visit to Madang, during which it became apparent that the small-scale proposal had been abandoned in favour of a joint TNC-Bismarck-Ramu proposal.

The Madang staff was aware of TNC's high profile attempts to gain access to the Josephstaal concession. It was an interesting idea that was closely followed by environmentalists throughout the country. The CD workers, however, had few positive feelings for TNC following a visit to the Madang office by the Country Director for PNG earlier that year. The latter was felt to be 'talking down' to the CD teams, telling them that with their knowledge of community development they could earn much higher wages and that they should be 'out there marketing their skills'. The CD teams thought his presentation to be 'cargo-oriented'. When the Bismarck-Ramu project team was thrown together with the TNC following the sudden emergence of the Biosphere Reserve concept, this was received with mixed feelings. A number of Madang staff and CD teams felt that the TNC was only interested in the Bismarck-Ramu project as it provided them with an avenue for GEF funding, a complaint which could also be levelled at the Bismarck-Ramu proponents of a joint submission.

In June 1998, three weeks after the sudden ministerial visit to Madang, a workshop was held at the Gateway Hotel in Port Moresby at which the Chief Technical Advisor of the Biodiversity Program, the UNDP country office, DEC officials, the TNC staff in PNG, the project team from Madang and several others convened to talk about the new GEF proposal. An immediate problem was that UNDP funding of the Bismarck-Ramu project ran out by the end of 1998 and that developing a much larger proposal would take at least a year to complete. This issue was partly solved by extending the existing budget up to the end of 1998. In December, however, the Madang team lost the New Zealand conservation manager because the program closed. The group was now out there on its own and, as the Biodiversity Program was officially closed, decided to take on a new name, calling itself the Bismarck-Ramu Group (BRG) until its future prospects became clear. At the Gateway meeting it became apparent that the funds needed for the development of a new six-year proposal were to be made available by applying for a separate project design grant. The GEF generally assesses large project proposals in two stages, financing a process of project formulation before actually considering long-term project funding. In the following months, the Biodiversity Program in Port Moresby, TNC and the UNDP Country Office rapidly developed a proposal for the so-called Project Development Facility (PDF) of the GEF, to fund the nine month design phase.

The full proposal that was to be developed in these nine months was vastly larger than the old medium-sized grant stand-alone proposal. Where the medium-sized grant proposal had looked at securing U$ 750,000 for a three year period, the joint TNC/BR submission contained a budget of no less than U$ 23.6 million for period of six to eight years of which U$ 5.3 million was to be funded by the GEF. The single largest component consisted of U$ 15 million to be brought in by TNC's forestry partner in order to develop the Josephstaal timber concession in an ecologically sustainable and economically viable manner. At the end of 1999, after two years of political wrangling, the TNC, bidding based on the quality of its proposal rather than on its inside connections, lost the concession to a Korean company. In many respects this outcome mirrored a complaint also made in *Race for the Rainforest*, which had argued that conservationists were handicapped as they had to 'play by the rules', while the timber companies bent these rules wherever they needed to (McCallum and Sekhran 1997).

BETWEEN CONSERVATION AND CONTROL II

While the chief technical advisor of the Biodiversity Program and the UNDP administration in Port Moresby and New York set to work on the PFD and the full TNC/BR submission, the project team in Madang became increasingly uneasy with the whole plan. In the first place there was a certain amount of resentment against the fact that the GEF could not fund a small stand-alone project requiring some U$ 250,000 annually in order to pursue a worthwhile trial in participatory community-

based conservation, but was apparently more likely to fund the large and complex TNC/Bismarck-Ramu submission. The Madang team with its highly developed sensitivity to 'cargoism' was well aware of the fact that too much money could inflict greater damage on its working relations with the Ramu communities than too little.

More important, however, was that the Madang team felt that although on paper the collaboration looked nice and solved the administrative requirements of the GEF, it would generate a raft of practical problems in the field. The proposal was from the start dubbed 'crazy' in its complexity, with the many involved organisations and their respective ideas and assumptions. An important issue of concern revolved around the administrative structure in which the Bismarck-Ramu team would be placed. The Bismarck-Ramu team had always cherished its independence and flexibility. It had moved its offices to Madang, distancing itself from the claustrophobic administration that had characterised the Lak project and had reduced its administrative burden through its contract with the Christensen Research Institute (CRI). This latter strategy almost failed when the CRI collapsed at the end of 1997, this time not threatening the self-reliance of its communities, but the independence of the Bismarck-Ramu team itself.

By mid 1997, however, the American Christensen Foundation that funded the CRI in Madang, ran into trouble with the US Tax Office. The tax exemptions from which the US foundation benefited were contingent upon the auditing of all its activities. The accounts of the CRI, however, proved to be so muddled that the auditors could not certify the institute's accounts over a number of consecutive years. Notwithstanding attempts on the part of the board to reconcile the various accounts and save the institute, the CRI had to close its doors in December 1997 in order to save the tax-exempt status of the foundation. Consequently, PNG lost what had until then been its best facilities for marine research. The director of the institute, also responsible for the education program of the Bismarck-Ramu project, left the country shortly afterwards.

The hypothesis that the CRI would provide an environment in which the project could calmly pursue it community work thus proved false, and the Bismarck-Ramu project saw itself confronted with a number of serious problems with regard to its housing, financing and administration. The housing problem was eventually solved as the premises previously occupied by the CRI were now leased from the hotel that owned them. The financial and personnel matters were after long negotiations with the UNOPS taken on by the Biodiversity Program. These issues took a lot of time and energy, distracting the project from its work in the Bismarck-Ramu area. As Ellis (1998: 42) notes, these events also 'shot home' to the project that it had been dependent on the CRI and that it now had to become more self-reliant in the same manner that it was telling local communities. The matter of control would come back a year later, when the joint BR/TNC GEF submission was being developed.

RESERVATIONS BY THE BISMARCK-RAMU TEAM

By the beginning of 1998, the Biodiversity Program was in trouble. Funding was running out by April and in order to continue operations both institutional and financial arrangements had to be made. At first it had been the intention of the chief technical advisor in Port Moresby to transfer the responsibility of the whole BT program to TNC one the Biodiversity Program closed down by April 1998. TNC appeared to be a good candidate to undertake an executive role in the second phase of the project and pull the GEF application together with the UNDP Country Office. Later, when the lifetime of the Biodiversity Program had been extended until the end of 1998, and when it became clear that the Bismarck-Ramu team in Madang cherished its independence, a different institutional structure was designed. The structure proposed a triadic division of labour along the zones of the Biosphere Reserve, with the Bismarck-Ramu team, strengthened with the position of a chief technical advisor, taking responsibility for the Core Conservation Area, the TNC and its timber concessionaire looking after the outer buffer zone in the Josephstaal area and with the Upper Ramu Local Level Governments responsible for the Outer Transition Zone in which oil ventures, the nickel-cobalt mine, oil palm and sugar plantations were active. The use of the Middle Ramu area between the Core Conservation Area and the Outer Transition Zone was to be determined as the project developed.

The entire project with its three different columns would come under a Provincial Steering Committee consisting of representative of DEC, the Madang Provincial Government, TNC and the UNDP. The Bismarck-Ramu team, however, saw this proposal as an outright threat to its independence and its conservation agenda. In the first place it feared that there would be a conflict of interest within the steering committee, as it would contain both logging and mining as well as conservation proponents. In addition, DEC was increasingly trying to take control of the project by vying for 'national execution' of the second phase in its negotiations with the UNDP country office. The Madang team was thus worried that it would be subjected to all kinds of unwanted political and administrative influences and increasingly fearful of losing control over events on the Ramu River.

More menacing than the expected administrative workload and the institutional structure of the future project, however, were the contradictions in the future dealings with communities in the Ramu catchment area. These first became apparent during the Gateway meeting. The CD teams, increasingly radical in their opposition to the local nickel-cobalt mine, oil palm developments and rejecting all forms of forest exploitation, did not want to be seen to collaborate with what they saw as 'the enemy'. This view clashed with the fact that the proposal for a Biosphere Reserve was supported by the nickel-cobalt mine and a sustainable forest concession. Therefore the TNC was, rather unfairly, perceived as 'just another cargo outfit', using the promises of royalties, jobs and income to 'buy' conservation. This view stemmed from the fact that the TNC approach reflected the Lak ICAD philosophy that had served as a counterpoint in the development of the Bismarck-

Ramu community entry approach in the first place. The irony of the fact that the failed Lak approach was now sprung back on the Bismarck-Ramu project, was insufficiently appreciated by those responsible for the TNC/Bismarck-Ramu project submission. It appears that these concerns became subsumed to the all out drive to access funds and safeguard the continuity of the program. Even if the Madang team would have been prepared to step over their objections to the biosphere philosophy they did not see how they could possibly explain to landowners in the Ramu area that they were supposed to conserve nature on the basis of strongly held convictions, while 50 kilometres further downstream, the same project was paying people to cut their forest in a sustainable manner.

The proposal that came out of the Gateway conference did not show much sensitivity to these practical issues, as it initially suggested putting TNC and the Bismarck-Ramu project in a joint office in Madang, while in addition proposing a 'Biosphere Reserve Stakeholder Forum' in which landowner groups from the Ramu basin, local-level governments and companies active within the area would meet to discuss their collaboration with the TNC and the Bismarck-Ramu teams. Such a forum would be exactly the place where the Ramu people would find out that while the Bismarck-Ramu component of the project was leading people towards self-reliance and conservation, the TNC was paying their Josephstaal neighbours to engage in forestry. Even without such a forum, news would trickle through quickly enough, probably meaning the end of the non-economic Bismarck-Ramu approach to conservation.

Thus in the view of the Madang team, the need to comply with the administrative requirements of the GEF, the all out drive to secure donor funding even if the various partners involved did not really see eye to eye, led to a highly complex project proposal. This proposal was characterised by an internally inconsistent project philosophy, as it on one hand focused on the non-economic community entry approach of the Madang group, while on the other developing an ICAD mechanism. While various briefs speak of the need for a 'strategic logic' to structure a successful proposal to the GEF, the designers did manage not solve this fundamental contradiction, the most common response being to build an ever-increasing physical and institutional distance between the two main stakeholders in what was to be a joint submission and co-operative endeavour. Consequently, the idea for a joint Madang office was scuttled, while the idea of the Bismarck-Ramu CD teams working in the Josephstaal area was rejected out of hand by the Madang group.

To the TNC this situation must have been most confusing. They were dealing with the Port Moresby Office and the chief technical advisor there, and assumed that he could make commitments on behalf of the Biodiversity Program, including the Madang project staff. As time went by, however, it became apparent that the Biodiversity Program itself was split over what to do, and that the chief technical advisor was pushed into a Janus-faced position, having to integrate both the philosophies of the GEF/UNDP/DEC/TNC coalition as well as the strong ideas of

his Madang field staff. Over time, it became increasingly clear that the Madang team of the Biodiversity Program was only co-operating because it needed future funding.

A BREAKDOWN IN RELATIONS

At the end of 1998, following the closure of the Biodiversity Program in Port Moresby, the departure of the NZ conservation manager and the chief technical advisor, left 12 CD workers, the DEC conservation manager, the church liaison officer, the expatriate CD trainer and a small number of support staff as the remainder of the once much larger Biodiversity Program. Following the formal end of the project, the Madang group took on the name of 'Bismarck-Ramu Group' (BRG), reflecting its ad hoc nature. In institutional terms the BRG was a sorry bunch. It did not have formal legal status other than being an unincorporated association; it did not have a board, no formal hierarchy outlining decision-making procedures and no financial administration. Due to the collapse of the CRI in 1997, its housing and office facilities were at the beck and call of the hotel from which they were rented, and financially the group and its field operations depended on the UNDP country office until the new GEF proposal was approved. The DEC continued to pay the salary of the PNG conservation manager, leading to the strange situation where a civil servant was found to be leading a non-governmental group.

Whereas other NGOs would immediately get to work in trying to sort these matters out and apply for funding to a large number of donors in order to achieve a modicum of institutional security, the BRG saw the lack of institutional trappings as a source of pride, cherished the informality of its structure, relied on its good relations with the UNDP Country Office and kept focused on its work in the Bismarck-Ramu area. The dissolution of the Biodiversity Program in Port Moresby not only meant that the BRG group was out in Madang on its own, but also meant that the gap between field operations and those responsible for the development of the GEF proposal became larger than ever. Whereas the UNDP Country Office in Port Moresby, the UNDP Office in New York and the TNC in Washington went about the development of the full-scale GEF proposal, the BRG continued work in the Ramu Valley.

As the BRG was now on its own and few links to DEC in Port Moresby existed, a certain radicalisation of viewpoints took place. At the end of 1998 already, DEC officials were shocked to find that during a joint workshop, the CD workers of the Bismarck-Ramu project were selling T-shirts with texts such as "MP's and Nappies are full of the same thing". An increasing number of CD workers felt that the nickel-cobalt mine which was being developed in the Bismarck range, as well as plans for oil palm development near Usino should be opposed at all costs and could thus not be an ally such as proposed in the joint BR/TNC proposal.

This also led to a hardening of the views of what TNC was trying to do, with the BRG increasingly preferring to be able to freely lash out at all resource-based projects operating in Madang Province. As the CD trainer explained

> 'It appears TNC will NOT get the Josephstaal concession... It is rumored the Koreans have the inside track. If that is the case we will be able to mount a more direct pro-environment, anti-logging campaign. ... We feel that the biodiversity will best be preserved by letting the Koreans have the concession as there is a lot of anti-logging feelings in the areas. Had TNC got the concession we would have had a less direct approach. Now we can open up' (Lalley to VanHelden 15 July 1999).

Consequently, the relations with the TNC, formally its partner in a joint GEF submission, were not particularly good. Halfway 1998 the TNC had established an office in Madang and its two American consultants would regularly visit the BRG in order to discuss issues. They however, were generally coolly received because, as the church liaison officer of the Bismarck-Ramu team explained: *'mipela bikhets'*, 'we were arrogant'. As the TNC tried to interest landowners in the Josephstaal Area for the sustainable logging project they gained an interest in the community entry process that had been developed by the BRG. Repeatedly, TNC asked for assistance from the Bismarck-Ramu team, first in using the CD teams in the Josephstaal area, then in asking the CD trainer to train their own field staff. Both demands were rejected as the CD teams did not want anything to do with the TNC for fear of jeopardising their work in the Ramu valley.

A number of CD teams had contacts in the Josephstaal and it was generally believed that any association with the TNC timber project would harm the conservation work in the Ramu communities. By the end of 1998, a number of BRG CD workers were fired following disputes. Still, they were well-respected trainers, among them some of the very first with whom the project started in July 1996. The Bismarck-Ramu team stayed in contact with all of them and finally recommended several of them to the TNC for the training of its field staff. Consequently, TNC was training its community workers in a very similar community entry process to that used by the BRG by the beginning of 1999. Still there was the strange situation that while ostentatiously partners in the GEF submission, and both located in Madang, there was little communication between the two project teams. Relations between the Bismarck-Ramu Group and the TNC did not improve when the BRG told UNDP and TNC in the beginning of 1999 that it did not believe that the TNC would get the Josephstaal concession, even though the first hurdle, that of its recommendation by the Provincial Forest Management Committee to the National Forest Board had been taken. The CD teams with their many and varied contacts within the Madang area had been informed that a Korean company had the inside track with the National Forest Board and that the TNC proposal would be rejected. This assessment later proved correct.

THE UNDP/TNC MEETING WITH THE BISMARCK-RAMU GROUP

Even though the confusion surrounding the allocation of the Josephstaal forest concession continued, it was by the beginning 1999 clear that hard choices had to be made if the full-scale GEF proposal was to be brought to a good end. GEF funding for project development was in place and two questions had to be answered. The first was whether the TNC would acquire the concession, the second was whether the BRG was actually on board in the joint TNC/BR submission or not. In order to answer this second question a workshop was organised in Madang at the end of March 1999 during which the UNDP/GEF project development specialist, formerly the resource economist to the Biodiversity Program, and the Financial Director of the TNC came to discuss matters with the BRG. All CD workers were invited for the meeting and four of them showed up, while the permanent Madang staff was there as well.

The meeting got off to a rocky start with the CD workers emphasising that they could not work together with the TNC because they saw three main problems: i) the TNC used a cargo-approach, while the BRG emphasised self-reliance, ii) the TNC operated at the landscape level through its adoption of the MAB concept, while the BRG operated at the community-level, and iii) there would be a problem when local people would see the CD workers collaborating with a logging company. Notwithstanding this start, it turned out to be a good meeting after all. The TNC director took a low-key approach, explaining the view of his organisation, the fact that it was in the first place a conservation organisation, the nature of its proposed operations in the Josephstaal area and the Biosphere Reserve concept while taking ample time to answer questions. In doing so, he cleared away a number of preconceptions held by the CD workers with regard to the proposed timber operations of the TNC forestry partner. The director explained the overall goal of maintaining productive forest capacity and diversity over the longer term, and went into a detailed explanation of the principles of reduced impact logging and independent certification. He emphasised TNC's commitment to worker safety, downstream processing, and the fact that no township would be built. In his judgement the BRG staff were impressed with how different this was to the usual Asian logging practices (Cohen to VanHelden 9 April 1999).

The GEF project specialist in turn explained the requirements of the GEF and the way in which the TNC and the Bismarck-Ramu project complemented each other in meeting these requirements. He also explained the principles of the Biosphere Reserve and the need to ensure sustainability. At a certain stage the UNDP project development specialist drew the three circles of the Biosphere Reserve concept out on the black board, explaining the various zones, only to see them wiped out by the church liaison officer who said it made no sense to have outsiders draw up region-wide conservation zones, when resource decisions are made at the community level. In addition, the church liaison officer argued that Melanesian communities had a much more holistic view of resource management issues. The ensuing debate on strategies to assure sustainability eventually led to a stalemate. The UNDP specialist

contended, in line with mainstream GEF thinking that spatial zoning and economic incentives were necessary to guarantee the long-term sustainability of biodiversity conservation within the proposed Core Conservation Area.

The CD teams in turn, maintained the view that this had nothing to do with sustainability as such could only be achieved if local people were empowered to look after their resources themselves. In this view conservation had to be done for its own sake and sustainability was in fact a consequence of a strongly held conviction within the participating communities, not of economic incentives. The discussion over the issue sustainability also touched upon the situation with regard to the Ramu River WMAs, with the CD trainer conceding that that though he was pleased with what had happened in Sepu, he was not so sure the people there would say 'no' to a logging company coming in with cash. The question than became whether the proposed reserve was likely to generate higher levels of sustainability than the CD approach, and whether the reserve idea was worth taking the risk as the CD's feared that the new approach would destroy their achievements on the Ramu River.

DOING AWAY WITH THE JOINT SUBMISSION

At the end of the meeting, it was agreed that the Madang group would come back to TNC and the UNDP to make clear what their choice was going to be. That choice turned out to be a difficult one. The CD workers were impressed by the presentations given, and appreciated the relationship with the UNDP Country Office, the UNDP GEF specialist and the TNC financial director. Much like the CD workers themselves had built personal relations with Ramu villagers in order to feed their conservation and development messages; they now found it difficult to upset relations with these people. On the other hand, the grave doubts about the Biosphere Reserve concept and the issue of sustainable logging remained. It appears that many of the staff made a distinction between the UNDP Country Office on the one hand and the TNC/GEF on the other. One of the CD workers for example explained that he did not like the Biosphere Reserve concept, and that he did not agree with TNC's sustainable forestry approach, but that 'going independent' entailed the risk of jeopardising a good relationship with the UNDP Country Office, which made it difficult for him to decide what to do. Everyone realised that opting out of the joint GEF submission could mean the end of the project if the UNDP Country Office cut funding and if another donor was not found in time.

More diplomatically inclined people in the UNDP Country Office suggested that the BRG did not really have to take a decision at all, as the TNC did not yet have the Josephstaal concession and as the likelihood of it not getting that concession was growing. By simply waiting for the outcome of the application process, BRG could avoid turning down the joint GEF submission that would give them the name of being a group of radical and arrogant naysayers. The CD trainer and the conservation manager, however, decided that it was time for a decision as the ongoing discussions with TNC, the status of the Josephstaal concession and the

design of the GEF project brief were taking too much time and energy and were detracting the group from it its fieldwork. In addition, the management team of the BRG felt that the group had to make a principled decision with regard to its philosophy, rather than being led by outside agencies, the fear of losing its funding and the turn of events. This latter point was especially brought forward by the CD trainer who took the view that people matter more than institutions. His philosophy, based on training people to think critically for themselves, meant that it was of little importance where these people work. Institutions come and go, but in the end the quality of people determines the quality of work and in the longer run the development course that a country takes. In this view, the Bismarck-Ramu Group was a temporary training vehicle. A good one, located in a pleasant spot, with an excellent donor in the form of the UNDP country office, but even so not indispensable.

It was the first time in the almost three years that the CD teams had been together, that several talking sessions failed to come up with a jointly agreed solution and the conservation manager and the CD trainer worried about the cohesion of the group. Finally a decision had to be made and a session was held during which the CD teams were prepared for the eventuality that a vote would have to be taken. Long talks were held to the tune that if push came to shove and one or the other decision was voted for, this should not affect group solidarity. The decision was to stand and was to be defended by the whole group regardless of personal opinions. When at the end of April 1999 the moment finally came, those present voted with a margin of one vote to withdraw from the joint submission. The relief that some decision had finally been made was shared by all, and a year after the Biosphere Reserve concept had first been brought up during the ministerial visit, the conservation manager wrote a short letter to the UNDP country office, the UNDP GEF-specialist, and the TNC explaining that the BRG opted out of the joint GEF proposal. The UNDP in turn had to inform the GEF of the fact that the project development funds that it had made available would not be used. The tone of the letter written to the UNDP Country Office was slightly different. This being the main financial lifeline of the BRG, the letter emphasised that the rejection of the joint submission should not be seen as a rejection of the UNDP Country Office.

The responses to this decision wavered were very varied. Some thought it was the right decision, other responded with outright anger to disbelief. Here was a tiny NGO, with little or no institutional structure and a more than tenuous future, rejecting a U$ 23 million dollar submission to one of the largest environmental donor bodies because it could not agree on the principles underlying the planned intervention, and feared loosing control over the process that it had started. It also put the BRG in a tight spot. Whereas the UNDP Country Office agreed to continue funding the group, it was clear that this could not go on indefinitely and that the future of the project depended on the groups ability to solicit new funds and to transform itself into an independent NGO with all the trappings in the form of a board, a management team, a financial administration and audited accounts.

During 1999 and 2000, the BRG widened its scope of activities considerably, becoming a sort of clearing house for a number of smaller community projects implemented by CD workers and former CD workers, with funding provided by the German Development Service. In addition it spent much time setting up accounts, developing a basic management structure, and writing a much smaller project proposal for a number of potential donor agencies. The church strategy gained momentum through the conduct of large countrywide environmental crusade for which an American preacher came over. The preacher held a number of public gatherings in May 1999, which drew wide publicity. Only the careful observer would note that the various community projects, as well as the environmental crusade, were operating from the same post office box as the BRG.

THE BISMARCK-RAMU GROUP AFTER MAY 1999

Over the last few years, the philosophy of the Bismarck-Ramu philosophy has been losing some of its sharper edges. This most clearly visible with regard to 1) the relations between communities and other outsiders than the CD workers of the Bismarck-Ramu team, 2) the vision of people as natural conservationists, and 3) and - most interesting of all - the use of economic incentives.

During 1998, while the CD workers talked to local people about self-reliance and conservation, the people of Sepu also started a number of small-scale development initiatives. At Sepu, as in many other places, the main priority lay with establishing a school and with health issues. There used to be a school in the village and a number of elderly people know how to read and write, but since the school broke down a whole group of children and youngsters is growing up illiterate (VanHelden 1998: 107). When this issue was brought up, people would obviously complain about the loss of Government services as rural Papua New Guineans do across the country. Rather the pointing to the responsibilities of the Department of Education, however, the CD workers asked people what they could do about this problem themselves. Over time, a plan evolved to support the training of local literacy workers and pre-school trainers. The Sepu people themselves constructed a bush material school and in 1998 the first literacy lessons would come off the ground. One of the best stories is the one concerning a delegation of Sepu people visiting the Provincial Education Department at Madang in search of a blackboard and chalk. They explained that their school had long since been abandoned, that various requests had come to nothing, and that they had now built their own school and that one or two literate people were to be trained as literacy trainers. They expected the Government to at least supply them with some basic materials, something which he astonished officials did (PC Lalley March 2000).

Health issues proved more difficult. Over the previous ten years the Sepu community had repeatedly failed to secure a community health worker for the village and was after deliberations with the CD workers, considering sending one of its people for training on preventive and environmental health measures. Following

the drought of 1997, for example, the Sepu people expressed their doubts about the quality of their drinking water. The project had the water quality assessed and could inform the village that their water was suitable for drinking, but that contamination could not be avoided if too many pigs would be left to wander around. The village therefore decided to move its pig herds to the other side of the Ramu River, rendering its source of drinking water safe. Similar measures to manage pigs and to dig pit latrines were taken in a number of other villages as well. The difference in approach between these cases and the example of the water project in Lak given in chapter 5 is self-evident.

What these initiatives have in common, was not only the fact that they were to a large extent self-propelled, but also that local people themselves engaged with outside institutions. People were stimulated to seek out the relevant outsiders that could help them after having first assessed what they themselves could do about the problem. To the Bismarck-Ramu project team the issue at stake thus gradually shifted from preventing *any* relations with outsiders, to the question of control. As long as people knew what they wanted, why they wanted it, and were able to take the lead in the process such linkages could be beneficial to the involved communities. Maintaining control, however, is difficult as many well meaning organisations and projects have their own agenda, dynamics and priorities, often subsuming those of local people to their own. In a sense the Bismarck-Ramu project thus acted as a guardian to local communities, carefully helping people to select institutions that are to be trusted and the conditions under which these are to be admitted. The rejection of the forest officials at Sogeram (See previous chapter) is an example of the manner in which people were prepared by the BRG to say 'no' to outsiders that they do not wish to deal with.

The second issue already came out during the meeting with TNC when the CD trainer mentioned the fact that he was not sure if local conservation convictions would hold in the face of logging. This was departure from the initial view of local people as conservationists, who may have erred but can be made to recoup their 'traditional' respect for nature. As I have argued in chapter 6, this also served as means to motivate the CD workers and local people. Recently he would argue:

> 'I'm not sure BRG believes that people were traditionally conservationists. I think they believe people had/have a relationship with the land that we expatriates may not understand. Also the *masalai* (spirit) places and other *tambu* (forbidden) places, and places of malaria which were avoided and thus conserved. Certainly this is conservation by default, but still it is conservation' (Lalley to VanHelden 10 August 2001).

This is a departure from the earlier visions of local people, which has also had an impact on the manner in which the Bismarck-Ramu Group views to role of economic activities. Ironically, the BRG is now more open towards the use of economic incentives, be it only *after* a community has gone through its program and has demonstrated its ability to organise itself. The BRG is now considering giving training on 'money', what it is and how it works and is actually in a number of

places looking at the possibilities to use small-scale forestry projects as part of its program. Thus while its community entry strategy remains in place, and the CD workers continue to de-emphasise economic issues in order to defuse unrealistic expectations and cargo-thinking, the direction in which communities go after this process of community entry is more open then ever, and the possible range of institutions and tools that are used to assist communities in managing their lives and resources has grown.

THE BISMARCK-RAMU GROUP AND CONSERVATION IN MADANG PROVINCE

In other respects, it appears that the Bismarck-Ramu Group is becoming more radical and more openly critical than it could afford to be when it was still part of the Biodiversity Program. During a 1998 information campaign against mining projects, for example, representatives of the nickel-cobalt mine would call the UNDP to complain about the activities of the BRG. These complaints were never taken serious, and over time the BRG would come to play a growing role in disseminating information concerning a range of environmental and political issues in Madang province. Over the years the BRG has become something of action group, picking up conservation issues as they come along and gain political importance. It thereby makes use of its network of different contacts throughout the province, directly informing local people as to the choice that they have, and the patterns of interaction that they can expect. The result is a very different and much more 'political' type of conservation than that first aimed for with GEF funding, but definitely one much needed in the high pressure environment that characterises PNG resource issues. Possibly it is one that is more worthwhile in the longer term than the blind pursuit of protected areas that characterise most international conservation interventions.

In recent years, as the BRG no longer feels the pressure to meet the goals as defined in its foreign sponsored project documents, its drive towards the establishment and management of WMAs on the Ramu River has lost some of its urgency. In contrast to the previous years, where it had to more or less think about the wishes of its donors, it can now determine its own course. Consequently, a raging debate is taking place over what the BRG should actually do. Is it to be a conservation agency in line with its initial formation, a community development organisation as it has developed, or a training centre to teach other organisations the principles of its community entry approach? Is it to stay involved in the further development of the Ramu River WMAs or is it to transfer the responsibility for WMA formation and management to a conservation organisation? These issues have not been solved.

In the beginning of 2001, as UNDP funding was about to come to a halt, a three year funding proposal was accepted by a coalition of the German Bread for the World and the Dutch Interchurch Organisation of Development Co-operation (ICCO), enabling the BRG to continue its work in the Ramu Valley and to redefine its place in the spectrum of PNG environmental organisations.

CONCLUSION

To present, as I have done in the opening chapter, the discourse of 'fortress conservation' as a rather monolithic discourse which is only gradually being challenged is rather limiting. It is clear that preservationists policies still persist in the eligibility requirements of the various donors, but it is also clear that the daily practices as developed by the Biodiversity Program or other conservation projects in PNG have very little to do with these mainstream ideas. In practice, the project implementing agencies and their staff draw ideas from a number of different discourses and visions.

The suggestion that people in PNG can simply be enticed to establish strictly protected areas of several tens of thousands of hectares is unrealistic. Even though project documents continue to slate the establishment of a sizeable 'conservation area' (UNDP 1993), a 'national park' (CRC 1996a), or 'core conservation area' (UNDP 1998) as the ultimate aim of their projects, there is not a single project implementing agency in PNG that does not in practice enter into the development of much less strict land and resource use plans. The grand scenarios of national park formation that dominate the multilateral donor and the international conservation agencies have nothing to do with actual conservation practice as it takes place in PNG. In practice, pragmatic considerations as to what is deemed possible and desirable take over, and the various project teams pick elements from various discourses in order to legitimise and shape their interventions.

It is only when the donors with their decontextualised and generally preservationist narratives as to what is conservation and what not, come into the play, that project teams are pulled back into line, trying to represent their situation in such a way that it secures another round of funding. Once the money has been allocated however, agencies go back to the day-to-day negotiations with local landowners, in the very best scenario coming up with integrated land use plans in which only certain areas are slated for total protection. In a sense, the difficult practice of having to deal with nature and the people that live within nature as it evolves in PNG conservation projects, is a much more mature than the preservationist visions of separating people from nature that dominate the donor agencies.

The wide gap in perceptions between various stakeholders, especially between the field staff of the Bismarck-Ramu programme and the eligibility requirements of the GEF, and the manner in which those responsible were caught between the realities of the Ramu Valley, the philosophy of the Bismarck-Ramu project and the guidelines of the GEF has been the topic of this final chapter.

CONCLUSIONS

In these times of strong environmental rhetoric with regard to the loss of tropical biodiversity and concerted interventions in developing countries in nature's name, detailed anthropological studies of the actual practices that constitute such interventions may cast light on the ideological and methodological struggles that these contain. As conservation interventions in developing countries are inevitably characterised by strongly opposing - often culturally and professionally influenced - understandings of the relation between mankind and its environment, and the nature and source of the problem such project interventions tend to fall apart in a variety of debates and factions. These conflicting understandings become apparent at the 'interface', the points of interaction where people and groups of people engage in daily negotiations 'to make things work'. Such interfaces not only occur within the hierarchy of the project, such as between administrators and project staff or between project staff and local people, but also between different professional groups, among the various ethnic groups 'targeted' by the intervention, between different generations within these communities, and between men and women. It is within this framework that this study has recounted the history of a complex biodiversity program in PNG.

Chapter one provided a background to some of the narratives that legitimise conservation interventions. Chapter two outlined the specific nature of conservation policy in PNG, and the experiences of the Biodiversity Program in the Lak area in that country. Together they provided a background to a more detailed account of the program's interventions in the Bismarck-Ramu area between early 1995 and mid 2000. Chapters three and four described in some detail the Jimi and Ramu societies and the interactions between them, with special attention given to the way in which intermarriage relations enable Jimi highlanders to settle in the lowland Ramu Valley. Chapters five and six dealt with the first interventions in the Jimi valley and

the shift in thinking that the program went through as a result of the combined experiences in the Lak area and the Jimi Valley. This shift in thinking would be reflected in a fundamental change in staff make-up. In the remainder of this thesis, the second half of chapter six outlined the principles of the highly reflexive and participatory community-based conservation strategy that was developed, while chapter seven deals with the subsequent interactions with different groups of people, and the manner in which the project became enrolled in local territorial concerns. The final chapter dealt with the manner in which the project breaks away from its donors due to the fundamental differences of opinion over the nature of 'local people', the 'conservation' and 'development' problems perceived and the necessary policies to address these.

In looking at these interventions, I have used an interface analysis as my main methodological framework, presenting the project as an 'arena' in which various individual and collective actors, each equipped with their own mode of understanding, agenda's and power base interact. By looking at what divides these various actors, and how they interact and contest each others ideas and authority, an interface analysis may help to explain the particular course that a planned intervention has taken, draw attention to the crucial differences in understanding and clarify the evolution of project ideology and practices through time. Important to note is that the extent to which interfaces constitute a site of struggle fluctuates, with the fissures between various actors taking on varying levels of importance and urgency through time. In a number of cases such interfaces are 'solved' in the sense that they either 'dissolve' into a common understanding, or alternatively they develop into a 'middle ground' where people co-operate, be it for often different reasons (White 1991). In these final pages, I will revisit the main interfaces that have become apparent in the Biodiversity Program, discuss a number of the underlying ideas that constitute the most important sources of contention within the program, and provide an overview of the main changes in ideology and implementation that have taken place.

INTERFACES AS CLASHING WORLDVIEWS

The key issue in an interface analysis is to define the various fault lines that run through a planned intervention. It is at these fault lines where representatives of opposing world views, each with their own explanatory framework, individual and collective agenda's come to interact and where both the key differences as well as the options for co-operation, become apparent. Cussins (1998) Speaks of a clash between 'whole moral universes', which represent a complex mixture of images of nature and people, the role of science and professional and cultural values. Important to note is that the various actors playing a role at these interfaces are not just detached collective or individual actors but tend to represent whole networks of people and organisations which in turn represent a series of powerful, often ideological and culturally determined images and narratives.

In this study, the fact that the daily encounters between individual and collective actors at the interface may represent whole life worlds has maybe become most clear in the discussion of western forms of conservation (chapter 1) as opposed to the ideas held with regard to their environment by local people (chapter 4). Westerners regard nature as vulnerable, under threat and something that should be cared for, giving themselves the responsibility to look after nature, often viewing protected areas as the main instrument to safeguard nature separate from human society. Local people in the Bismarck-Ramu area do not share the idea that nature is vulnerable. They have to work hard to keep nature from taking over, cutting their gardens in the bush. In general they tend to regard people as the weaker of the two. They certainly do not share the idea that they should take responsibility for nature, as such is, certainly by the elder people, seen as the task of the spirits of the bush, who need to be propitiated or tricked into surrendering wildlife. The idea of not using nature, as it would be more valuable in an untouched form is completely alien to pragmatic and utilitarian people. In addition, setting land aside without using it may weakens one's claims to ownership, as it is exactly through the use of land, the cultivation of crops and the planting of trees that ownership and use rights are created.

While such images may seem rather ephemeral and theoretical, it is at the interface between various groups and individuals where apparently clear cut, but in practice highly ambiguous, concepts such as 'conservation' and 'development' are loaded with meaning and translated into practices that serve the understandings and interests of the actors concerned. It is at the interface between CD workers and local people for example, that negotiations are conducted with regard to the management of resources, the way in which such should be done, and that competing explanations, realities and interests become apparent.

Interfaces in the Biodiversity Program

In the analysis of project development, most attention is usually given to the interconnections between project and people, taking a dyadic view of planned intervention as consisting of a project that intervenes and local people that are being intervened upon. A look at the fissures that run through the Biodiversity Program, however, allows us to identify a variety of different nodal points, which, each in its own way, constitute a source of debate, contention and argument. I can not hope to identify them all, as one's field of vision is inevitably limited, but believe that the account presented in this study allows us to identify to following crucial interfaces for both the Lak and the Bismarck-Ramu projects.

Both in the Lak as well as in the Bismarck-Ramu project the field staff of the Biodiversity Program tried to engage local communities in the ambit of its conservation program. In essence, this consisted of communications between people and project either through plenary meetings and the awareness drive in Lak or through the conduct of patrols and the use of PRA exercises in the case of the

Bismarck-Ramu project. Presenting it as such, however, is a gross simplification as these encounters were seldom two-sided. In practice, both local people and project staff are made up off a number of factions or are supplemented by other actors. To start with the latter aspect, in the case of the Lak forums, during which local people were consulted over their participation in the ICAD proposal, and asked to terminate the logging agreement, the logging company constituted the physically absent, but in practice omnipresent competitor to the ICAD project team. In the case of the Bismarck-Ramu project it is clear that there is no such thing as 'local people'. Not only the apparent division between Ramu landowners and Jimi settlers plays a role, also the fact that the highly competitive Jimi themselves consist of many different clan and sub-clan groups proved of crucial importance to the way in which the project intervention was received, absorbed, and enrolled. Other fissures running through these communities include the different interests of women and men, the latter being more predisposed towards managing resources than the latter, and between youngster and elders. The different interests across the generation gap can be illustrated by the fact that the Ramu elderly would like to cease intermarriage with the Jimi settlers, while the Ramu youngsters, in search of a wife, simply disregard these directions.

Within the Biodiversity Program team itself, a number of different interfaces became apparent. The Lak project, for example, was dominated by the differing interests of the higher management in the UNDP Country Office, which overemphasised aspects of administration, proper procedure and accountability, and liked to play power games, while the staff of the Biodiversity Program was trying to establish a presence in Lak as quickly as possible in order to outcompete a local logging operation. This conflict became especially apparent with regard to the construction of the Lak base. Around the time of the phase two negotiations with the TNC and the GEF the Bismarck-Ramu project was characterised by two essential fissures, which put especially the chief technical advisor in the Port Moresby office in a difficult position. On the one hand there was the interface with the donor which revolved around the use of economic incentives to secure conservation, on the other there was the Bismarck-Ramu team which vehemently opposed the use of such incentives as these were thought to destroy self-reliance. This situation points to the fact that not only the interfaces themselves may form a site of struggle, but also that the contradictory requirements *between* a number of interfaces in one and the same social setting may constitute a source of problems.

As described in the last chapter, the chief technical advisor and the UNDP consultant made a concerted but unsuccessful effort to bridge the gap by drawing the sustainable timber concession of the TNC into the fray. Below the surface of these contradictory requirements lay opposing visions of local people, with the GEF taking a rather cynical view of local people and regarding economic incentives as a way to secure conservation in the longer run, while the Bismarck-Ramu team thought conservation could be secured by grounding it in a communally held conviction. Even deeper than this issue lay the issue of control. The Bismarck-Ramu

team most of all feared to be subjected to unwanted pressures, fearing that its work on the Ramu River would be undone if the provincial politicians and the biological and economically inclined technocrats of a second phase program would take over.

There is one obvious interface that is missing throughout the Biodiversity Program. That is the interface with the logging companies. Although the conservation debate in PNG can be framed in terms of a competition between loggers and conservationist over local landowner's resources, there is very little interaction between mainstream timber organisations and their conservationist opponents. This stands in contradiction to practices in West Africa where conservation agencies and timber companies actively discuss matters, and where in some cases forest companies play a role in curbing the hunting for protected species in their concessions. In PNG, this debate has not evolved beyond the highly politicised and public discussions between the various stakeholders in PNG forestry and attempts by the Biodiversity Program in Lak and the Nature Conservancy in the Josephstaal area to evict the proponents of industrial clear felling and to replace them with ecologically more sustainable and socio-economically more advantageous operations.

INTERFACES AS ORGANISING ENTITIES

Important to note is that interfaces do not represent fluid and nondescript zones of encounter in which various actors bounce ideas off against each other, but tend to develop a logic of their own. It is through the practical encounters between various people and groups, each with their own history, images, needs and strategic resources that patterns of interaction develop, social boundaries are drawn and that the interfaces itself turns into an element that structures future encounters.

Thus the encounters with local people in Lak organised in plenary meetings, or the meetings at the market in Bubkile in the Jimi Valley took the usual shape of conservationists talking down to local people. The involved expatriate personnel told people to become aware of their conservation predicament, informing them of the risks they were taking by living as they did, and suggesting a vague and poorly defined alternative called ICAD to their present situation. People in turn listened and adopted the resolutions or invited the project back in. Whereas these public meetings ostentatiously produced the outcomes desired by the project, they would usually be disputed later on, or would prove to have little impact on the manner with which people treated project staff. When people in the Jimi valley, briefed by the community facilitator, finally thought they knew what the project wanted, and started making the right noises about conservation and keeping logging companies out, a new community development approach changed the patterns of interaction as they had evolved, throwing the Jimi people into confusion and later anger.

The community development approach of the Bismarck-Ramu project took a different format of interactions with local people. In the first place it involved Papua New Guinean villagers talking to Papua New Guinean villagers, rather than highly

skilled expatriates giving presentations to largely uneducated rural communities. Although plenary meetings were also called for during the later community entry approach of the Bismarck-Ramu project, much of the interactions between project staff and people took place before and after these meetings in a much more informal setting. The community workers of the Bismarck-Ramu project were encouraged to work and spend time with local people, thus gaining an insight in local divisions of interest and the make up of the various communities. What worried local people about this process was not so much the presence of the community development workers who would strike up friendships throughout the area, but the fact that people did not know what the project was after.

Even three years after patrols had started villagers would profess to be baffled as to what the community development workers 'really' wanted. The community development workers in turn, wanted people to be 'self-reliant', while simultaneously pushing a conservation agenda through the selective use of PRA tools and metaphors. If people were unhappy they could always ask the teams to leave, which they on one occasion indeed did. Most communities, however, baffled as they were, had no reason to evict the project but rather continued to hope that something would eventually emerge. The community development workers in turn, hoped that the local communities would through the continuous emphasis on self-reliance and the elaborate community planning process, address those issues that they themselves found relevant. Even though it was presented as an open-ended process, in practice the community development approach of the Bismarck-Ramu project depended on a carefully thought out combination of exercises to 'sneak conservation issues in', and consituted a highly political exercise. The responses to these meetings and the various tools, would allow the community development workers to label people either as 'self-reliant' or 'cargo thinkers' if necessary excluding the latter from future work.

The interfaces described above have in common that they occur between the hierarchical layers of the program, with UN administrators clashing with project administrators, and the project staff clashing with various groups of people. The one important interface in the Biodiversity Program that runs across all layers of the organisation is the one between biologists and social scientists.

THE BIOLOGICAL VERSUS THE SOCIAL SCIENCES

Throughout the Biodiversity Program runs the fissure between social and natural scientists, an interaction which not only covers notions of best practice under PNG circumstances, but which also entails a discussion over the relative authority of the biologists with their emphasis on positivistic science and that of their community-oriented colleagues from the social sciences. Thus, where the Lak project was dominated by the former, the Bismarck-Ramu intervention would be largely driven by social scientists. Both projects have been criticised by the other party. Social scientists for example tend to argue that biologists should spend more time thinking

about and talking to local people (see chapter 4), while biologists strike back arguing that it is all very well to talk to local people, but of little use if these people do not own the resources worth protecting, or if the outcome is some wishy-washy form of environmental protection (see chapter 8).

These approaches fall apart in very different interpretations of what conservation projects should look like and which issues take priority. Examples of both a nature-oriented project and a people-oriented approach can be found in the history of the Biodiversity Program. In the first place there is the technical and managerial attitude to conservation as seen in Lak. This is the mainstream conservation approach as pushed by the international conservation agencies. It is usually based on a spatial zoning program and accords prime authority to, often expatriate, biologists and conservation managers who select the area of their choice on the basis of biological indicators, develop a management regime based on an analysis of threats and subsequently aim to develop mechanisms to coerce or entice people into certain beneficial forms of behaviour. In this view, social scientists are an 'add-on' to a largely technical and managerial project. In the more enlightened varieties of such programmes, local people may voice their concerns on carefully selected issues. As recounted in chapter 1 the sustained conflicts between local people and project managers, are often replicated in differing opinions between the social and natural scientists that make up the project teams.

In the second place, there is the community-based form of conservation as proposed by the Bismarck-Ramu project that argues that people can very well look after their environment, and that it is their decision anyway. In this view biologists may have a place in the program, but only as advisors after people have decided that they may need certain information. In practice the project is pulled by community development workers, trainers, and the odd social scientist.[65] Conservation outcomes may be based on spatial zoning through land use plans, but may also include simple rules of behaviour such as 'we will not allow timber companies into our lands' such as that contained in the deed agreement among the Sogeram clans (See chapter 7). The weak spot in such management regimes is the issue of enforcement in the face of social change, a break down of 'traditional' patterns of authority, the monetisation of the economy, growing feelings of relative deprivation and the offers made by foreign resource developers.

FROM GROUPS TO INDIVIDUALS

Talking about interfaces as existing between parties and their respective worldviews, it is important to qualify and complicate the above description of the

[65] The latter is not necessarily indispensable as the CD workers, through their contacts with local communities, may gain sufficient information for the project to shape its daily interventions. In fact it may be more attractive not to have an academically inclined social scientist in the project as the outcome of his/her work may contradict the strategic representations of the project (See chapter 8).

various hierarchical, social and professional boundaries at play in the program. An issue of importance is to note that interfaces are not necessarily between collective actors. Often key debates are triggered or punctuated by individuals that do not appear to 'fit the bill', as they draw upon resources, affiliations and knowledge from a variety of sources. An example is the person of the Bismarck-Ramu community facilitator, one of the few educated people in the Jimi Valley, who having his residence among the settlers in the Ramu Valley, enlisted all his resources, contacts and information into his election campaign. Another is the community development trainer of the Bismarck-Ramu project who managed to turn a GEF/UNDP project, essentially based on the idea that an integration into world markets may serve to establish conservation-related incentives, on its head by pursuing a radical and experimental community development strategy.

People or groups of people thus do not necessarily act on behalf of the group to which they appear to belong. Long (2001) notes that such linkages, or the absence thereof, needs to be empirically established. Thus the ongoing debate between social scientists and biologists described in these pages is not one of *all* biologists versus *all* social scientists. The conservation manager of the Bismarck-Ramu project for example, accepted and supported the community entry approach wholeheartedly, thereby reducing the influence of his own profession on the interactions with local people. The resource economist, instrumental in developing the community entry approach and processing the Lak experience, would later emphasise the need to bring economic incentives back into the project in order to ensure sustainability and secure further funding. Among local people too, individuals played a similar role, with some Jimi agreeing to recognise the Ramu landowners as their hosts, while others constructing elaborate 'traditions' in order to assert their status of 'true landowners'. This study show that one of the main problems that well-meaning conservationists time and again run into is that they take public utterances by individuals as a reflection of group opinion.

One of the problems with mainstream policy discourses is that these provide no room for the manner in which individual and collective actors involved in planned intervention may act differently than their status or position would suggest. These discourses tend to fall back on broad sweeping reified images such as that contained in notions of 'community', 'local people', 'the program', or 'the social' versus the 'biological sciences' (Long 2001). Such imagery, combined with the practice of 'labelling' (Wood 1985), is attractive to the policymaker trying to design a development or conservation project geared towards a specific 'target population' but does not allow for an understanding of the complex interactions between individuals and groups that tend to determine the specific outcome of such interventions. Often such imagery is based on a number of implicit assumptions about local people, their communities, their leaders and so on. In chapter 4, I have critiqued the way in which such simplified and often implicit images with regard to local society set the stage for subsequent disappointment among conservationists. The most complete treatment of such stereotypes, however, was given in the

opening chapter where I provided an overview of some of the stories that we tell concerning local people. In chapter eight I have described how such stereotypical narratives are reproduced as part of the process required to secure further project funding. These stereotypical images of local people warrant a further discussion.

THE STORIES THAT WE TELL ABOUT NATURE AND 'LOCAL' PEOPLE

This study started by, arguing that one of the most defining aspects of conservation discourse is the omnipresent notion of 'crisis'. The continuous invocation of a vulnerable environment that is being threatened by human behaviour serves to mobilise resources. Project documents tend to be constructed in the same manner, starting with a description of the importance of local biodiversity, subsequently entering into sometimes graphic descriptions on how nature is being threatened, and ending with what should be done. The dominant image of people against nature tends to de-emphasise the different understandings of the situation, the variety of possible solutions and the diverging interests among the various actors involved in conservation interventions. Consequently, the establishment, expansion and improved management of a variety of protected areas are the inevitable policy suggestions. The human component is dealt with through participation on a number of carefully selected issues and a package of 'linked' development activities.

Project proponents tend to sustain the images of vulnerable nature and destructive local people, because it is only be complying with the dominant and usually decontextualised narratives that exist within the international institutions, that they can tap into the resources necessary to implement their programs and maintain their jobs. In doing so, conservationists tend to be prone to exaggerate those aspects that serve their case. This is not only visible in the nightmare scenarios on species extinction developed by a number of prominent conservation biologists, but also in the daily practice of project development and implementation. In the case of the Lak project it appears that both the biological significance of local nature as well as the logging threat were overstated. In the case of the Bismarck-Ramu project the area was initially selected because of its low levels of threat, a classification which had be turned around in the run up to a second phase proposal to the GEF. Thus even when it is obvious that the threats are low, that reality is highly complex and that strictly protected areas of a minimum size will not be the outcome, the need for funding drives project proponents to present their case in the usual stereotypical format, thus reproducing these stereotypes *ad infinitum*.

Next tot the notion of 'crisis', conservation literature now abounds with the importance of the 'community'. This aspect too has been introduced in the first chapter, where I have argued that for a number of moral and especially practical reasons, conservationists have come to see the involvement of local people as part of their trade. The views taken of people vary widely, with some seeing local people as the ultimate threat to the biodiversity that they cherish, others seeing local communities as a means to secure conservation, while a small but vocal group see

indigenous people as the allies of nature. These views essentially fall back on a number of characterisations of indigenous people which I have, by reference to the African literature, identified as either the 'good' and 'nature loving', the 'destructive' and 'ignorant' and the 'economically rational native'. Even though one might think that such stereotypes are a thing of the colonial past, this study shows how all of these descriptions of indigenous people, pop up throughout the interventions of the Biodiversity Program, providing the ideologically-tinted raw material from which policies are subsequently made.

These visions of local people not only constitute the corner stone for the shape that planned interventions take, but also determine who is in charge. Where people are held to be destructive and ignorant they need to be excluded from nature, where they are held to be nature caring they need to be given the autonomy and self-confidence to pursue these conservationist practices. The first view leads to a policy which reduces the authority of local people over nature, transferring the management of resources to more educated professionals acting in the name of the public good, the second view legitimises an opposing view which argues that communities are best equipped to look after nature as local and global interests agree. These opposing explanations are part and parcel of the history of the Biodiversity Program.

An alternative view inherent to integrated conservation and development methods is the idea that people are essentially economic beings who move towards or away from sustainable livelihoods, depending on the nature of local incentives. In this view, policymaking concerning conservation management involves modifying incentives and disincentives in such a way that what the intervening conservationists deem more favourable lifestyles evolve. Looking at the history of the Biodiversity Program, it is remarkable how little influence this latter view of local people has had in practice. Whereas the policy documents of the Biodiversity Program talk about conservation area establishment, ICAD methods and the need to develop 'linked' activities, in practice, discussions with local people were dominated by the do's and don'ts of community-based conservation and development rather than by the establishment of a series of incentives. This had partly to do with the fact that the Lak project never reached a stage where economic incentives were applied as it simply lacked the funds and time to do so. The community approach of the Bismarck-Ramu project did away with economic incentives all together.

In practice, the image of the 'economically rational native' made way for the much older stereotypes mentioned above. These stereotypical views of local people are not 'given' however, but rapidly change and shift as events unfold. Where the Lak project started from the premise that local people were naturally predisposed towards conservation, this view quickly made place for a short-lived attempt to develop economic incentives in order to compete with the timber company. Later, when the project did not eventuate as planned, the positive and economic view of local culture made place for more disparaging views. A similar pattern is visible in the interventions in the Jimi Valley. Where conservationists hoped to find local

communities susceptible to their offers of integrated conservation, social services and economic development, this initial optimism disintegrated in the face of reality. The discussions and conflicts that followed tended to focus on the ground rules for working together, rather than on the content of the program itself. Here too an unfavourable view of the Jimi communities would come to dominate.

These negative preconceptions of local people were replaced by a radical change in philosophy. This view, based on a much more positive view of local society suggested that not local people were at fault, but that the manner in which the first interventions in the Lak area and in the Jimi Valley had been conducted had triggered a range of expectations and problems when these were not met. Based on this analysis the Biodiversity Program changed tack towards a highly participatory community entry approach. This approach, based on the assumption that 'traditional' communities are not only self-reliant but also essentially conservationist in nature, would come to dominate a drive to 'put people back on their feet' with the help of Paolo Freire's conscientisation approach. The underlying stereotype of 'primitive ecological wisdom' however is difficult to maintain in the face of the available anthropological studies on man-nature relations in PNG and the available field material from the area itself. Still this image of the 'traditional' community became a driving force in the development of the program.

Over time, the Bismarck-Ramu team developed a conceptual framework based on notions of 'self-reliance', 'cargo-thinking' and 'traditional conservation'. This framework is essentially a variety of the 'fallen angel' perspective in which people are seen as intrinsically nature loving, but corrupted due to outside influences. This framework, a critical analysis of the first interventions, plus the activities of the community facilitator helped to explain to the Bismarck-Ramu team why the Jimi were 'lost' to conservation. The Bismarck-Ramu team, however, was successful in establishing relations with a number of Ramu communities, and even got them to agree to establish two protected areas. Notwithstanding this success in forging a relationship with local people, the assumption that this constitutes long-term conservation is under dispute.

The vision of local people as being natural conservationists, who are likely to remain so as they have been 'led back to their traditional culture' and as they have 'organised themselves' would prove incompatible to the sustainability narrative that dominates the international donor agencies. This latter narrative does not mind how protected areas come about, but argues that once these have been established, economic incentives constitute the main 'safety latch'. Such is especially in the PNG situation where coercive measures can not be applied. The clash between the Bismarck-Ramu project team and its donors over the views of people and the role of economic incentives led to the collapse of the second project proposal.

THE FRAGILE 'MIDDLE GROUND'

In the introduction, I have introduced White's (1991) 'middle ground' concept, which in simple terms refers to an interface 'that works'. Where project staff and people, decide that they have enough in common to pursue a number of joint activities, even when this might be for a variety of reasons, such a middle ground evolves. In the Bismarck-Ramu project this became visible in the articulation of the project's community-based conservation strategy and the territorial concerns of the Ramu people.

While the project staff grappled with the respective views of local communities, the attitude of local people towards the environment, and the authority of biologists versus social scientists, local people themselves also set about filling the notion of conservation. Thus the business–minded Jimi would talk about the need to establish a *kampani bilong environmen*, 'an environmental company'. This concept, which in some ways mirrors the ICAD concept, fell flat because the project changed its course towards a non-economic view of conservation, over time triggering a breakdown in relations with the Jimi. The Ramu people in contrast, were more successful, asserting that *lukautim graun na bush na wara*, 'looking after the land, the forest and the waters' was what they had always done, thereby almost coincidentally offering a possibility to link the non-economic community-based conservation policy pursued by the Bismarck-Ramu project team to their own territorial concerns. In the village of Sepu also the fear of a loss of culture and identity and a general apprehension at the pace of change played a role in adopting notions of conservation.

The joint middle ground that evolved centred on the establishment of two wildlife management areas, and the signing of a conservation deed in the Sogeram area. The latter was a remarkable feat on the part of the Bismarck-Ramu project team as it meant that local people successfully and on their own account resisted the entreaties of a company and its supporters in the PNG forest administration. A detailed description of the interactions between community development workers and the Sepu and Foroko communities however suggests that the battle for conservation is far from over. People appear to have actively and successfully used the WMA mechanism, their links with the community development workers of the Bismarck-Ramu project and the forums that the community development work offered, to reassert their authority as landowners in the face of Jimi encroachment and competing claims from within the Ramu Floodplains. In Foroko the changing situation, combined with a spell of bad luck on the part of the Jimi settlers there, led the latter to abandon the area altogether and move back up towards the Jimi Valley. There are, however, also indications, that the some of the Ramu people see the WMA as an intermediate step in the development of economic activities. Thus people do wish to conserve certain sacred areas within the WMA, but also mention that they may want to give certain companies access to their resources by following a dual strategy.

Important to note is that the 'middle ground' that evolved between the Ramu communities and the Bismarck-Ramu team, was in no small way facilitated by the ambiguity of the 'conservation' notion. *'Lukautim bush an graun an wara'* can mean many different things to different people, and the concept will be acceptable as long as it is not translated into actual practices. As long as there is no enforcement of conservation rules in these protected areas, not further influx of Jimi into the Ramu territory, no direct offers by timber companies, and the conservation activities of the project are not seen to actually inhibit the economic aspirations of local communities, both the project team and local people can sustain the idea that they are talking about the same thing.

Once reality overtakes however, and people see themselves forced to turn this vague and free conservation thing into real practices, the diverging explanations of this concept will inevitably become apparent. As long as the interests of the Bismarck-Ramu project and Ramu River groups coincide, the first seeing its conservation and self-reliance goals met through the establishment of two protected areas, the latter regarding the project as a means to consolidate it claims to landownership in the face of Jimi encroachment, all will be well. The moment, however, that landownership becomes a vehicle to pursue other means than keeping the Jimi at bay, the partnership will likely disintegrate. As in many other cases on this globe, the conservationists run the risk of being sorely disappointed by their local allies.

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SAMENVATTING

Deze studie beschrijft de activiteiten van het *Biodiversity Conservation and Resource Management Program* in Papua Nieuw Guinea (PNG) in de jaren tussen 1992 en 2000. Dit programma, gefinancierd door de *Global Environment Facility* en uitgevoerd door het *United Nations Development Program* en het Papua Nieuw Guineese *Department of Environment and Conservation* was gericht op het ontwikkelen van een tweetal natuurparken. Het eerste project vond plaats in het Lak gebied op New Ireland, een van de grootste eilanden van PNG. Het tweede project richtte zich op het Bismarck-Ramu gebied op de noordelijke hellingen van het vasteland van PNG en vormt het hoofdonderwerp van deze studie. Tussen juli 1996 en januari 1998 was ik als sociaal-economisch onderzoeker aan dit laatste project verbonden.

Natuurbeheer in PNG kent een hele specifieke vorm. Waar het door de overheid opzetten van natuurgebieden over het algemeen gezien wordt als de beste manier om biodiversiteit te beschermen kan een dergelijke, door de overheid geleide benadering, niet worden toegepast in PNG. Al het land en de zich daarop bevindende natuurlijke hulpbronnen zijn het eigendom van lokale groepen. Omdat dit gewoonterecht erkend wordt in de constitutie van PNG, heeft de overheid geen middelen om in het algemeen belang land te onteigenen. Dit betekent dat buitenstaanders, zoals bos- en mijnbouwbedrijven die gebruik willen maken van de aanwezige natuurlijke hulpbronnen, gedwongen zijn direct met lokale groepen landbezitters te onder-handelen. Sinds het einde van de jaren 80 is met name de wijze waarop bosbouwbedrijven lokale leiders omkopen om daarna tegen een minimale vergoeding en met grote ecologische en social egevolgen enorme stukken bos te ontginnen een bron van zorg. Omdat natuurbeschermers lokale gemeenschappen ervan willen overtuigen dat er andere, meer duurzame manieren zijn om van het bos gebruik te maken zijn ook zij gedwongen een dialoog met de lokale bosbezittende gemeenschappen aan te gaan. Deze situatie plaatst PNG in de voorhoede van op gemeenschapsbasis georganiseerde vormen van natuurbescherming: de ervaring die hierbij opgedaan is kan relevant zijn voor de ontwikkeling van soortgelijke *community-based* vormen van natuurbeheer in andere landen.

Sinds het begin van de negentiger jaren maken projecten die zich bezig houden met de bescherming van biodiversiteit in PNG in toenemende mate gebruik van zogenaamde geïntegreerde natuurbeheer en ontwikkelingsmethoden (*integrated conservation and development methods).* Deze methoden hebben gemeen dat zij natuurbeschermend gedrag belonen door middel van positieve economische

prikkels. Een toenemend aantal milieuorganisaties streeft ernaar om samen met de betrokkenen tot een probleemdefinitie te komen, te bespreken wat gedaan kan worden, of een beschermd gebied kan worden opgezet en hoe degenen die de gevolgen van natuurbeheer voor hun rekening nemen beloond kunnen worden.

In het ontwikkelen van dergelijke programma's maken natuurbeschermers in toenemende mate gebruik van methoden ontleend aan het ontwikkelingswerk. Net als de ontwikkelingswerker probeert de hedendaagse natuurbeschermer lokale mensen van kansen in de vorm van banen, inkomens en diensten te voorzien. Echter niet alleen de praktijk van het ontwikkelingswerk bevat lessen voor natuurbeschermers: ook de antropologische studie van projectinterventies kan van belang zijn. Een gedetailleerde analyse van dit soort projecten maakt de verschillende aannames waarop zij gebaseerd zijn en het verschil van inzicht met de lokale bevolking inzichtelijk, en werpt tevens licht op de wijze waarop de betrokken personen dit soort interventies aanpassen, verwerpen, dan wel aanvaarden. Deze studie analyseert zo'n casus. Daarbij wordt niet alleen naar de perceptie en reacties van de ontvangende bevolking gekeken maar wordt ook besproken wat Olivier de Sardan (1995) nogal cynisch *la configuration developementiste* heeft genoemd: 'de hele constellatie aan experts, ambtenaren, werknemers van niet-gouvernementele organisaties, onderzoekers, technici, projectleiders en veldstaf die op de een of ander wijze leven van de ontwikkeling van anderen'. Deze focus op het totaal aan betrokken actoren past in een ontwikkeling waarbij sociale wetenschappers hun blikveld hebben verruimd van de wijze waarop de lokale bevolking dit soort projecten ontvangt naar de manier waarop ook degenen die deze projecten uitvoeren een veelheid aan persoonlijke en collectieve belangen, ideeën en gezichtspunten vertegenwoordigen.

Projectinterventies worden vaak gezien als politiek neutrale en op wetenschappelijke inzichten gebaseerde processen die berusten op een lineaire en werktuigelijke voorstelling van de relatie tussen beleidsformulering, uitvoering en uitkomsten. In het geval van tropisch natuurbeheer is het gebruikelijke patroon er een waarbij biologische experts zich buigen over kaarten om daarmee de gebieden van hoge biodiversiteit te bepalen, om vervolgens de contouren van toekomstige natuurparken te tekenen op basis van ecologische en bestuurlijke overwegingen. Pas als dit gebeurd is, verschuift de aandacht naar lokale mensen. In het verleden betekende dit vaak dat lokale mensen uit natuurparken verdreven werden. Tegenwoordig ontwikkelen natuurbeschermers geïntegreerde natuurbeheer en ontwikkelingsactiviteiten die door middel van een combinatie van dwang en positieve prikkels de druk op beschermde gebieden moeten verminderen. Sociale wetenschappers hebben de a-politieke en lineaire voorstelling van dergelijke projecten bekritiseerd door erop te wijzen dat ook lokale mensen, belangengroepen en onderdelen van de

overheid hun eigen belangen nastreven. De verschillende wereldbeelden en waarden, uitgedragen door deze groepen, sporen niet noodzakelijkerwijs met de belangen van de projectuitvoerende instantie en leiden tot een *au fond* onvoorspelbaar proces van sociale verandering. Op deze wijze bezien is een geplande interventie niet één enkel project dat uitgevoerd wordt langs de lijnen van de projectcyclus, maar eerder een bundel van constant verschuivende individuele en collectieve inspanningen.

Het feit dat lokale mensen externe interventies beïnvloeden heeft geleid tot een aangepaste visie op ontwikkelingsprojecten. In deze visie *produceren* de interveniërende organisaties en de ontvangende bevolking de uitkomsten van projecten gezamenlijk in een voortdurend proces van onderhandeling en interactie. Op deze wijze bezien vormt een project een sociale en politieke arena waarin verschillende groepen hun belangen najagen. Zelfs als projecten en lokale mensen besluiten samen te werken zal er een voortdurende strijd bestaan over de inhoud van deze activiteiten. Een en ander leidt ertoe dat de uitkomsten van soortgelijke projecten vaak heel verschillende vormen kunnen aannemen en fundamenteel onvoorspelbaar zijn.

Theoretisch kader

Eén manier om de verscheidenheid aan belangen en gezichtspunten binnen een project te analyseren is een zogeheten interface analyse. 'Interfaces', ofwel contactvelden, zijn de raakvlakken waar de verschillende bij een projectinterventie betrokken actoren, ieder met hun eigen belangen, waarden en machtsmiddelen, interacteren. Overeenkomstig de voorstelling van een project als een arena, is het op deze raakvlakken dat in de dagelijkse praktijk van een project de verscheidenheid aan probleemdefinities, ideeën, prioriteiten en belangen zichtbaar wordt. Een voorbeeld van zo'n soort raakvlak in de context van deze studie zijn de relaties tussen natuurbeschermers enerzijds en de lokale bevolking in het Bismarck-Ramu gebied anderzijds.

Hoewel een dergelijke analyse zich in de eerste plaats richt op de confrontatie tussen verschillende actoren en de sociaal-economische, politieke en culturele verschillen die daaraan ten grondslag liggen, is het ook op deze contactvelden dat projectteams en lokale mensen al dan niet tot samenwerking komen. De historicus Richard White (1991) heeft hiervoor het *'middle ground'* begrip gebruikt. Dit begrip beschrijft de manier waarop actoren met heel verschillende achtergrond er door een proces van onderhandeling, confrontatie en vernieuwing toch in slagen tot een vorm van samenwerking te komen waarbij de betrokkenen menen een of meerdere van hun doelen te kunnen realiseren. In eenvoudige termen is de *'middle ground'* een contactveld dat 'werkt', zelfs als de betrokkenen alleen maar tijdelijk samenwerken om heel verschillende, soms op de langere termijn zelfs tegengestelde, redenen.

Projectinterventies kennen echter niet alleen de tegenstelling tussen degenen die het project uitvoeren en de lokale bevolking die daaraan onderworpen wordt, maar kennen een groot aantal verschillende partijen en een veelheid aan contactvelden. De ontvangende bevolking is vaak gedifferentieerd op basis van verschillen in welstand, etnische groep, sociale verhoudingen, verwantschap, geslacht en territorialiteit. Ook de uitvoerende instanties zijn zelden homogeen. Meer gebruikelijk is dat zulke organisaties een aantal verschillende groepen met verschillende prioriteiten en doelen bevatten. Tegenstellingen binnen projectuitvoerende instanties kunnen bijvoorbeeld liggen tussen verschillende beroepsgroepen zoals natuurwetenschappers en hun collega's uit de sociale wetenschappen, tussen buitenlanders en lokale staf en tussen afdelingen en bestuurlijke lagen binnen de uitvoerende instanties. Voor een succesvol project zijn dus een veelheid aan samenwerkingsverbanden of '*middle grounds*' nodig.

Overzicht van deze studie

Toen ik in Maart 1998 terugkeerde uit PNG realiseerde ik me dat ik in het kader van mijn werk voor het Bismarck-Ramu project voornamelijk de bevolking van het Bismarck-Ramu gebied had bestudeerd, maar dat ik eigenlijk niet veel wist van het begrip 'natuurbeheer' (*conservation*) zoals dat binnen het project zo vanzelfsprekend werd gebruikt. Een gevolg hiervan is dat deze studie begint met een hoofdstuk over de oorsprong van het westers milieudenken en de wijze waarop een aantal ideeën rond 1930 samenkwam in een ideologie die zich richtte op het in stand houden van 'ongerepte' natuur met behulp van nationale parken. Dit gedachtegoed is niet alleen gebaseerd op de twijfelachtige aanname dat ongerepte natuur per definitie meer waardevol is dan door de mens beïnvloede ecosystemen, maar berust ook op een negatief beeld van lokale bevolkingsgroepen. De rest van dit hoofdstuk bespreekt een aantal concurrerende ideeën ten aanzien van lokale mensen en natuurbeheer die sinds de jaren 70 in ontwikkeling zijn. Met het dekolonisatieproces en het inzicht dat de regeringen van de nieuwe onafhankelijke staten meer nadruk zouden leggen op economische ontwikkeling dan op natuurbehoud ontstond er een toenemende aandacht voor het koppelen van ontwikkelingsactiviteiten aan natuurbeheer. Dit werd versterkt doordat in de praktijk nationale parken en natuurgebieden gekenmerkt werden door hoogoplopende conflicten tussen lokale bevolkingsgroepen en het van overheidswege aangestelde en vaak vanuit het westen gefinancierde nationale park management. Het inzicht dat de kosten van natuurbeheer niet zonder meer op de - vaak arme – groepen rond natuurgebieden konden worden afgewenteld leidde tot de ontwikkeling van een veelheid aan participatieve en op gemeenschapsbasis georganiseerde natuurbeheersprojecten. In deze laatste aanpak past het specifieke geval van PNG.

Het tweede hoofdstuk beschrijft hoe, ondanks de natuurlijke rijkdom van PNG, het land tot voor kort nauwelijks aandacht heeft gekregen van internationale natuurbeschermers. De belangrijkste reden hiervoor hangt samen met het communale landbezit en het feit dat lokale gemeenschappen niet bereid zijn land af te staan voor het algemeen belang. Het opzetten van natuurgebieden door onteigening en uitzetting zoals elders gebruikelijk is wordt daarmee uitzonderlijk moeilijk. Aan het eind van de 80er en het begin van de 90er jaren leidde een toenemende zorg rond de toekomst van het tropisch regenwoud, het opzetten van de *Global Environment Facility* en het houden van de *United Nations Conference on Environment and Development* uit 1992, tot een golf van aandacht voor de situatie in PNG. Het tweede deel van dit hoofdstuk beschrijft hoe deze aandacht leidde tot het opzetten van een biodiversiteitsprogramma en hoe dit programma tevergeefs probeerde om een natuurgebied op te zetten in New Ireland. Toen het project er niet in slaagde de lokale bevolking ervan te overtuigen dat een lokaal actief bosbouwbedrijf zijn activiteiten moest stoppen, besloot het programma zijn tweede project in het Bismarck-Ramu gebied op radicaal nieuwe wijze op te zetten.

Hoofdstuk drie en vier geven een etnografische beschrijving van het Bismarck-Ramu gebied en zijn bewoners en introduceert het conflict tussen Jimi migranten in de Ramu Vallei en de bewoners van deze vallei waarin het project betrokken raakte. Het vierde hoofdstuk kijkt ook naar lokale vormen van het beheer van natuurlijke bestaansbronnen en betoogt dat natuurbeheer zoals voorgesteld door het biodiversiteitsprogramma niet goed aansluit bij de wijze waarop lokale mensen hun relatie tot, en eventuele verantwoordelijkheid voor, de natuur ervaren. In de Jimi vallei is het moeilijk te zien hoe een participatieve *community-based* benadering zou kunnen werken aangezien het een dicht bevolkt gebied is, mensen hoge economische verwachtingen hebben, de lokale sociale structuur gefragmenteerd is en gekenmerkt wordt door voortdurende conflicten. Daarbij zijn de Jimi geneigd buitenstaanders en hun eigen natuurlijke hulpbronnen in de eerste plaats te beschouwen als middelen om op de korte termijn de eigen economische situatie te verbeteren. In de Ramu Vallei zijn de mogelijke redenen voor deelname aan natuurbeheer gevarieerder, maar niet zozeer een gevolg van zorg voor het mileu. De motivatie tot deelname lijkt hoofdzakelijk voort te komen uit de angst overlopen te worden door grote groepen Jimi immigranten. In de optiek van een aantal Ramu groepen kan het opzetten van een nationaal park dienen als buffer tussen henzelf en de naderende Jimi. Een bijkomende reden is dat de veel kleinere en conservatievere Ramu groepen bang zijn voor de snelle sociale veranderingen die met de mijn- en bosbouwactiviteiten in de omgeving gepaard gaan. *Conservation* wordt door hen dus veel breder gezien dan alleen de zorg voor de natuur, en wordt ook betrokken op aspecten als territorialiteit, culturele identiteit en behoud van de *status quo*. Het zijn met name

deze overlappende redenen die de samenwerking tussen het project en een aantal Ramu groepen mogelijk maakte.

Hoofdstuk vijf geeft een gedetailleerd verslag van de interacties tussen projectteam en Jimi groepen. Het project presenteerde zijn interventie in eerste instantie als een 'ruil' van natuurbeheer voor ontwikkeling. Hoewel dit voorstel publiekelijk werd verwelkomd, werden de projectmedewerkers al snel geconfronteerd met een serie conflicten met een grote verscheidenheid aan mensen. Deze conflicten spitsten zich met name toe op de organisatie van een onderzoek naar de lokale biodiversiteit. De teleurstelling aan de kant van de projectmedewerkers was vooral een gevolg van de nogal optimistische aannames ten aanzien van de lokale samenleving waarmee zij in eerste instantie het veld in gingen. Impliciet verwachtte het projectteam homogene cooperatieve groepen mensen met een langetermijnperspectief aan te treffen met wie het goed samenwerken zou zijn. Lokale gemeenschappen bleken echter gefragmenteerd, conflictueus en op de korte termijn gericht, met als gevolg een houding ten opzichte van het project die erop gericht was te halen wat er te halen viel. Dit hoofdstuk stelt dat een beter geïnformeerde en wat realistischer houding met oog voor de belangentegenstellingen binnen gemeenschappen dit soort projecten beter zou voorbereiden op hun contacten met lokale groepen. Het hoofdstuk laat aan de hand van koloniale rapporten, beschreven in hoofdstuk vier, zien hoe de reacties van de Jimi groepen ten aanzien van het project een hoge mate van continuïteit vertonen met de reacties op eerdere buitenstaanders. De Jimi reactie op interventies van buitenaf lijkt niet in de eerste plaats gedreven door de aard van de interventie als wel door de onderlinge rivaliteit tussen de Jimi gemeenschappen.

Hoofdstuk zes analyseert de nieuwe benadering die door het Bismarck-Ramu project ontwikkeld werd in het licht van de ervaringen in New Ireland en de Jimi Vallei. Deze nieuwe benadering week af van de eerder gebruikte natuurbeheers en ontwikkelings-methoden en stelde in plaats daarvan een participatieve strategie voor die zich baseerde op het idee van zelfbeschikking (*self-reliance*) en gemeenschapsversterking (*empowerment*). In tegenstelling tot de eerder gebruikte benadering benadrukte de nieuwe filosofie het feit dat gemeenschappen zelf moeten bepalen welke ontwikkeling en milieuproblemen zij centraal wensen te stellen in hun samenwerking met het project. Daarmee verlegde het programma zich van een beheersmatige en economische benadering die zich met name richtte op het opzetten van een natuurgebied, naar een benadering die lokale mensen en hun problemen en prioriteiten centraal stelde. Het gebruik van economische prikkels werd daarbij afgewezen omdat mensen dan aan het project deel zouden nemen om de 'verkeerde' redenen. Waar de eerdere benadering gebaseerd was op het feit dat lokale mensen een bedreiging vormden voor de natuur ging deze nieuwe aanpak uit van de gedachte dat lokale mensen

van nature geneigd zijn voor hun omgeving te zorgen. Deze verandering in beleid betekende ook dat de samenstelling van de staf zich wijzigde en dat de eerder dominante biologen en professionele natuurbeheerders in toenemende mate vervangen werden door sociale wetenschappers. Het hoofdstuk eindigt met een analyse van de moeizame en soms paradoxale relatie tussen ideeën als participatie, zelfbeschikking en gemeenschapsversterking en betoogt onder meer dat wat gepresenteerd werd als een open en participatieve benadering in feite een in hoge mate gestructureerde interventie was.

Hoofdstuk zeven beschrijft de wijze warop deze nieuwe benadering door een aantal Papua Nieuw Guinese gemeenschapswerkers in het Bismarck-Ramu gebied werd toegepast en de verschillende reacties op deze nieuwe benadering. Niet verwonderlijk is dat deze in de Jimi vallei niet aansloeg. Waar de uitermate economisch georiënteerde Jimi eerst was voorgesteld een ruil tussen natuurbeheer en ontwikkelingsactiviteiten aan te gaan, werden zij nu geconfronteerd met een verschuiving in de projectfilosofie die het gebruik van economische prikkels juist afwees en zelfredzaamheid benadrukte. De gemengde gemeenschappen waar Jimi en Ramu samenwonen bleken dermate conflictueus dat een benadering gebaseerd op de gedachte dat de gehele gemeenschap samen zou werken niet realistisch bleek. In de praktijk werd het project een speelbal van verschillende groepen en individuen die territoriale rechten dan wel status of autoriteit najoegen. Op den duur moest het project besluiten zijn pogingen zowel in de Jimi Vallei als onder de gemengde gemeenschappen in de Ramu Vallei te staken.

Onder de volledig Ramu gemeenschappen bleek echter met name territorialiteit een raakvlak voor samenwerking tussen project en lokale mensen te bieden. De Ramu gemeenschappen zagen het project in toenemende mate als een potentiële medestander in hun pogingen de Jimi migranten op afstand te houden. Het hoofdstuk beschrijft gedetailleerd hoe mensen geleidelijk aan voldeden aan de verwachtingen van het project, leidend tot het opzetten van een tweetal grote en aaneensluitende natuurgebieden. Hoewel dit proces door alle betrokkenen als 'natuurbeheer' werd aangemerkt haden de betrokkenen duidelijk tegengestelde agenda's. Waar lokale mensen tevreden lijken omdat het bereikte resultaat hun rechten op dat gebied vastlegt is het onduidelijk in hoeverre de natuur in de resulterende natuurgebieden ook daadwerkelijk beschermd wordt. Het verschil in doelstellingen maakt een dergelijke '*middle ground*' erg kwetsbaar. Pas geleidelijk aan, in de alledaagse praktijk van het gezamenlijk nemen van beschermende maatregelen en het ontwikkelen van de daarvoor nodige organisatie worden de verbaal verhulde maar niettemin tegengestelde agenda's duidelijk.

Het laatste hoofdstuk beschrijft hoe het Bismarck-Ramu project in de problemen kwam door de verschillen in benadering zoals die door de donoren werd

nagestreefd en de wijze waarop het project zich in de praktijk had ontwikkeld. Deze verschillen spitsten zich toe op de vraag in hoevere het bereikte resultaat duurzaam was en hoe duurzaamheid in het opzetten van beschermde gebieden in de context van communaal landeigendom kon worden gegarandeerd. Waar de donor uitging van het 'oude' beeld dat een natuurgebied alleen opgezet en beheerd kan worden door het gebruik van economische prikkels, wilde het projectteam zijn op de behoeften van de lokale bevolking toespitste strategie vervolgen. Het was aan het hogere management van het biodiversiteits-programma om te proberen deze twee benaderingen te verenigen om daarmee verdere financiering veilig te stellen. Daarbij koos het voor de benadering van de donor die uitgaat van de gedachte dat lokale mensen een bedreiging vormen en dat alleen door positieve economische prikkels en een proces van zonering duurzaamheid kan worden gegarandeerd. Het voorstel dat werd gedaan verschilde echter dermate van de projectfilosofie zoals deze zich in de dagelijkse praktijk had ontwikkeld dat de veldstaf uit het programma stapte. Daarmee stokte de *middle ground'* tussen veldstaf enerzijds en het management en de financiers anderzijds. De veldstaf heeft sindsdien (1999) haar eigen organisatie opgericht en vervolgt haar activiteiten in het Bismarck-Ramu gebied met behulp van nieuwe financiers.

Het laatste hoofdstuk sluit de cirkel door de verschillende contactvelden in het Bismarck-Ramu project te bespreken en een aantal kenmerken van deze raakvlakken, hun achterliggende benaderingen en de kwetsbare *middle grounds* tussen de verschillende betrokken partijen op een rij te zetten.

CURRICULUM VITAE

Frederik Wijnand (Flip) van Helden, was born on the 24th of April 1967 in Leiden, the Netherlands. In 1987, he started his studies at the Development Sociology Group of Wageningen University. During these studies he undertook two practical training periods: In 1990 he was assistant to the editorial committee of the General Directorate for International Co-operation of the Department of Foreign Affairs in charge of writing a development policy paper. In 1991 he became a student member of the Interdisciplinary Research Project in Malang, Indonesia, analysing rural non-farm employment in an agriculturally marginal upland area. He graduated in 1993. Between 1992 and 1993 he studied at Wye College of the University of London where he took a Masters of Science in Agricultural Economics.

In December 1993, he was employed by the Fellowship Scheme of the Overseas Development Institute in London and sent to the Department of Finance and Planning in Papua New Guinea. As a senior planning officer he was responsible for the planning and implementation of institutional and financial arrangements for forestry, fishery, agricultural and environmental projects. In July 1996 he became an associate researcher at the National Research Institute in Papua New Guinea and was seconded to the GEF-funded Biodiversity Conservation and Resource Management Program developed by the UNDP and the national Department of Environment and Conservation. Here he took responsibility for the execution of a social feasibility study for the Bismarck-Ramu integrated conservation and development project. This study assessed the best possible options for community-based biodiversity conservation in a remote area on the mainland of Papua New Guinea.

Upon returning to the Netherlands in March 1998, he conducted several short-term assignments before becoming a research fellow with the Development Sociology Group of Wageningen University. His research interests and publications focus on the socio-economic aspects of community-based resource management. Since August 2001 he works as a staff-officer on international biodiversity issues at the Ministry of Agriculture, Nature Management and Fisheries in The Hague, the Netherlands. He lives in Wageningen together with Inger Stocking Korzen and their son Natan.

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Recent years have seen a shift from expert-driven methods for biodiversity conservation to more participatory community-based approaches. While the former - and by far dominant position - propagates a policy of spatial zoning based on the view that local people constitute the main threat to nature, the latter approach suggests that local communities may be allies in the struggle to conserve biodiversity. This study analyses the debate between these two positions in the light of the GEF-funded Bismarck-Ramu integrated conservation and development program in Papua New Guinea. A detailed description of the interactions between the project team and local people, discloses some of the often implicit assumptions on which such interventions are based. Local people however, seldom fit the stereotypical images that outsiders impose on them. Instead, they tend to enrol such interventions in a variety of personal and collective endeavours. This study for example, argues that the establishment of a conservation area by a number of Ramu communities can not be attributed to the existence of an indigenous conservation ethic, but was in the first place based on the wish to maintain control over land and resources in the face of incoming migrants. The disparate motives and priorities that underpin the co-operative arrangements between conservation projects and local people attest to the fragility of such agreements.

Flip van Helden, a development sociologist and economist by training, was attached to the Bismarck-Ramu integrated conservation and development project between July 1996 and January 1998, before returning to the Development Sociology Group at Wageningen University. At present, he works at the Department of Nature Management of the Ministry of Agriculture, Nature Management and Fisheries in The Hague.

