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Common efforts in the development of rural Sarawak, Malaysia

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Abstract

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The subject of research was whether it is possible to establish modern cooperative societies in traditionally integrated communities. Views of laymen, politicians and sociologists are presented. The characteristics of tribal societies and loosely structured societies are discussed. An analysis is made of the location of research in Sarawak, in particular the Government's development policy and aspects of the Land Dayak structure and culture. Case studies and surveys showed that Land Dayak villages disintegrate when they are incorporated into the market economy and political structure of Sarawak. The frequency of traditional cooperative activities diminishes and new activities do not become institutionalized, because no material sanctions are connected with social control. Sometimes an outwardly oriented traditional leader or close guidance by development workers retards the process of disintegration.

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1 Introduction

This book is a report about my research among the Bidayuh, a dialect group of the Land Dayak tribe which lives in the interior of South-West Sarawak. Sarawak, situated on the North-West coast of Borneo, is the largest constituent State of the Federation of Malaysia. The unit of analysis in my study was the village. I investigated the changes in the social structure of villages when they became increasingly incorporated in the larger society. In particular I tried to assess the effect the level of integration in a village has on the implementation and use of cooperative development projects initiated and stimulated by the Government.

1.1 Theoretical framework

1.1.1 The village as unit of analysis

Up to now village studies have been mainly the domain of anthropologists who used the method of participant observation. They have provided the human sciences with extensive and minute descriptions of the lives of people in almost every part of the world. The authors of these monographs were in the beginning mainly concerned with a complete description and analysis of the culture and structure of the communities studied in their pure form, unaffected by European contact. The nature of their work meant that they paid comparatively little attention to the changes taking place under influence of contact with the industrialized part of the world. Gradually, around World War II, more and more anthropologists became interested in the study of these changes. Often the analysis of the changes is added as a final chapter to their work but is not an integrated part. Their reports are still mainly static descriptions. The standard monograph on the Land Dayak of Sarawak (Geddes, 1954a), provides an example of such a report. In the third and last part the author gives his recommendations for the area. He comments on these as 'based on personal conclusions not strictly deducible from the evidence presented in the preceding survey' (page 7). It is not until this part of the book that the reader can assess for instance the extent to which Christianity had influenced the Land Dayak culture at that time, though many pages had been spent on religion.

During the last two decades a number of sociologists and other scientists have started to use the survey technique in studying social change with the village as unit of analysis. Examples are Leighton et al. (1963), who studied the influence of village disintegration on the mental health of the inhabitants among the Yoruba of Nigeria; Fliegel et al. (1968) who dealt with agricultural innovations in Indian villages as a project of Michigan State University concerned with the diffusion of innovations in rural societies; and Young (1966) who studied the dynamics of the incorporation of small (sub)systems into a larger system in many places of the world. Especially the study of Fliegel is remarkable because it differs from most of the other innovation studies in stating that 'it seemed important to obtain some comparative information on the larger social unit in which the

cultivator carries on his daily work, the agricultural village'. In a later stage the focus could be changed to the individual. The reasoning behind this approach was obtained from statements by Srinivas (1960) 'beyond the immediate family, the village is very probably the social unit which is most important in shaping the individual, making him the kind of cultivator he is'; and Van den Ban (1960) 'difference in the adoption of new farm practices between the townships studied can be only partly explained by differences in individual characteristics or by values directly affecting farming. Difference in social structure seems to be more important'. The argument of both is that the village community influences the behaviour of its inhabitants to a large extent, and therefore determines their adoption of innovations.

However, I think there is another reason why villages should be taken as the unit of analysis in studies of change. This becomes clear when a village is considered not only to consist of a number of individuals but as a group with an identity of its own, which as a single unit maintains relations with other systems in a larger enclosing system, and with the enclosing system itself. At present Young is constructing a paradigm about the relative position of small systems in an incorporating system. This situation is well illustrated by the relationship between the State and the villages within it. Sometimes the village level is merely an administrative intermediary between the State or other institutions and the individuals in the villages. Officials at the village level act according to exhausitive directives from a higher level which leave no scope for local variations or additions. In other situations the village is provided with a framework of basic rules and it is left to the inhabitants to work out the details of implementation. Examples from the research area of relations between the village and higher levels in the administration of the State are presented in Chapter 3.

The reasons that can be mentioned for using the village as a unit in the administrative organization of the State are pragmatic. The higher levels lack funds, personnel and detailed knowledge of the local level to reach the inhabitants of villages without assistance of the latter or their representatives. A type of indirect rule is therefore established by which the State organizations can limit the number of their dealings with the village population. There are also obvious technical and organizational reasons why often the State only deals with groups of people, which generally consist of people living in the same territory, and not with individuals. Schools, clinics, roads, marketing facilities etc. are normally not constructed for single individuals, but aim to serve groups of people.

Apart from these pragmatic reasons there sometimes is a strong ideological motive to include the village as a unit in the administrative organization of the State. This motive is the subject of the next section.

1.1.2 The effect of integration, according to politicians and bureaucrats

Within democratic political systems it is discussed to what extent the common citizens should take part in actual policy making and implementation. Advocates of basic democracy recommend that groups and individuals from the public should have a strong influence upon those measures which directly affect them and which they can oversee. Participation on the basis of flexible rules instead of frustration of local initiative by rigid bureaucratic directives would result in greater success of measures taken. If a group can take an active part in enterprises which affect it directly, the internal dynamics of the group could contribute to the success of its actions. The guiding principle of community development 'helping people to help themselves' clearly reflects this philosphy.[1]

1 In this study I will try to ascertain whether this opinion is backed by empirical facts or a mere belief.

A necessary condition for the fruitful involvement of an existing group is that it has not become disintegrated. Disintegration and integration were defined by Leighton et al. (1963): 'Insofar as any sociocultural system consists of patterned ways of acting among people who share at least some common sentiments, 'disintegration' means the breakdown or disruption of the interrelationship of these patterns, a process which is, to some extent, always occuring in any social system, just as integrative processes are continually in action.' Thus coordination should mark the interactions between the members, and at least part of these interactions should be directed to the pursuit of common goals, to be classified as cooperation. The group will have to function in a similar way to that described by Van den Ban (1960), who stated that 'a positive side of the strong community feeling in Alto is that social prestige seems to be based to a rather high degree on service to the community and the church. This makes it possible to organize in this township many community activities, including a good consolidated grade school, a strong Farm Bureau with many local activities, and the largest 4H club in the county.' It is often believed that these conditions are most properly met in small rural communities which have not been largely affected by outside influences and where the traditional existing social structure is still satisfactory to the inhabitants. These integrated villages could be linked in their entirety to the administrative organization of the State and be used to establish new organizations to be based on traditional existing bonds.

In East India the Netherlands' policy of indirect rule for the rural villages is a clear example of this idea. Furnivall (1956) said about this policy: 'the Dutch system (of self-government) was built on the basis of the village, and aiming to bring the village into organic relation with higher units of popular self-government.' For a long period in East India the village was seen as the unit for actions in the rural areas. According to Grader (undated) the Dutch administration looked upon the village, or rather the Javanese dessa, as a well integrated social unit, with as principal characteristics: (a) the traditional system of compulsory village services; (b) the traditional pattern of mutual help.

Similar views and practices with regard to the position of the rural communities in the structure of the State have been, and are held in other parts of the world too. In the present Federation of Malaysia, the Rural and Industrial Development Authority (RIDA) was established in 1950 to fight rural poverty. It was thought that villages had become distintegrated, largely by the paternalism of colonial rule, and that the inhabitants had lost the old cooperative spirit and self-reliance of the traditional village. By providing assistance on a self-help basis it was hoped that RIDA would resurrect the old spirit of self-reliance in rural communities. 'Community development schemes began almost immediately with projects to construct community halls. It was hoped that these would provide meeting places in which local initiative and racial harmony would be engendered' (Ness, 1967, page 125–127). In 1958 a community development programme was started by the Ministry of Agriculture. The initiator of the programme Abdul Aziz Ishak, Minister of Agriculture, later declared 'I pursued a policy of cooperative expansion.' In explaining the basis for his policy he stated: 'The rural folks, in particular the Malays, are unsuited for the cut and thrust of a capitalist society. They are used to the gotong royong (mutual help) society of cooperative effort.' See Vasil (1971).

The responsibility for the community development programme was shifted to the Ministry of Rural Development in 1959 and completely remodelled. However, also in the new set-up launched by Tun Abdul Razak, then Deputy Prime Minister, strong emphasis remained on the village level where people should work on the development of their community on a gotong royong basis under the guidance of newly created kampong (village) development committees (Ness, 1967, page 125–127). An editorial to the Sarawak Gazette, written whilst this research project was being un-

dertaken, reflected the same views. It read: 'Our early longhouse was something of a cooperative settlement. Gotong-royong has been the traditional way of life in our part of the world for centuries. Cooperative farming is gotong-royong farming and should be attractive to many of our farmers' (Sarawak Gazette, no 1372, 1972).

Nyerere, President of the United Republic of Tanzania, stressed similar aspects in 1967 when he declared: 'Our people in the rural areas, as well as their Government, must organize themselves co-operatively and work for themselves through working for the community of which they are members'. He stated further: 'Our education must therefore inculcate a sense of commitment to the total community, and help the pupils to accept the values appropriate to our kind of future, not those appropriate to our colonial past' (Nyerere, 1967).

In European countries also a strong belief exists that rural areas can be developed through the collective efforts of the inhabitants, though there is difference of opinion between East and West Europe about the amount of guidance the State should provide. In the Netherlands the rural dwellers established cooperative societies on their own initiative. Many of these societies have been established in the eastern and southern parts of this country, where at the time of formation of the majority of the cooperative societies mutual help between members of the same neighbourhood was still practised in times of sickness, death and calamities. This circumstance is often given as an explanation for the warm reception of the cooperative principle.

1.1.3 The effect of integration, according to sociological theorists

In contrast to the popular ideas about the value of collective efforts for the development of rural areas, and the importance attached to the traditionally existing bonds between the inhabitants of integrated rural communities, we shall now consider what sociological theorists think about the establishment of new organizations for the development of rural villages on traditionally integrated patterns of interactions.

Early writers such as Durkheim and Tönnies did not believe that new cooperative organizations could be easily grafted onto traditional institutions of mutual help. To them mechanic and organic solidarity, Gemeinschaft and Gesellschaft are entirely different, between which no easy and quick transition is possible. Essentially the same ideas have been expressed by modern authors of whom Wolf, Bailey and Young will be discussed here. Wolf (1966) classified coalitions between peasants into eight different categories, according to three dichotomous principles, (a) the number of persons involved, or dyadic vs polyadic; (b) the number of interests served by the coalition, or multi-stranded vs single-stranded; and (c) the similarity or dissimilarity in socio-economic status of those involved, or horizontal vs vertical.

Wolf noted that polyadic, horizontal, many-stranded coalitions favour the continuity of the social structure of corporate communities over time. On the other hand, polyadic, horizontal, but single-stranded coalitions, also called associations, as they developed in modern Europe have proved to be highly compatible with economic and social change towards a neotechnic order. Another important aspect of associations is that they can link groups of members of a community to the wider structure of power and interest, creating a dyadic, vertical and single-stranded relationship between a rural community and a person or organization active on a higher level of the State. Wolf's classification makes clear that one type of coalition, the single-stranded, cannot be simply grafted onto another type, the multi-stranded, nor can they be expected to evolve from the latter spontaneously and in a short period of time. For such changes upheavals of the society are necessary, or at least interference by a strong government. In commenting upon the Mexican

revolution he writes "its success appears to lie less in its efforts at land reform than in its attempts to break open the Indian corporate communities, to curtail their autonomy, and to effect a hook-up between the political machinery of the State and political organizers in the village' (Wolf, 1966, page 93).

Bailey (1971b) is more explicit about the impossibility to transform traditional rural communities into modern associations, this opinion being based on the studies by him and others of small European communities. According to him first traditional relations, which imply a lot of jealousy, have to be broken down and replaced by ignorance and indifference towards one's co-villagers before cooperation about some single purpose is possible. Potential cooperators in an association must be allowed the opportunity to take their decisions individually, and therefore they cannot be entangled in a net of traditional community relationships. He concluded his study with the statement that 'peasant communities cannot move as communities into a twentieth century economy' (Bailey, 1971b, page 299). Rather cynical is Bailey's remark about leaders and planners who make appeals to the public to show altruistic behaviour and to be willing to sacrifice private interests for the common good. 'The planner's dream—and the myth which every competent planner tries to get into circulation in order to compensate for his inability to do what they do not want to do—is that everyone is falling overhimself to sacrifice his own interests for the good of the community' (Bailey, 1971b, page 296). Indeed such appeals occur not infrequently, also in Malaysia where as was mentioned high hopes are placed upon activities that could be developed by villagers cooperatively. The following two quotes from a speech made by Nelson Kundai Ngareng, a member of the Supreme Council of Sarawak in the area where the fieldwork was done, illustrate this well. The Minister said: 'It was high time that Bidayuhs should unite and cooperate with one another in all activities, especially in community development', and 'common petty quarrels should be put aside for they would only mar the rate of progress' (Sarawak Tribune, July 12, 1972).

At Cornell University Young assisted by others is verifying a paradigm constructed by him which helps to explain the development, also described as growth, of communities. Nowhere in the publications on this paradigm is reference made to grafting new associations on the traditional coalitions in rural communities. However after discussion of this paradigm it will be clear that some relevant conclusions can be derived from it.

The paradigm has two levels, the community or subsystem, and the higher incorporating inter-village system, which generally is the State or an intermediate organization. A surprisingly low number of three concepts are used. These concepts and their definitions are the following (Young, 1966, 1970):

'relative centrality'—the degree to which a community participates in the wider symbolic structure of the intervillage system, or the system 'recognizes' the subsystem. Measurement procedures are preferably based on such phenomena as diplomatic or political representation;

'differentiation'—the system's capacity to process a diversity of types of information, or the diversity of meaning areas maintained by a social system. In practice, it is the number of meaning sectors that have been publicly discriminated at the community level, and these may be found by a count of roles, main institutions, or by thematic analysis of word clusters;

'solidarity'—the degree to which the social symbols maintained by a group are organized to convey a focused definition of the situation. Or, it is the degree to which the meaning sectors of a symbolic structure no matter how differentiated—show overall unity. That is, do the diverse meaning sectors imply one another, interlock tightly, or is there some overarching idea, like tolerance, progress, or withstanding enemies, that binds the more or less differentiated structure into a unified definition of the situation.

Young (1966) formed the following hypotheses about the ways these three variables, attributes of the component subsystems in an incorporating system, relate to each other:

1. Differentiation and relative centrality of component communities in a system vary directly.
2. The greater the discrepancy between a community's differentiation (high) and its relative centrality (low) the greater will be its solidarity.
3. The greater the solidarity of a community, the more likely it is to increase its relative centrality.
4. An increase in a community's relative centrality will lead to an increase in its differentiation, finally ending in a steady state as described in Hypothesis 1.

Hypothesis 1 describes a 'normal' and steady condition, with respect to the structural location of a community in an intervillage system. It does not express an equilibrium, but an adaptive system, differentiation and relative centrality increase or decrease in a corresponding manner[1].

The second hypothesis describes an abnormality, communities high in differentiation and low in relative centrality experience a 'structural bind'. Under this condition it is postulated that forces will be put into play which tend to increase the solidarity of the community. If for some reason the linkages between a community and a large urban centre are cut off or shifted away from the centre, then the community is left with a symbolic structure that can process a greater diversity of information than actually enters the community, given the reduction in the channels of communication or linkages with the outside. Regardless of what occurs at the individual level under such conditions, it is hypothesized that at the group level efforts will be directed toward redefining the situation. Thus, a new communication strategy will emerge. It will tend to be relatively dramatic, unified, and the result of a high degree of cooperation from within the community. The rhetoric evolved may express a wide variety of content, but its structure will convey the message of solidarity. 'The hypothesis assumes the appearance of a subgroup with a diversified symbolic structure, and thus a greater capacity for handling a range of social communications. The question of how such a group develops may be put aside for the moment. But low relative centrality makes it impossible to achieve an adequate range of communication, so the subsystem turns to the most feasible alternative—an increased intercommunication among its own differentiated sectors. Such increased internal communication alerts the members of the subcommunity to the structural discrepancy and to the fact that they share a common fate with respect to it' (Young, 1970, page 301).

Hypothesis 3 describes the next step in the sequence. When a community-wide solidarity movement occurs, an attempt will be made by the community to establish linkages or channels of communication such that the community will have greater access to the information within the intervillage system. This, of course, describes an increase in relative centrality.

Hypothesis 4 merely completes the sequence of causation. An increase in relative centrality in the community is postulated to bring about a corresponding increase in differentiation. Thus, on the basis of the relationships described in 2 and 3, Hypothesis 4 shows the direction of causation between relative centrality and differentiation and in so doing specifies the dynamic aspect of the relation described in Hypothesis 1.

Hence, the outcome of a particular structural discrepancy between the high degree of differentiation of a group, and a low degree of symbolic recognition accorded to it by the incorporating system, may be a solidarity movement which aims to restore an original high level of relative cen-

1 The explication of the hypotheses is derived from Spencer (1967, pages 18, 19).

trality. This process applies only to already differentiated communities who have found their links with the incorporating system to be cut off, e.g. by a political reshuffle in the incorporating system, or the construction of a new road which bypasses the community previously important as a traffic centre. Said in a few words, solidarity movements rise in subsystems 'all dressed up and with no place to go' (Young, 1970, page 302).

A considerable number of Ph.D. and M.Sc. candidates have used Young's concepts in their theses. However, in summer 1974 when this book was written no summary of the findings of these research workers was available. Three historical cases are presented by Young as evidence for the second hypothesis that solidarity develops in communities high in differentiation and quite suddenly low in relative centrality. The revitalization movement with the Seneca Indians under guidance of Handsome Lake, as well as the rural and urban protests in 19th Century France, were reactions to shifts in the political and economic position of the groups involved within the incorporating system. The Seneca Indians had sided with the losing party in the American Revolution; the rural artisans in France were threatened by the emerging industry in the towns; while the urban industrial proletariat was subject to relative deprivation. The third example is derived from the article by Matossian (1958) about ideologies like Gandhiism, Marxism, the Indonesian Pantjasila etc. emerging in States that have been in contact with the industralized West for at least fifty years. Especially the intellectual elite in these States is subject to the structural bind between high differentiation and low relative centrality for their country among all nations of the world. This discrepancy results in ideologies and connected solidarity movements which can take many forms, among which attempts at recovery of believed lost spiritual assets and strong statements about egalitarianism are not uncommon. In this context the earlier discussed appeals by politicians and planners to the public to be cooperative and to work together in the traditional spirit of mutual help, can be well placed. These appeals are the product of a particular situation, and not hollow phrases to instill people with altruistic sentiments from leaders who themselves know that their appeals are unrealistic, as believed by Bailey (1971b).

Although Young did not mention the actual problem I studied, it can be concluded from his set of hypotheses that a traditionally integrated pattern of relationships is not a fertile basis for new cooperative activities. Differentiation of the community is an essential requirement for the development of a solidarity movement. A small rural community will reach a high level of differentiation mainly through external contacts. It is almost unthinkable that the acquirement of new ideas, capabilities and practices, leaves the traditional pattern of relationships unaltered; it is even more probable that the community becomes disintegrated to a certain extent. Therefore Young can be classified among those who think that an individualizing phase is necessary before villagers can be expected to cooperate in associations which try to further their interests through actions within the community as well as within the incorporating system.

If differentiation is lacking in a subsystem, the following course of events is likely to happen, as stated in a parallel hypothesis to Hypothesis 2:

2b. The greater the discrepancy between a community's differentiation (low) and its relative centrality (high), the lower will be its solidarity (Young, 1966).

A plantation community illustrates this hypothesis. It has little diversity in institutions, thus a low level of differentiation, but is high in relative centrality because of the contacts the management has outside the community. A barrier exists between labourers and elite, hence overall solidarity is low. No additional hypotheses parallel to Hypotheses 3 and 4 have been formed about what will happen in a situation of low solidarity. Young probably limited himself to the example of the plantation community. He declared that its further analysis would be on regional level instead of the

level of the small community and therefore be outside the scope of his paradigm. However, Hypothesis 2b, does not only apply to plantations and other similarly split communities. This hypothesis is also relevant for the situation in developing countries where the Government actively tries by all kinds of programmes to develop the yet rather unsophisticated rural villages, often hoping that solidarity movements in these villages would facilitate its attempts. According to the hypothesis this hope that solidarity will develop in communities low in differentiation and a rising degree of relative centrality is false. The outcomes of my research will help to confirm or to refute this hypothesis.

The sociologists mentioned think it is impossible to graft new cooperative associations on the traditional set of relationships in a rural community. The only clear positive statement I found in the sociological literature on cooperative organizations was from Seibel & Koll (1966). In the foreword to their study of indigenous cooperatives in West Africa they said with regard to Liberia: 'The only functioning modern cooperatives are the modernized indigenous cooperative societies'. Migot-Adholla (1970) had a very different opinion about the other side of the African continent. He stated: 'It is clear enough that modern cooperatives are not a direct continuation of the native communal forms, even they may appear to be so' (page 34). He added that a traditional disposition toward cooperation can only be a minor factor in explaining the cooperative success in parts of East Africa. However there are still a number of writers who do not want to outrule beforehand any possibility of transition, like Dore (1971, page 44) who said: 'the fact that many countries *have* moved from early communal forms to modern collectivist forms through a stage of private property does not necessarily imply that all societies must.' He thought that if certain conditions are met there might be chances to surpass a phase of individualization.

Van Wengen (1957, page 33, 34) concluded that direct continuation of traditional existing forms of cooperation will in most cases not lead to the desired result, but continued to say 'in some cases, after due investigation and with the necessary caution, the existence of (these) cooperative workgroups can be utilized in developing cooperatives along western lines'.

In 1969 a conference was held at the University of Sussex which had as its theme 'the extent to which patterns of relationship in traditional communities can be used as a basis for modern cooperative development' (Worsley, 1971, page viii). From the paper contributed by the participants and edited by Worsley the following will be mentioned. Weintraub (1971, pages 135, 136) found for Israel that a strong, solidary, traditional kinship structure may constitute a positive condition for the sustained development of modern cooperation. Though he stated that the importance of a core of genuine loyalty stretches over a period longer than the initial introduction of modern cooperative development' (Worsley, 1971, page viii). From the papers contributed by the par-This release of commitments will just be facilitated by the existing solidarity. A continued stable process of development depends very much on the proper timing of the replacement of parts of the traditional structure by a new one, so that no serious disintegration occurs. Crocombe (1971) had a different idea from Weintraub about the extent to which traditional kinship structure is an asset when modern cooperatives are to be established. In kin-based authority structures deference to persons is necessary on grounds of inherited rank, while in a cooperative society members have identical rights. He therefore thought that in societies with a minimal structure, e.g. New Guinea, formal cooperatives can be introduced more easily than in societies with a complex structure of relationships, e.g. Samoa, because traditional forms of cooperation are designed to serve quite different ends and hinder the achievement of commercial goals.

A New Guinean has to learn all the features of cooperative activity without much help from

traditional precedents, but also without too much hindrance from them. Morgan (1968) had a similar view about the great adaptability of societies with a minimal structure. She changed Pringle's (1970) amazed statement about the Iban of Borneo 'unstructured yet dynamic' into 'unstructured, therefore dynamic'.

Carroll (1971) reviewing the literature about the experiences in Latin America to convert traditional systems of cooperation into modern ones, stated that there are possibilities. Cooperative societies of the Rochdale type may not spontaneously arise, but at least outside planned and partly controlled pre-cooperatives can be established. According to him even the severest critics admit the transmutability of certain aspects of traditional structures as long as gradualistic strategies and intermediate modes are used[1].

Most of the arguments mentioned appear also in the contribution by Dore (1971). He specified preconditions for modern cooperatives to be successfully based on traditional relationships. The first condition is that cohesive solidarity really exists in the traditional community. There are many traditional communities which are not so solidary as reported in Bailey (1971a). Secondly, what is the type of the authority pattern? If authoritarian leaders are in favour of the formation of cooperative societies these might be easily established. However, if these are to be run along the pure democratic principles immense difficulties will be faced. Then the traditional authority patterns will have to be broken down and it is likely that along with that process cohesive solidarity will also disappear. So generally speaking modern cooperative associations have only a chance in communities with an egalitarian ideology. Even when the two conditions are met there remain problems with the introduction of practices inherent with modern cooperatives which are based on the principle of institutionalized suspicion. The traditional mutual trust and loyalty which are hoped to be of advantage to the cooperative organizations are incompatible with this suspicion. Dore's cautious conclusion is 'if the balance of material advantages from cooperation is sufficiently great, and if the other norms and values of the society (time discounts, evaluation of truthfulness, etc.) are sufficiently favourable to enable it to survive the difficult transition period, it may emerge with a stronger and more efficient organization than a cooperative which did not start from a similar traditional base line'.

Support for the hypothesis that traditional social structures are a suitable starting point for communal approaches to development can also be derived from the outcomes of a research by Smock & Smock (1972) in Eastern Nigeria. They compared villages who had responded to the establishment of a community plantation with unresponsive villages. They discovered that 'overall, the responsive villages offer a picture of somewhat greater isolation and traditionalism, plus greater homogeneity and integration.'

Galjart (1973) thought that there are three incentives for farmers to cooperate with each other in organizations: force, prospects to rewards as compensation for the contributions made, and solidarity. He defined solidarity as the propensity to sacrifice resources or future satisfactions for the well being of others, because of a feeling of togetherness. It is doing things for others without a material recompensation. He further differentiated mechanic and organic solidarity, though differently from Durkheim. To Galjart mechanic solidarity is the sacrifice of resources for a common purpose. Organic solidarity is the sacrifice of satisfactions of an individual and short-term character because of the continuation of the joint social system. When peasants start to cooperate in a newly established organization, mechanic solidarity is especially required. After the initial

1 Similar opinions are expressed in Carroll (1969).

phase, when the organization is working, and the first fruits of cooperation can be reaped, it becomes essential that besides a certain mechanic solidarity—membership, fees, participation—members show organic solidarity. By that time the organization will have become bureaucratized and routinized to some extent. Employment of staff decreases the dependency of the organization on the contributions by the members. Now the first requirement of the members is that they will not jeopardize the organization by not accepting the allocation of responsibilities to it and the distribution of shares in its profits, or not complying with the procedures created for settling disputes. Galjart pointed out that in this second phase organizations in which peasants are to cooperate suffer from the mechanic solidarity present in subgroup, when for example resources are used to the benefit of the household unit and withheld from the organization. Galjart's conclusion at the end of his study of peasant organizations in Chili is similar to the findings of Weintraub (1971) with regard to moshavim (rural villages) in Israel. Both stated that a traditional type of solidarity is essential when a new cooperative organization is launched, which then gradually has to give way to other principles of loyalty, more adequate for keeping the organization functioning. They clearly reveal the difference between the mechanism on which the cooperative organization is supposed to be founded, and the mechanism along which it will operate. Often cooperation is seen as the only way open to individual peasants to obtain a piece of the welfare cake, to which only big and powerful units have admission. It is believed that on the basis of recognition of a common identity among neglected or oppressed people they will start to run a rather formalized and bureaucratic organization. But as pointed out by Galjart and Weintraub this organization would need a solidarity from its members, different from simple 'we' feelings. Because of the different nature of the kind of solidarity expected in the different phases in the life cycle of a cooperative organization, a smooth transition from the launching phase into the phase of establishment should be called an exception rather than a rule.

I started my research project at a time when the findings and views of Galjart were not yet available. So I could not test and eleborate on his ideas. Still the conclusion from my direct observations of cooperative activities, and the statistically processed data collected about these activities, is very similar to Galjart's outcomes. Probably it is a principle with a wide, if not general applicability.

In Chapters 13, 14, 15, and 16 it will be shown that launching cooperative activities in villages where a habitually integrated pattern of relations still exists or has been revived does not create the greatest problems[1]. But the transition to an established organization is far more difficult, and until now has hardly occurred.

1.1.4 Integration in tribal societies

I tried to answer the question: can the loyalty and mutual trust of a traditionally integrated community be transferred to new cooperative organizations? If this hypothesis is to be tested among a particular group of people it is necessary to ascertain that there integration based on loyalty and mutual trust really does or did exist.

Because of its relevance to the Land Dayak of Sarawak, parts of the book 'Tribesmen' by

1 Unlike Galjart I use the terms habitually integrated and action-oriented integrated pattern of relationships. Both terms emerged when the data collected were processed.

Sahlins (1968) will now be discussed. Sahlins noted that the major characteristic of tribes is the lack of a central regulating power. He differentiated segmentary tribes and chiefdoms, being extremata of a continuum. The first are socially and politically fragmented, and have an undiversified economy. Their segments are equivalent, structurally and functionally. The segments can be based on the principle of descent, on territory, or a combination of both. The communities of a segmentary tribe are invariably small, their form ranges from compact villages to scattered homesteads. Chiefdoms have a kind of political superstructure, as well as a more elaborate organization of other aspects of culture, which makes them predecessors and transitionary phases to states[1].

A tribe experiences its greatest strength in the homestead and hamlet units, which are rather independent and self-sufficient groups. As stated, tribes are only weakly, if at all, organized into greater units. This atomistic condition does not only apply to the social and political sphere, but also to the economic system. For Sahlins the best word for the organization of production with tribesmen is anarchy, 'The social economy is broken down into independent household existences, constituted to operate parallel to each other and in an uncoordinated way' (Sahlins, 1968, page 76). The lack of constituted relationships in tribal societies make them excessively prone to a situation of Hobbesian conflict of every man against every man. If peace is to be secured, the cooperation of everybody in his dealings with his fellow-men is needed. Peacemaking, the wisdom of tribal institutions, is a continuous process, going on within society itself. In many transactions in tribal societies the motives of gain and competition are waved. Reciprocal gift-giving is used as means to establish solidarity. But reciprocity is also an important policy in preventing disturbances in a peaceful status quo. Sahlins refers to three types of reciprocity as defined by Service (1966):

1. *Generalized reciprocity.* These transactions are at least putatively altruistic. The social side of the relation overwhelms the material. Reckoning is simply not proper. Not that there is no obligation to reciprocate, but the expectation of reciprocity is left indefinite, unspecified as to time, quantity and quality.

2. *Balanced reciprocity.* Direct exchange: the return is made straight off and is equivalent in value to the goods received. The material aspect of the bargain is as important as the social, and there has to be some reckoning, more or less precise, because accounts have to be balanced.

3. *Negative reciprocity.* This is the attempt to get something for nothing: transactions opened and conducted toward net utilitarian advantage. In other words, what we might consider as sound business principles. The participants in all instances confront each other not merely as distinct but opposed interests, each looking to maximize his position at the other's expense.

In tribes the different types of reciprocity are exercized with different people. In dealings with close kinsmen generalized reciprocity is often the norm, with co-villagers balanced reciprocity is maintained, while negative reciprocity in dealings with outsiders is generally not frowned upon morally. In transactions within the village boundaries balanced reciprocity is the principle normally adhered to. This characterizes to a large extent the social structure of these communities. The attainment of balanced reciprocity is a condition for integration in tribal villages. As will be seen in later chapters this accent on equivalence of contributions by villagers in their relationships is likely to be

1 The description of Land Dayak villages in the following chapters will show that they should be classified as territory-based units of a segmentary tribe.

transferred to the cooperative organizations which may be envisaged for these villages.

Apart from these general remarks about the socio-political and economic structure of tribes, Sahlins (1968) mentioned a number of adaptations of the basic pattern of tribal societies to physical and cultural circumstances. Three adaptations, concerned with practising agriculture in dense tropical forests, dominance by other groups, and influences from an external market, are noteworthy for their relevance to the Land Dayak of Sarawak. These adaptations are all of a regressive nature, into the direction of a segmentary tribe proper, which is characterized by social and political fragmentation, and an undiversified economy. The conditions mentioned do not allow for development into a chiefdom, which with its greater complexity anticipates statehood.

One of the adaptations is that made by forest agricultural tribes. Dispersed isolated hamlets or small villages, not larger than a few hundreds of inhabitants are connected with the practice of shifting cultivation or swiddening. This pattern of settlement does not allow for strong political and economic relations between the communities. When a segmentary tribe is in contact with a superior organization there are two options. The first is to set up a chief who has to deal with the outsiders. However, the rest of the tribe remains undifferentiated, the chiefly stratum not having any real roots in it. Sometimes these newly established authorities openly claim descent from a neighbouring royalty. The other way for a segmentary tribe to react to powerful neighbours is to become invisible, to fragment in small unobtrusive groups living among the more advanced people, or to run off into the forest as small mobile communities.

The two adaptations discussed affect integration at the intervillage level. The third adaptation concerns intravillage integration. When tribal communities become exposed to the influence of markets which offer them new prestige goods, often the only way open to the constituting households to obtain these luxuries is by exchange for part of their food crop. The effect of export of a part of the food crop is that the community becomes atomized. No surplus of the food crop is left for generosity towards unfortunate co-villagers, either directly, or via a fund controlled by the village chief. The directedness of all households to the accumulation of the new prestige goods cause community relations to be cut to a minimum. Leadership also suffers from this external influence, the retraction of households to their individual positions gives it little scope for uniting and guiding those living together in the same village.

Sometimes a society is characterized as loosely integrated, or loosely structured. Some sociologists even speak of unstructured societies. What do these terms mean? Are members of such societies unable to organize themselves in groups with a prolonged existence, other than the very primary and basic group as the nuclear family? The concept was originally formed by Embree and based on his observations of human behaviour in Thailand. His definition was 'signifying a culture in which considerable variation of individual behaviour is sanctioned' (Embree, 1950). Some anthroplogists use the term for certain tribal societies. Examples are Crocombe (1971) who referred to New Guinean societies having a 'minimal structure', and Van der Leeden (1956) who found many institutions in Sarmi, New Guinea, to be vague, mainly due to bilateral influences in the kinship system. Though Van der Leeden agreed that structural incoherence is an adjustment of very small communities to harsh surroundings, he still concluded to a mainly hypothetical double-unilateral system of descent. Pouwer (1960 a and b) disputed this point of view on the basis that it does not acknowledge the bilateral principle. A bilateral kinship system too can result in a stable structure, and besides it has the advantage of being flexible in difficult surroundings. The previous references to the characteristics of tribal societies show that the use of the term loosely structured for some tribal societies is not unjustified, but it is nothing more than mere labelling. It does not give any explanation about the forces which have created such a situation. In a review of the post-war

sociological literature on Thailand, the country to which the term loosely structured was first applied, Mulder (1967) said despairingly that most of it was only of descriptive value, because since Embree's article few research workers have looked for the causes behind loose structures. The discussion on structural looseness was still not closed. A few years later a reader of articles was edited about the fruitfulness of the concept for the understanding of Thai society, and its contribution to general social science theory (Evers, 1969).

In a review of this reader Anderson (1970) remarked that much of the confusion around loosely structures derives from the inadequacy of methods of analysis usually used by sociologists and anthroplogists. These methods lay much emphasis on formal order without paying much attention to personal modifications in human behaviour. He differentiated three categories of students of Thai society. The first one he called 'behaviourists', among which is Embree, who rightfully stress the inconsistency of Thai life. But unfortunately they used structural terms, which has led to misunderstandings. The second category consists of 'institutionalists', in which he included Mulder, who painstakingly have revealed the order existing in different Thai institutions. But Anderson's sympathy is with the 'organizationalists', who recognize the necessity to amend the results of existing methods of institutional and personality analysis by focussing upon processes of interpersonal behaviour. He stressed the fact that in every society human behaviour is far richer in variety than can be described by formal patterns. This is particularly true for Southeast Asian societies like the Thai where social life is not so much determined by norms into a single fashion as by interpersonal manipulation and negotiation. Still a rather predictable order emerges. Anderson did not go into the causes which have created the so-called loosely structured societies.

Pelto (1968) ranked thirty societies on a continuum: tight—loose structure. His research suggested that kinship system, dependency on food crops, and population density, account for the difference in social structure. In tight societies unilineal kinship systems predominate; the people rely on food crops for which cultivation teamwork is essential and population density is high. Loose societies are characterized by bilateral kinship systems, herding and hunting as means of subsistence, and low population density.

To conclude this review of the basic pattern of tribal societies and some adaptations to particular circumstances, the main characteristic of their structure is that they consist of a number of rather independent units, generally the nuclear family. Relations between these units are characterized by reciprocity and are mainly the concern of these units themselves. A central authority, giving certain general regulations hardly exists. This does not mean that tribal societies experience a continuous situation of disintegration. In fact stable patterns of relations exist, along which transactions are repeatedly made with little or no prior negotiations. But the persons involved remain very conscious of their own independent position, and they keep all options open to act differently in future, if they would wish to do so. To end with the words of Sahlins (1968, pages 95): 'although exchange may establish harmony between parties, their differentiation of interests is inescapable'.

1.1.5 Operationalization of concepts

The phase of operationalization has been reached. Up to here the concept of integration was used as defined by Leighton et al. (1962), patterned ways of interacting among people in a sociocultural system who share at least some sentiments. Other social theorists use the term solidarity for the description and analysis of those aspects of social life that are the subject of this research project. Their definitions of solidarity are different from each other, as well as from the way integration in

this particular case was conceptualized. But they can be considered to be variations on a common basic pattern, and therefore they are of relevance to this study. As it has been shown in all these definitions the same two elements appear; the first is cooperation, or coordination in interaction, the second is expressed in terms as cohesion or common sentiments. These two elements are also reflected in the statements about social integration by Van Doorn & Lammers (1969). They differentiated the four following aspects:

1. Coordination in interaction between people involved;
2. Convergency in ideas and opinions about matters relevant to the people involved;
3. Congruency in mutual feelings with relation to matters relevant to the people involved;
4. The endeavour after coordination with relation to matters relevant to the people involved.

The three last aspects together indicate that the people involved in the coordination of their interaction should have the same attitude about the objects relevant in their interaction. Each of these aspects reflect one of the three components of an attitude, cognitive, feeling and action tendency as defined by Krech et al. (1962).

Van Doorn & Lammers considered a close relation between the four aspects of integration to be a natural tendency of groups. They recognized that sometimes cooperation coincides with strong disagreement and fairly intense feelings of mutual antipathy. However, conflicts as rivalry and competition are also forms of integration. Those involved in antagonistic cooperation must have similar attitudes to a certain extent.

In the operationalization of social variables three different types of indicators can be differentiated. The first category comprizes the perceptible phenomena of a variable. But other variables may be in causal relation with the first variable, either as a precondition or as an effect. Indicators of these variables form the other two categories. Generally much understanding of the first variable can be gained by including these other two in the study. When operationalizing the variable integration in a segmentary tribal society the following indicators are of use:

– actual integration: (a) coordination in interaction aimed at the continuation and well being of the community, the contribution by each of the participants will be in accordance with the expected individual returns; (b) similarity in attitudes with regard to matters of relevance to the members of the community.

– preconditions to integration: homogeneity in social and economic positions in the community which facilitates interactions based on balanced reciprocity, and fosters similarity in attitudes about matters relevant to all members of the community.

– effects of integration: effects of coordination in interactions between the members of the community.

In this study integration was measured by surveying the actual and previous coordination in interaction between the inhabitants of a village. Also the extent to which the same matters are relevant to all or most of the inhabitants was used as indicator of integration. The ethnic, religious, political, and economic homogeneity among the villagers was investigated. No attempt was made to measure actual attitudes towards coordination and cooperation between villagers. I thought that attitudes might change too quickly so that associations between an attitude at the time of the investigations and other more stable features could easily lead to misinterpretations. An example of such problems can be found in a study by Smock & Smock (1972). They attempted to develop a predictive device to measure the response of communities to the formation of a community plantation by comparing villages that a number of years before either had accepted or rejected a proposal to form such a plantation. Some of their findings are that inhabitants of responsive villages tend to

be more optimistic about their economic future; to be more likely to believe that by working hard they can improve their position; and to have a more positive attitude toward the Government. However, with the research design followed it is not proved that these attitudes already existed in the responsive villages before the community plantation was started.

Other factors of villages, besides integration, which at the start of my research were thought to be important for the establishment of new outside instigated cooperative organizations in a village were leadership, differentiation, size and accessibility.

The position of village headman is pivotal, he is leader of the villagers as well as an intermediary between the village and organizations outside it. If the headman is a dynamic personality, accepted by his people, this is likely to increase the quality of the village's representation with the outside organizations, as well as to result in a smooth implementation of projects to which the villagers cooperatively have to contribute their labour and other resources. The reasoning behind the idea that differentiation affects the extent to which cooperative projects are desired and implemented is that familiarity with the more sophisticated society outside the village community affects the wish for the products of development projects and forces the villagers to cooperate in these. This driving force is supposed to be stronger with people who have some knowledge about what possibilities exist. They are more subject to relative deprivation than those who have an unaltered perception of their traditional world.

Situational circumstances like size of the project receiving village, and its accessibility, are probably also of importance in the process of soliciting for, granting and implementation of community development projects. The larger the village, and the easier it can be reached, the more a project providing organization will be interested in it. In large villages more people will be benefited by the expenditure for a certain amenity which is to improve the quality of their life, compared with the not necessarily much smaller expenditure for a similar amenity in a small village. If a village is well accessible the implementation of a project is not likely to suffer from difficulties in transport of staff and materials. Besides, if travelling to and fro a village is a comparatively easy affair, its inhabitants will probably have more contacts with the society outside their village, which makes them more prone to the relative deprivation and affects their eagerness to obtain amenities for their villages.

1.1.6 The hypotheses

The previous reflections on why villagers respond well or not so well to attempts to establish cooperative organizations and other projects based on cooperative efforts, are recapitulated in the following set of hypotheses:

1. In villages with a high degree of integration more cooperative development projects are implemented than in disintegrated villages.
2. In villages with a dynamic and accepted headman more cooperative development projects are implemented than in villages which lack such leadership.
3. In villages with a high degree of differentiation of meaning sectors more cooperative development projects are implemented than in undifferentiated villages.
4. In large villages more cooperative development projects are implemented than in small villages.
5. In well accessible villages more cooperative development projects are implemented than in isolated villages.

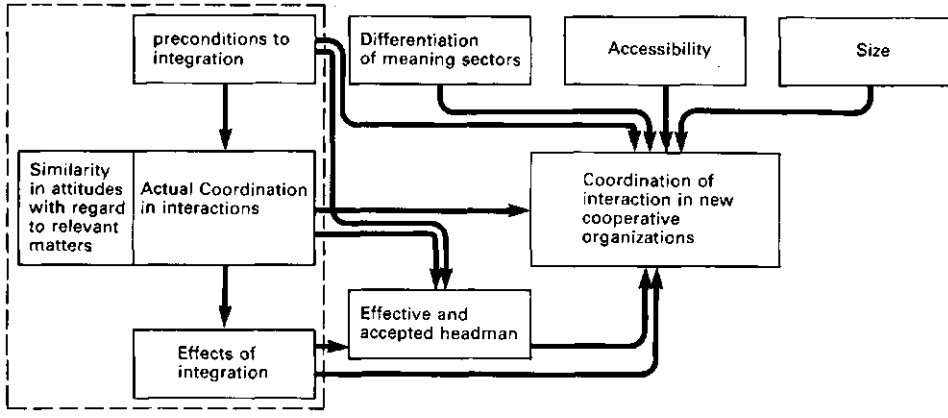


Fig. 1

The different social variables in this study and their hypothesized interdependencies with the central variable, cooperative organizations on village level, are pictured in Fig. 1. The variables shown in this diagram are limited to those directly concerned with the degree of integration in the existing pattern of relations, the major independent variable, and the dependent variable, cooperative organizations at village level. A few other variables which are hypothesized to be of direct and substantial influence on the dependent variable are also shown[1].

This set-up of the research project allows for testing the five hypotheses, together forming the model shown in the diagram. No variables have been included to investigate whether another model would be more appropriate.

If the hypotheses are confirmed by the outcomes of the research, this question is appropriate: how can these facts be used by organizations responsible for the planning and implementation of development policies. If for example only villages with a high level of integration, or with a dynamic and accepted headman, or highly differentiated villages, responded well to an approach which includes cooperative development projects, it would be useful to develop simple methods by which these features could be recognized. Then a programme including these projects could be exclusively directed at these villages, while for communities not likely to respond well alternative programmes could be designed. The measurement of features like size of and distance to a village is not difficult. It has already been hypothesized that project-providing organizations do reckon with these characteristics. Neither will it be difficult for a layman in sociology to estimate if a village is differentiated to a certain extent or not. But it will be more problematic to develop simple techniques which would result in reliable estimates of the degree of integration in a village, and the quality of its leadership. In Sarawak, representatives of the organizations charged with rural

1 During the fieldwork a few other variables have been operationalized, as interlock between different leader positions in the villages, presence of Chinese in the villages, and entrepreneurs on the village level. In that phase it was felt that these variables could add to the understanding of the relations between the variables in the original model, as well as it would increase the practical relevance of this study.

development often thought an orderly village outlook to be a good indicator of integration, as well as of a capable and accepted headman. Leadership and integration are regarded as interdependent. Village outlook as an indicator is easily to assess, and if it would prove to be a valid one, deserves to be applied on a large scale. Any other indicator would certainly involve more difficulties and time to be measured. For example use of one or more questions from the questionnaire I used in this research would create problems such as selecting respondents, and checking on reliability, because answers to Government servants by rural dwellers are frequently biased. The reasoning behind use of village outlook as a measure of integration is not illogical. In an integrated village it can be expected that the villagers will coordinate their activities with regard to their houses, yards and other surroundings, so that an orderly, pleasant place to live in is the result. Active, capable leadership could well guide these activities. However, the reasoning is based on the assumption that the people really desire a clean and orderly village, or in other words, that this is a relevant matter to them. To check whether the outlook of a village can be rightfully used as an indicator of the degree of integration, and the quality of leadership, an additional hypothesis was formulated, which either confirmed or refuted, will be of practical relevance.

6. The degree of integration of a village, and the presence of a dynamic and accepted headman, are reflected in the outlook of the village.

One more aspect of direct practical relevance was enhanced to this research project. It was, and probably still is widely believed in Sarawak that the Chinese population group, which is active in commerce, professions as well as in labour and capital intensive types of agriculture, serves as an example to the indigenous population groups, of which the Land Dayak, among whom this study was made, are one. Observation by the latter of the methods practised by the Chinese, and active assistance by the Chinese to their compatriots in the form of advice and credit facilities would have contributed to the rise of a class of indigenous rural entrepreneurs. A confirmation or refutation of this opinion is of importance to a society which has as one of its major aims the eradication of existing differences in occupation and income structure between the population groups. The following and last hypothesis was formed to check this popular belief:

7. In villages were businessmen and market orientated agriculturalists of the Chinese population group in Sarawak can be easily met and observed, more native entrepreneurs are present than in villages which lack such contacts.

1.2 Research chronicle

Work on this research project started in mid-1970 at the Department of Rural Sociology of the tropics and subtropics of the Agricultural University in Wageningen, the Netherlands. A new phase in the research programme concerned with the development of small scale farmers in tropical countries was to be embarked upon and its outlook was intensively discussed by all the resesearch workers present at that time. It was unanimously decided that if the intended research programme was to reveal new facts and information, it should not centre around the adoption of innovations by individual farmers but should feature the effect of development programmes aimed at individual peasants and groups of peasants in relation to the social structure of the communities the peasants reside in.

Sarawak was selected as a location for research because an important part of its population is in transition from an agricultural system based on growing of food crops in shifting cultivation to continuous use of land for food and cash crops. It therefore offered an excellent opportunity to study an important process of rural change. Another reason, just as important as the first, was the

knowledge that the Government of Sarawak, as well as the Government of the Federation of Malaysia, had the sincere wish to develop the rural areas, and that there was an effective system of development administration established for that purpose. Early in 1971 the State Government of Sarawak gave its consent to a study in rural development. Other studies under the research programme have been made in Chile (Galjart, 1973) and Senegal (Venema, in preparation).

The months of preparation in Wageningen were used for study of written sources about the recent history of Sarawak and the Federation of Malaysia, the economic resources and administrative system of the State, and anthroplogical research among the different population groups. The Language Centre of the Agricultural University provided a training in the Malay language, a lingua franca in Sarawak.

The fieldwork covered the period from May 1971 until December 1972, of which about eighteen months were devoted to actual fieldwork. The first month was used for introduction to the different departments and levels of the administration, and collection of detailed knowledge about their programmes, including progress made and the existence of possible problems. Several reconnaissance trips in the rural areas were made. Sometimes I accompanied Government officers on their tours of duty. Then a definite decision was made about research object and location. I decided that my research would deal with people in transition from shifting cultivation to settled agriculture. This transition is strongest in areas with high population density and good accessibility which facilitates transport of inputs and outputs and contact with institutional sources of advice and guidance. An easily accessible research area would have the advantage that I could remain in close contact with the administration and politicians in the centres, thereby gradually increasing my knowledge of the development policies and programmes as well as the philosophies behind these. For the reasons stated above it was decided to confine the research to one of the Land Dayak groups in the first Division, with the State capital Kuching as major centre. The Bukar-Sadong dialect group living in the Upper Sadong District with Serian as principle centre was finally selected because of the following reasons:

- It is the largest linguistically homogeneous group of Land Dayak, entirely confined to one District; population groups besides the Land Dayak are minorities in the District.
- Location not in the immediate vicinity of Kuching to evade disturbing influences of part-time farmers etc. in the set-up of the research.
- Long time presence of farmers of Chinese origin, engaged in highly specialized agricultural enterprises.
- Twenty years before this population group had been studied (Geddes 1954a, b; 1957), so that assessments about changes in time could be made.

Within the District one village was selected to start the research by investigations with anthropological methods. The criteria for selection were:

- size of the village slightly over the average in the District of 48 households, because the larger villages attract the attention of the Government more;
- some Government projects, in progress or recently terminated;
- presence of longhouses as well as detached houses, the latter as probable indicators of increasing individualism and an outside influenced culture pattern;
- Christian religion recently adopted by at least a part of the population so that the circumstances and effects of religious conversion, could be studied;
- growing of permanent crops besides shifting cultivation;
- presence of a few entrepreneurs in the village, e.g. shopkeepers and operator of a rice mill;
- good accessbility, however not situated in the immediate vicinity of a major centre, or on one of

the major roads;
– soil of a comparatively good structure and fertility, not being an obstacle to agricultural innovations;
– some specialized Chinese pepper cultivators in the neighbourhood.

After my own investigations and discussions with Government officers and missionaries it was decided that the village Riih Daso, about one mile off the Serian-Tebakang road closely resembled the above given description. The area with Taie in the north and Pichin in the south had also been recommended as location for research two decades before by Leach (1950). Another advantage of Daso was that the then Distrct Native Chief originated from this village and lived close to it, which facilitated the study of his influences and duties. The Education Department made available a vacant teacher's house at the side of the village school of Daso, near the major entrance to the village. Most of village life and nearly all movements in and out of the village could be observed from that residence. The five months spent in Daso served as a reconnaissance into Land Dayak economy, culture and social structure. Long unstructured interviews were made with the inhabitants by day in their fields and on the way to these, and in the evening in their houses. The information collected was verified and added to by observation, which in turn gave rise to new questions. Where necessary a secondary school leaver served as interpreter. First meetings with people from the village were formal and stiff. Polite questions and explanations were asked about Europe and voyages to the moon, subjects it was thought I would be proud to tell about. But generally after I had explained the purpose of my presence the villagers were willing to share their knowledge with me when asked for it. Some felt such a great responsibility that they themselves raised new points of interest and gave lengthy explanations. Others felt ashamed about their situation and culture, but this could be overcome by prolonged presence, active participation in village life and efforts to learn the language.

Important events as village meetings, sessions of the village court, and the speeches of Government officials visiting the village were recorded and afterwards word for word translated. In order to obtain a more than superficial impression the activities and expenditure of ten households in the village were recorded every day for a period of six weeks after which the informants and the interviewer grew tired of it. During the stay in Daso many other villages were visited for one or more days, individually or in company of Government officers of the Divisional and District level. These visits served to get an impression about the range of variation in village characteristics, and also to observe the relationship between Government administration and the village level.

Afterwards, when the reconnaissance period in Daso had ended, I continued to visit the village regularly to observe activities in other seasons and to fill other gaps in my knowledge in additional interviews. The village has also served as a testing ground of the questionnaires used in two surveys.

In December 1971 a survey of all Land Dayak villages in the District was launched. Its purpose was to collect information that could be processed statistically and which it was hoped would reveal general patterns and trends. The nature of these are mentioned in the hypotheses in the first part of this chapter. Questions were drafted and translated into the Land Dayak dialect, and retranslated into English by different persons in order to check on possible mistakes. After pretesting, several parts of the original questionnaire had to be revised. Especially questions about numbers, parts of village population and points in time proved to be too sophisticated. The respondents often only differentiated in many and not so many, and remembered clearly the formation of Malaysia, the Japanese occupation and the eruption of the Krakatau. The final version of

the questionnaire, and the frequency distribution of the answers are presented in Appendix I. Ten trainees of the Batu Lintang Teachers Training College were recruited and trained as interviewers for the period of their holiday. Some of them had already assisted in the preparation of the questionnaire. All were Land Dayak from the District to be surveyed, and had served before one or more years as untrained teachers. They proved to be very good interviewers, with a high understanding of the purpose of their work. They were welcome visitors to the houses of the respondents, who often put them up for the night.

Every village recognized by the Government as an administrative independent unit was included in the survey. Knowledge about the total number of villages and their names was obtained from a list of villages and headmen in the District Office. Because of the limited number of Land Dayak villages in the District (96) it was decided that the sample would be equal to the population.

The interviewers travelled by foot from village to village in couples. In every village two, four, six or eight interviews were made in accordance with the number of households living in it. Key persons in village life had to be selected as informants, like the headman, a religious leader, a member of the school committee etc. Informants had to live in different parts of the village and if possible be of different religion.

Afterwards the returned questionnaires of each village were processed into one single record by comparing the answers obtained. In the few cases these answers were in strong contradiction a 'don't know' had to be scored. The single records for every village formed the basis for index construction and correlations between them as described in Chapter 14. Preliminary processing in Sarawak, with a small computer in the Forestry Department, indicated whether the hypothesized relationships between village characteristics did exist in reality. The major hypothesis that Government projects constructed by making use of the gotong royong principle were present in villages with high cohesiveness was refuted by the preliminary outcomes.

In order to gain deeper insight in the village structure and the processes behind communal activities and Government assisted projects, and the variation in these, additional community studies were made in six selected villages. Main characteristics of these villages are shown in Table 1. Selection was primarily based on the scores on the preliminary indexes for internal cohesion and development projects, typical and atypical villages were included. If more than one village possessed the qualities in the required combination there was some scope for geographical distribution over the District (see Map 2) and the possibility to include representatives of different religion

Table 1. Some characteristics of six selected villages.

Name	Internal cohesion	Number of projects	Religion[1]	Number of households	Accessibility from feeder road
Retuh and Plaman	high	few	RC/Bid/SDA	46	¼ h by outboard
Murut and Plaman	low	few	RC/SDA	48	4½ mile project road
Engkaru	high	many	SDA	71	2 mile project road
Tangga and Plaman	low	many	Bid/RC	73	on feeder road
Mapu Mawang	high	few	Bid	45	2–3 h by foot
Koran Empaneg	low	few	RC	34	1 h by foot

1. Religions mentioned in order of number of adherents: RC = Roman Catholic; SDA = Seventh Day Adventists; Bid = traditional Land Dayak religion.

or a combination of these. Also the size of the villages and their accessibility varied, but no extremes were included. The villages 1–4 in Table 1 had a completed irrigation scheme or one under construction. The construction and management of these was thought to be an interesting aspect to be studied.

For the actual execution of the village studies assistance was received from three Netherlands students in sociology, Hetty van Berkel and Jon Daane from the Agricultural University of Wageningen who studied villages nos 4 and 6, and nos 3 and 5, respectively, and Jarik Lette from Leiden University, who worked in villages nos 1 and 2. One more village study was possible because of assistance by Ir A. G. Nottelman. Pichin, an extremely large village was selected, rapidly developing by the efforts of the inhabitants as well as assistance received from the Government. At the universities internal reports about these village studies have been published (Van Berkel & Nottelman, 1973; Daane, 1974; Lette, 1974). Before they started their investigations the students received a training in the dialect of the District by a Land Dayak teacher, who used a coursebook supplied by the local Peace Corps Office. The students lived for a period of two months in each of the two villages assigned to them. The method of research was the same as the one used in the first reconnaissance study in Daso. Secondary school leavers assisted them in complicated interviews. Close liaison was maintained between all involved throughout this period of village studies, by internal notes and regular mutual visits.

The fieldwork of the research project was ended by a survey covering all households in Daso and six villages that had been studied by the students (Pichin was excluded). The questionnaire comprised topics such as composition of the household, agricultural activities and produce, subsidies received, and participation in village activities. Drafting, translation and implementation of the second survey were similar to the first one made a year before. The questionnaire and frequency distribution of answers collected are presented in Appendix II. A purpose of this second survey was to acquire statistical information which could facilitate comparison between the villages that had been selected as typical and atypical representatives of all the Land Dayak villages in the District.

Together the seven samples comprising 400 households, are a select unstratified cluster sample from the Bidayuh households in the District. Because of its size and the heterogeneity of the villages selected the sample is thought to be fairly representative of the population.

Definite processing of statistical data and writing of the thesis was done at the Department of Rural Sociology of the tropics and subtropics of the Agricultural University of Wageningen, in the Netherlands during 1973 and 1974.

2 Sarawak, the country, its people and government

2.1 Short history of the state

Sarawak, since 1963 one of the constituent states within the Federation of Malaysia, is situated on the north-west coast of the island of Borneo in the South Chinese Sea (see Map 1). Sarawak, with an area of 48,342 square miles comprises 38 per cent of the total area of the Federation but its population forms only about one tenth of the total population.

The history of Sarawak has been well recorded since 1839, the year of the first visit of James Brooke the later ruler of the country. About the previous period less is known with certainty, Sarawak was one of the less important provinces at the southern edge of Brunei Sultanate. It was not even marked on any British Admiralty chart (Irwin, 1955). In 1840 James Brooke definitely settled himself in Kuching, at present still the capital, in the western part of the state. James Brooke, and his heir descendents Charles Brooke, who reigned from 1868 to 1917, and Charles Vyner Brooke, who ceded Sarawak to the British Crown in 1946, are commonly referred to as the White Rajahs. In the beginning it was James Brooke who helped the Sultan of Brunei to oppress a rebellion in the area around Kuching, which area, somewhat smaller than the present First Division, became his personal domain after the pacification. But he soon thought himself more capable of administering the country than the Sultan and his nobles. The area of Sarawak was several times extended at the expense of the Sultan of Brunei. This practice came to an end in 1906 when a British Resident was appointed in Brunei. The Brookes pacified their country, protected it from piracy from outside, forbade practices which they thought detrimental, like head hunting, and preserved what they thought to be good with the 'common sense of rightminded Englishmen'. They placed themselves in a position of supreme ruler and judge, accessible for every member of the public. In the implementation of their task the Brookes were assisted by the Malay aristocracy and a small group of European officers. Sarawak remained practically closed to foreign influences.

At first James Brooke had requested the support of the British Government and was even prepared to bring Sarawak under the Sovereignity of the British Crown. But he made his conditions as to welfare of the people of Sarawak, which in 1858 he thought would be served best if Sarawak became a British possession with a native administration superintended by Englishmen. The proposal did not gain much official appreciation in London. Only in 1888 did Sarawak become a British protectorate. Much earlier James Brooke had terminated his attempts to lure the commercial world into large enterprises. In 1846 he succeeded in putting his finances on a more or less satisfactory basis, and from then on did everything he could to frustrate the commercial penetration of his kingdom, afraid that this might be the end of the unspoiled nature of Sarawak's people (Irwin, 1955). In this way commerce and industry remained nearly all on a small scale, operated by Chinese businessmen.

In 1941, at the State centenary, the third Rajah granted the population a new constitution, which terminated the period of absolute rule and gave legislative power to the Council Negri, a State

Representative Council consisting of official and Government nominated and appointed members. Soon after the festivities the Japanese occupied Sarawak until September 1945. The new Council Negri has done hardly more than to approve a proposal of the last Rajah that Sarawak should become a Crown Colony in 1946. The proposal was accepted by 19 to 16 votes, but to show their protest three hundred Malay Government officials left the Civil Service. In 1949 a member of the protest movement fatally stabbed the British Governor. However, the British took a firm stand which made Anthony Brooke, nephew of the last Rajah and most prominent heir to the Raj, drop his claim subsequently. The protest movement died in 1950. At present the anti-cession movement is sometimes regarded as a first sign of anti-colonialism and nationalism.

The seventeen years under colonial rule did not bring drastic changes to Sarawak. More money was made available for development, by which the administration and infrastructure in particular were improved, but due to the vastness of the country they still only could be described as very basic by 1963. Some of the members of the Council Negri were now elected by a three-tier system and a start was made with local authorities. Real political parties were not founded before 1959.

The idea of a Federation of Malaysia of which Sarawak would be an integrative part, first expressed in 1961 by Tengku Abdul Rahman, Government leader of Malaya, caught everybody in Sarawak, unprepared. The British were sympathetic towards a future Federation of the Malay States, Singapore and the Borneo territories, as they were towards political federations in other parts of the world. The Government of Sarawak, as well as of Sabah, published public statements which urged the local races to consider Malaysia favourable in their own interests (Allan, 1968). Some of the British Government servants went all the way to intimidate and restrict the political rights of everyone who had joined or intended to join the Sarawak United People's Party (SUPP) who opposed the formation of the Federation of Malaysia (Leigh, 1971). Malayan sponsored visits by Bornean leaders to the Peninsula, where they saw rural development, economic prosperity and racial harmony, made them good converts to Malaysia. The Borneans became convinced that a Federation of Malaysia would bring to their territories the same success story which had attended the Federation of Malaya since Independence (Merdeka) in 1957 (Ongkili, 1972). The British-Malayan Cobbold Commission, which in 1962 ascertained the views of the peoples of Sarawak and Sabah on a Federation of Malaysia, reported that a two-third majority would favour its realization, though half of it required specific safeguards and conditions. There exists some disagreement about the quality of the investigations by the Cobbold Commission. Allan stated, in line with the official report of the Commission, that the remaining third of the population of the Borneo territories was not irrevocably opposed to the plan. Parts of it might either have preferred a temporary continuation of British rule, or have insisted on the formality that independence should come first, after which the new nation could decide to join the Federation or not (Allan, 1968). However, Leigh thought that the Cobbold Commission did cast aspersions on much opposition evidence, caricaturing it as communist influenced, but did not choose to assess critically the submissions in favour of Malaysia (Leigh, 1971). missions in favour of Malaysia (Leigh, 1971).

The issues of religion, language, immigration and special position for the indigenous people, which to the opinion of the Borneans required specific safeguards were satisfactorily discussed in a Inter-Governmental Committee.

Soon after the formation of the Federation of Malaysia in 1963 a generous amount of development aid started to flow to Sarawak, which at the time of its entry was certainly one of the most underdeveloped States. For the first time a certain British influence remained, in the form of expatriate officers in several administrative key posts, and the presence of Commmonwealth forces to protect Sarawak from Sukarno's actions under his Confrontation policy and activities of the

diverse communist organizations in Sarawak itself. Sukarno's actions against the 'neo-colonialist plot' Malaysia had started in 1963, probably to soothe the large Indonesian Communist Party, and to divert attention from internal problems. It came to an end in 1966 when he had to step down from the political scene in his country, without having altered the territory at all, let alone crushing the Federation of Malaysia. Communist activities in Sarawak date back to the Japanese occupation when a Sarawak Anti-Fascist League was organized mostly by Chinese (van der Kroef, 1964a). Gradually the number of communist activities increased, their organizations became generally addressed as the Clandestine Communist Organization (CCO). Confrontation period meant an enormous boost in the activities of the CCO, because of the support they obtained from the Indonesians. In 1964 its strength was estimated at 6,000 with some military training and at least another 10,000 sympathizers (van der Kroef, 1966a). Since the establishment of cordial relations between Indonesia and Malaysia their number has dwindled. Instead of being able to hide at the Indonesian side of the border, they were now actively hunted from both sides. After negotiations in the first months of 1974 the majority of the remaining 755 guerillas returned to civil life, as well as a number of 1,124 unarmed communists were encouraged to end their activities in the North Kalimantan National Liberation League and other organizations (Asia Research Bulletin, 1974, Vol. 4, No. 3). Nearly exclusively Chinese were attracted to the Communist organizations. Education in Chinese medium schools had fostered an admiration and loyalty to mainland China. Lack of knowledge of English and the national language Bahasa Malaysia deprived them of opportunities for employment. Also they resented the dominant position of the Malays in the new Federation. Occasionally they have been able to rally the passive support of other non-Muslim population groups, mainly on anti-Malay sentiments. The effects of the CCO were contrary to their goal of an independent, communist-dominated Sarawak. Their presence pressed Sarawak leaders to ask support from West Malaysia and to express their loyalty to the Federation. Besides, their presence provided arguments for Federal leaders to interfere directly in State affairs.

The reasons for the inclusion of Sarawak (and Sabah) in the Federation of Malaysia were different in Kuala Lumpur and Kuching. The Malay leaders in Kuala Lumpur wanted the Borneo territories with their majority of indigenious people to counterweight Singapore with its dominant Chinese population. The Borneo territories got a number of seats in the Federal House of Representatives which made them overrepresented in accordance with their number of inhabitants, and the indigenous people of Borneo were expected to behave culturally and politically along the same lines as the Malays of the Malayan Peninsula. On the other hand, the Bornean leaders accepted Malaysia because of the economic progress it would bring to their States, and made conditions upon the entry of these States which should prevent too many cultural changes. From the start of Malaysia the political leaders in Kuala Lumpur have tried to bring the administrative and political systems of the non-Malayan parts of the Federation in line with those of the Peninsula. After Singapore was made to understand that its presence in the Federation was no longer appreciated, attention was paid to the Borneo territories. Their leaders were accused of being too much concerned with the autonomy of their States, and relying on British advisors instead of Malayan ones where no qualified Borneans were available yet. The reorganizations occurred by gentle persuasion and open interference, but were hard to resist because of the dependence on Kuala Lumpur for the development funds. Gradually there came an awareness among Sarawak's politicians that it was better to accept a cooperative stand within the Federation instead of a constant insistence on State rights.

The party system in Sarawak had to resemble the Malayan Alliance Party characterized by:

1. unification of each race under the leadership of its own distinct communal[1] party;
2. inter-communal cooperation and compromise by a coming together of each ethnic group in the Alliance where immediate conflicts of interest are resolved;
3. the pre-eminent position of the United Malay National Organization (UMNO) within the Alliance, with its ability to dictate the terms of agreement when deemed essential to the Malay interest (Leigh, 1971, pages 98, 99).

In the beginning all Sarawak parties had tried to claim support from all the population groups present, but gradually they nearly all turned out to be communal parties, one representing every major group. Already before Independence the nationalist SUPP had been isolated from its supporters outside the Chinese population group. In 1967 the two dominant Malay parties, Party Negara (PANAS) and the Barisan Ra'ayat Jati Sarawak (BARJASA) were united to Party Bumiputra, and this party again in 1972 merged with Party Pesaka, mainly representing the Iban, in order to create an organization of people native to Sarawak of sufficient size to dominate the political scene, according to the UMNO example in West Malaysia. Another step towards this increasing resemblance was made in 1970 by the formation of the Sarawak Coalition Government by Datuk Abdul Rahman Ya'kub, whose leadership is normally referred to as dynamic by the local press. He is a devoted Muslim of Melanau origin who gained political experience by holding several posts in the Federal Cabinet, and who is fully trusted by the Federal leaders, as expressed by them on several occasions. It is often said that the formation of this State Cabinet formed a break through because besides the Sarawak Alliance of Bumiputra and Pesaka it contained the Sarawak United Peoples Party (SUPP) with a dominant Chinese membership. This party was often accused of being communist infested when it was still in opposition, and even as early as Colonial rule. It excluded the Sarawak National Party (SNAP) which had always stressed State rights, and of all the contesting parties in the elections of 1970 had proved to be in terms of pan-ethnic support truly a Sarawak National Party (Leigh, 1971, page 246). This move is hardly a surprise seen in the light of the West Malaysian idea that every ethnic group should be represented by one party.

The coalition in Sarawak secured the Central Government with a two-third majority in the Federal House of Representatives. Later the Alliance entered similar coalitions in other States of Malaysia. Together this National Front of nine parties contested the general elections in 1974 and won a landslide victory in West Malaysia and Sabah. Only in Sarawak did the opposition (SNAP) win a substantial number of seats, 18 out of 48 in the State Assembly, the largest number it ever had, and nine of the 24 places for Sarawak in the Federal Parliament. There 135 of the 154 seats are now occupied by the National Front (Far Eastern Economic Review, September 27, 1974).

Sarawak did not experience race riots like those in 1969 in West Malaysia after the results of the elections had been released. Still in Sarawak, as in the rest of Malaysia, democracy was suspended until 1971. A number of issues have been declared sensitive and still cannot be discussed in public, or even in Parliament. These issues include: the position of the hereditary rulers, ceremonial heads of the constituent states, descendents of feudal chiefly families; the special rights of the indigenous people; and the role of the national language, the Bahasa Malaysia.

1 Communal is the adjective generally used in Malaysia for organizations limited to one ethnic group, probably as an euphemism for the term racial. However, ethnic party is the most appropriate term.

2.2 Physical structure

Because the research area was situated in the upcountry part of the First Division, the information presented under this heading is mainly related to this area only.

The climate of Sarawak is characterized by a uniform temperature, an abundant rainfall and high humidity. The mean annual temperature is 25–26°C (78–80°F), the daily range is 5–8°C (10–15°F). For most of the places where rainfall is recorded in the First Division the mean annual rainfall varies between 3,300 mm (135 inch) for the interior and 4,570 mm (180 inch) for the costal area. The distribution of the rainfall over the year is not uniform, 60 per cent falling during five months, called landas season (November–March) with the peak in January, 400–850 mm (16–34 inch).

Because evapotranspiration is lower than rainfall, drainage is important in Sarawak. The courses of the rivers which roughly flow from the border with Indonesia in the South to the South China Sea in the North can be divided into three parts, parallel to the coast, the upper, the middle and the lower course. These parts are related to landscape units that differ in physiography. The landscape that contains the lower river courses is a plain of swampy alluvium. The two other parts, predominant in the research area consist of rugged low to high hill country. In the research area these two land units are approximately 10 miles deep. In the upper areas the rainfall is discharged by many small swift streams with turbulent flow. Because of the irregularities in rainfall their level fluctuates heavily. Whenever a dry spell of some months occurs, as happened in 1972, the population in the area encounters hardships in obtaining sufficient clear water for domestic use. In the middle course stream velocities are still rather high. However, in periods with heavy rainfall, and when the discharge downstream is hampered by tidal influence, the river water backs up and severe flooding may occur in all the main and minor valleys in this area (Andriesse, 1972, page 82). This permanent danger of flooding limits the agricultural possibilities along the river banks.

A large part of the land in the research area is unsuitable for agriculture due to conditions such as rugged physiography, limited soil depth and flood hazard[1]. The predominant soils are different clays, their variation mainly dependent on the parent material. These soils comprise latosols mainly derived from shales on the gentler slopes of the hilly areas, and lithosols derived from basalt on the steeper slopes. The latter are very thin and can be best left under forest, because clearance can promote severe erosion (Jackson, 1968, page 30). However, because of their higher fertility the population clears small patches of these soils and uses them for pepper plantations. In the other parts of Sarawak's First Division soil conditions are not more favourable for agriculture than in the research area.

These physical conditions have the following implications for agricultural development:

- a continuous vegetation growth, whose removal leads to erosion
- weak development of soil structure
- crops which need a specific dry period cannot be cultivated
- air drying of crop products gives problems
- flood danger, which leads to high expenses for drainage schemes. (Regional Planning Study of the First Division of Sarawak, 1971).

1 See classification of land in Andriesse (1964).

2.3 Social structure

The population of Sarawak is very heterogeneous, and meets the characteristics of a plural society to a large extent. The different groups live in the same political unit but maintain their own religion, culture and language, individuals only meeting in the market place. Administratively two categories are differentiated: the peoples *native*[1] to the area, and the *immigrants*. The first category can be subdivided in Muslims and non-Muslims. Especially among the non-Muslims different tribes are recognized. With the exception of a small number of Indians and Europeans the immigrants are all Chinese. The new term for the indigenous people is 'bumiputra', which means literally son of the soil. However, many of the immigrants were born in the State, and have lived there all their life, while the ancestors of many native groups were immigrants too, a few generations ago.

The native peoples are economically the weakest category, and as already menioned the Rajahs were anxious to safeguard them from exploitation. Since Independence their special position has been constitutionally laid down and the Government is actively trying to improve their welfare by giving preferential treatment in the recruitment of civil servants, allocation of scholarships, and assistance in the establishment of economic enterprises. Due to the politically dominant position of the Malays in the Federation of Malaysia these programmes are fairly successful.

According to the census of 1970 68·9% of the population can be classified as indigenous and 31·1% as immigrants. A further breakdown is given in Table 2. As shown in Table 2 the ethnic groups have different growth rates. Explanation of these differences has to be based on the presence of medical facilities in the different areas where the population groups form the majority, more than on the ethnic factor alone. The highest growth rates between 1947 and 1960 are noted for the Chinese, Land Dayak and Malays. The Chinese being the most urbanized group, the Land Dayak completely confined to the First Division, and the Malays predominantly settled in the coastal areas of the First and Second Division. These three groups live in areas where medical facilities are available and easily accessible. The great diminution in percentage increase for the Chinese between 1947–1960 and 1960–1970 is probably because since 1960 they have become an increasingly urban group.

Table 2. Sarawak population composition and growth by ethnic groups, 1947–1970. Sources: Lee Yong Leng, 1970; (MG-SBK, Dep. of Stat.) Population Census 1970.

Ethnic group	Number in 1970	% of total population			% increase		
		1947	1960	1970	'47–'60	'60–'70	'47–'70
Malay	182 709	17.9	17.4	18.7	32.7	41.3	87.5
Melanau	53 234	6.5	6.0	5.5	25.6	19.2	49.7
Sea Dayak (Iban)	302 984	34.8	31.9	31.0	24.9	27.4	59.2
Land Dayak	83 276	7.7	7.7	8.5	36.6	50.2	97.4
Other indigenous	49 960	5.5	5.1	5.1	27.0	31.7	67.3
Chinese	294 020	26.6	30.8	30.1	57.9	28.3	102.6
Others	9 735	1.0	1.1	1.0	26.7	19.8	51.9
Total	977 438	100.0	100.0	99.9	36.3	31.3	78.9

1 In Sarawak the term 'native' has no degrading connotation.

The high growth rate for all the community groups results in an age structure with many young children, and few old people. In 1960 out of every 1000 persons in the country 445 were under 15 years old (figure for 1970 not available yet).

The population is unevenly distributed over the State. Concentrations occur in the First Division, around Sibu town and Rejang river in the Third Division and near the oilfields of Miri in the North-East of the State. Overall population density is small, 20 persons per square mile in 1970, while it was only 15 in 1960.

Internal migration is small, few indigenous people leave the rural areas for the towns. Before 1960 even some Chinese moved from the congested areas to less crowded districts where land was still available. This latter tendency has been reversed due to activities of the CCO, which mostly tried to extort support from the rural Chinese.

The term urbanization seems to be a too big word for Sarawak, its largest town, the Kuching Municipality, having only 63,535 inhabitants in 1970. According to the criteria used in the census of 1970 205,784 persons lived in the twenty major towns and townships of Sarawak. The largest being the Kuching Municipality, and the smallest Simunjan with only 911 inhabitants. The bulk of the 'urban' population is formed by the inhabitants of the Kuching Municipality and the Sibu and Miri urban areas, 149,827 persons or 73% of the 20 major towns and townships in Sarawak. The difference in the degree of urbanization for the different ethnic groups in Sarawak is presented in Table 3. Detailed information about the population distribution in the research area is provided in Appendix VII.

Table 3. Urbanization in 1970 by ethnic groups. Source: (MG-SBK, Dep. of Stat.) Population Census 1970.

Ethnic group	Total number	% of total population	% of urban population	% living in urban areas
Malay	182 709	18.7	23.3	26.2
Melanau	53 234	5.5	3.0	11.7
Sea Dayak (Iban)	302 984	31.0	5.8	3.9
Land Dayak	83 276	8.5	1.6	3.7
Other indigenous	49 960	5.1	1.3	5.2
Chinese	294 020	30.1	63.3	44.3
Others	9 735	1.0	1.9	39.8
Total	977 438	99.9	100.2	

The characteristics of the major ethnic groups will now be discussed.

The *Malays* are predominantly settled in the coastal regions of the First and Second Division. Their villages consist of separate dwellings. The origin of the Malays is obscure. Travellers from elsewhere settled in Sarawak, propagating the Islamic faith. They married into the indigenous groups. Besides their marriage partners they converted others from these groups to the Islam. These two categories, Islamic outsiders and converted indigenous people are the two basic components of the present Sarawak Malays. The process of proselytizing still continues and many of the fresh converts want to be classified as Malays. All Malays adhere to the Islam religion. Since Islam is the national religion in the Federation of Malaysia, but not in East Malaysia, the self-consciousness of the Malays has increased and their behaviour has become more devout.

Originally the main economic activities of the Malays were fishing and agriculture. The White Rajahs relied heavily upon these coastal people, the first they met after settling in Sarawak, for advice and assistance in native affairs and as warriors; many Malays occupied the lower ranks in their civil service. This early introduction to bureaucracy has given the Malays a certain edge over the other indigenous groups of Sarawak. At present all the major towns and bazars have an important separate Malay quarter. The Malays have a social organization based on aristocratic tradition, a remnant of the feudal period under the Sultan of Brunei. Prestige can also be gained by making the pilgrimage to Mecca. Both features are reflected in a lavish use of titles. However, there is little difference in economic position. In the last decade the Malay leaders have unified these people of very mixed origin, and made them play their role in a newly independent Sarawak.

The *Melanaus* live in the coastal areas of the Third and Fourth Division. They are fishermen and sago producers. Many of them have become Muslims and often regard themselves to be Malays. Others, however, are Christians or still adhere to their traditional religion.

The *Sea Dayak or Iban* are the largest indigenous group with a relatively homogeneous culture and one language. Before they were renowned as the most notorious headhunters of Sarawak. Originally they entered Sarawak in the Second Division from Central Borneo, from where they spread into the Third and Fourth Division. At present their major strongholds are the Batang Lupar and Rejang river systems. Most of them are still living in longhouses. They migrated to sparsely populated areas, assimilating or expelling the population already present.

The Iban society is strongly egalitarian. There were powerful chiefs, especially during the period when expansion was hampered by regulations of the second Rajah. But they gained their position exclusively through their own merits, and their descendants had to prove themselves again. At present the Iban are still mainly agriculturists, growing wet paddy in the riverain areas and hill paddy in shifting cultivation in the interior parts of Sarawak. Many of them have planted rubber as well. Although many of the men during their early adulthood have travelled extensively inside and outside Sarawak they have not shown any eagerness to settle permanently in the urban areas. The Iban have their own animistic religion, but an increasing number is accepting Christianity.

The *Land Dayak* are confined to the interior of the First Division, of which they are probably the oldest inhabitants. They speak a number of mutually nearly unintelligible dialects, and there are other cultural differences. As a group they have hardly received attention. They have a strong egalitarian ideology, and are deprived of leaders who have any substantial command outside their villages of origin. Living in the vicinity of the State Capital has made them subject to many influences. Their growth rate is one of the highest in the State, probably because of easy access to medical assistance. Originally longhouse dwellers, many now occupy detached dwellings. Growing of dry rice in shifting cultivation has ceased to be their only source of income, they are becoming increasingly dependent on the cultivation of wet paddy, and cash crops as pepper and rubber. Their traditional religion is at present adhered to by a minority, the others have become members of one of the Chrisitian denominations.

The *Chinese* started to migrate to Sarawak in the early part of the Nineteenth Century. Most of them were miners who came from Dutch Borneo to explore the gold and antimony fields near Bau in the Western part of Sarawak. After exhaustion of the mineral deposits many of them turned to commerce or agriculture, especially the planting of pepper and gambier. The peaceful conditions which prevailed in Sarawak after the establishment of the Raj attracted more of their compatriots. The Second Rajah, who realized that none of the indigenous groups could provide the skills and knowledge in agriculture and commerce the Chinese possessed, actively encouraged their immigration. The immigration, with certain ups and downs, continued until World War II. By then

there were about 125,000 Chinese in Sarawak, forming a quarter of the total population. Already in 1960 four-fifths of the Sarawak Chinese were born in the State, a proportion which is steadily increasing. Among the Chinese many dialects are spoken. The major groups are the Hakkas who are mainly agriculturists in the First and Second Division, the Foochows who are predominant in the Third Division and the Hokkiens who dominate Kuching town.

A striking difference with many other countries in South-East Asia is the presence of the Chinese in agriculture, besides the familiar domination of commerce in the townships and bazars. The Chinese engaged in agriculture are mainly confined to the easy accessible areas around the urban centres where they are market gardeners or cultivators of cash crops.

In the beginning the Chinese had to rely almost completely on their own organizations for their interpersonal relations and amenities as well as for education. This has certainly stimulated a separate identity among these immigrants. But at present they are becoming progressively active in public life. Many have been educated in the English language in Government and Mission schools, or in the Chinese schools integrated in the national education system, and can subsequently serve as Government servants. The Chinese have organized themselves in political parties which are increasingly accepted on the local political scene. A very small minority of the youngsters, who only received education in the Chinese medium schools, roam as guerillas in the jungle.

Among the Chinese, personal prestige is mainly based on economic success in a personally owned enterprise. This success must be demonstrated by philanthropic gestures in general, and assistance to those in patron–client relationships. Their economic enterprises often fail to develop above the level of family business because when a unifying senior member in a family dies, the enterprise is split among the younger members each carrying away a certain part of the business. In these family enterprises there are little opportunities for non-family members, those employed are mainly Chinese of the same language group as the owner. Very few members of the non-Chinese community groups are employed, although their number is increasing because the present Government wants to eradicate the situation in which certain occupations are identified with certain community groups. These family enterprises on the different economical levels are integrated by a credit system based on mutual trust enforced by personal acquaintance.

The majority of the Chinese are Buddhists. Among the urban Chinese educated in English, Christianity has found many followers.

The differences between the population groups are determined more by ethnic than racial factors. There is a process of intermarriage and adoption. The persons involved in intermarriage become fully absorbed in the cultural group of one of the partners. With a Muslim and a non-Muslim it is nearly always the latter who changes his affiliations. Naturally this practice of complete absorption has not boosted a new overall Sarawakian identity at the expense of traditional communal feelings.

The Government actively tries to unite the people of different background and origin, and to make them conscious that they are not only citizens of the State of Sarawak, but also of the Federation of Malaysia. Its efforts are especially directed at the schoolchildren and other youth. The use of Bahasa Malaysia is being promoted; the educational system of Sarawak is being adapted to that of Peninsular Malaysia, which includes the use of Bahasa Malaysia as medium of instruction; and one large integrated youth organization has been formed instead of the many clubs that mainly recruited their members from one ethnic community. In contrast to many other countries which gained their independence recently, the leaders of Malaysia and Sarawak never chose to unite their people on the negative basis of strong anti-colonialism. Instead they are trying to win the loyalty of

their people by pointing at the improvements in their life since Independence and the progress to be made in the near future. Development is their major concern and little time is wasted on condemnations of an episode that is closed. Symbols of the past era such as anthem, flag and crest have been replaced gradually. However it will take a long time for the different ethnic groups of Sarawak to gain a deep knowledge and understanding of each other. At present 'One need not search far among Kuching residents to find one who has never seen a longhouse, never been to the seashore, and has an appallingly misinformed conception of the life styles of the fellow citizens beyond the city boundaries' (Dixon, 1973).

Living in the urban areas has contributed only a little to the integration of the different ethnic groups. The Chinese and the Malays who form the bulk of the urban population live in separate quarters of the townships. Most of the Malays live on land which due to its classification under the Land Code can only be occupied by natives, the Chinese predominate in the areas open to all ethnic groups. Only in the Civil Service and in the secondary schools do the different ethnic groups meet each other frequently and intensively. In the State Assembly members of different parties and of different ethnic origin sometimes address each other as 'my honourable school and class-mate'. It indicates that the number of opportunities for Sarawakians to develop relationships beyond their primary groups was recently still very limited.

Ethnic identity is a major condition to the social and economic position of a Sarawakian, and to the relationships he maintains with other inhabitants of his country. It has been discussed that political parties mainly operate along ethnic lines. Ethnic identity also mainly determines the occupation and economic position of the people of Sarawak, as well as their compatriots in the other States of the Federation of Malaysia.

The major occupations of the different ethnic groups in Sarawak have been mentioned already. The Chinese dominate commerce and the professions in the towns, as well as the market-oriented sector of agriculture. The Malays are mainly rural and coastal people, occupied with small-scale farming and fishing. But a substantial number live in the towns and bazars with occupations in Government organizations and industries. The other indigeneous groups are still mainly occupied in subsistence agriculture. An interesting aspect of the composition of the civil service is that the Malays occupy many of the administrative positions, while the Chinese predominate among the technical staff. This division extends to the highest ranks. Because of the preferences of the youth in secondary schools, (science courses are mainly followed by Chinese, Malays and other natives prefer to study arts), this demarkation of positions will be continued. Though the Government actively tries to eradicate the identification of ethnic identity with economic position, the discrepancy in incomes of members of the different ethnic groups is still large[1].

As long as ethnic identity strongly corresponds with economic position there is little scope for a class struggle which cuts across ethnic lines. Discontent is mainly directed at the leaders of the ethnic groups. They are expected to strive for and to negotiate for a better deal for their own community. Antagonism is mainly confined to the different ethnic groups. The following examples substantiate this statement. In Sarawak the clandestine communist organizations choose to hide in the Sarawak United People's Party (SUPP), which mainly consists of small Chinese businessmen

1 Median household incomes per month are M$122.00 for Malays and M$271.00 for Chinese in Peninsular Malaysia, means are M$179.00 and M$387.00, respectively (Far Eastern Economic Review, December 3, 1973). In Sarawak the difference in income between Malays and Chinese is probably as large as in Peninsular Malysia. It is very likely that the household incomes of other indigenous groups in Sarawak are even lower than those of the Malays.

and farmers. Its leaders had a hard time to preserve peace and unity within the party. Blackmail and extortion by the guerilla's was mainly directed towards members of the Chinese community, and it is this ethnic group which suffered most of the civilian casualties. In Peninsular Malaysia a major challenge toward the Malay dominated Government coalition came from the Parti Islam, the former Pan Malaysian Islamic Party. And in 1974 Malay students played an important role in the anti-Government demonstrations, because of rural poverty and allegations of corruption.

2.4 Economic structure

The economy of Sarawak depends to a large extent on primary products such as timber, pepper, rubber, and during the last few years on oil. These products are nearly completely exported. Fluctuations in the prices on the world market of the first three products have caused the Government to build up substantial reserves to survive periods of recession when royalties and duties, the major source of revenue, yield a low income.

Also a conservative financial policy was followed by minimizing budgets in years of recession, by which practice the State's reserves had reached the level of M$117 million at the start of 1971, an amount larger than the annual revenue. For the first time in 1971 and 1972 anticyclical spending was practised which reduced the reserves to half the previous size. The contribution to the Development Fund increased from M$8.2 million in 1970 to M$45 million in 1971.

The comparatively small population of the State of which many members have a very limited purchasing power, means that there is little scope for industries producing for the domestic market. But also processing of local raw materials for export is not much developed. Wood processing is the only important industry, in 1969 employing 5,108 of the 37,326 employees in establishments with at least five workers ((MG-SBK, Dep. of Stat.) Ann. Bull. Statistics 1971). Other large employers are the (semi) governmental services, business services, and firms engaged in logging. Traditionally agriculture is a small-scale business. Most of the farmers try to be self sufficient in rice and other foodcrops, adding to their income by the cultivation of rubber and pepper. Production of the latter two crops is very price elastic. A calculation of the values added by the different industries to the Gross Regional Product of the State in 1967 produced a total of M$762 million. This resulted in an average per capita income of M$820.00. A breakdown is given in Table 4.

Sarawak's economy is rapidly expanding. Between 1965 and 1970 its gross product in current prices is estimated to have grown at 7.9% per year, compared with 6% for West Malaysia and 10.7% for Sabah, the other East Malaysian State ((MGKL) Second Malaysia Plan 1971–1975). In the three year period 1970–1972 the average annual growth rate amounted to 11.4%, which resulted in a Gross Regional Product of M$1,153 million and a per capita income of M$1,112.00 in 1972 (Borneo Bulletin, September 8, 1973). This was the first year the per capita income of Sarawak almost equalled that for the whole of Malaysia, M$1,127.00 (US$415) in 1972 ((MGKL-Treasury) Economic Report 1972–1973), which is, apart from that of Singapore, the highest in South East Asia. This rapid acceleration is mainly due to new offshore oil fields coming into production. In 1967 mining and quarrying accounted for only 0.4% of Sarawak's Gross Regional Product, in 1972 their share was nearly 20%, and this is expected to rise again in the near future. Sarawak's economy is thus becoming increasingly unbalanced, largely depending on the extraction of two primary products. The distribution of income between the different economic sectors is very unequal. As will be shown in a later chapter an annual income of M$1,000.00 per family is still far away for many of Sarawak's farmers. It will take time, and a large share of the royalties on oil and timber before a more diversified and balanced economic structure is attained. Because of the

Table 4. The Gross Regional Product of Sarawak by industrial origin in 1967, in 10^6 M$ and percentage. Source: Regional Planning Study of the First Division of Sarawak, 1971.

	10^6M$		%	
Primary sector		238		34
agriculture	130		19	
forestry	97		14	
marine fisheries	8		1	
mining and quarrying	3		0	
Secondary sector		292		43
manufacturing	114		17	
building, construction	29		4	
utilities	10		1	
transport and communications	50		7	
wholesale and retail trade	89		14	
Tertiary sector		157		23
banking, insurance and real estate	13		2	
ownership of dwellings	47		7	
public administration	54		8	
services	43		6	
Total at factor costs		687		100
Indirect taxes		75		
Total at market prices		762		

Table 5. Exports of Sarawak in 1972, in 10^6 M$ and percentage. Source: Borneo Bulletin, 1st September, 1973.

Product	10^6M$		%	
Oil[1]		321		53.2
Timber		179		29.7
Agricultural:		84		13.9
rubber	14.4		2.4	
pepper	58.0		9.6	
coconut oil	1.6		0.3	
sago flour	2.3		0.4	
other products	7.6		1.3	
Miscellaneous		19		3.2
Total		603		100

1. Excluded is the value of Brunei oil exported via Sarawak.

increased oil production it is likely that the surplus on the visible balance of trade, that has existed since 1968 and was M$94 million in 1971, can be continued and increased.

Sarawak's major export commodities in 1972 are presented in Table 5. Although agricultural products form an important part of Sarawak's exports, the State is not self-sufficient in food

products. In 1971 they had to be imported to a total value of M$99.8 million including 10.1 million milk, 3.9 million wheat flour, 11.0 million sugar and also 19.6 million rice. Other major import commodities are manufactured articles, machines and transport equipment, chemicals, and beverages and tobacco ((MG-SBK, Dep. of Stat.) Ann. Bull. Statistics, 1971).

In Sarawak trade is the almost complete domain of private enterprise. Trade licenses are liberally issued and there is little Government intervention in the commercial world. The cooperative principle is little developed. In 1969 225 societies were registered with an average membership of less than 100 members. The total number of trade licenses registered that year was more than 10,000. Among the trade licenses the share issued for other (general) business is remarkably high, about 50%. The second highest number is for imports and exports, more than 15% ((MG-SBK, Dep. of Stat.) Ann. Bull. Statistics, 1971). The shops at the bazar level, the basis of the commercial structure of Sarawak, are engaged in the collection of whatever agricultural products the population offers for sale, and retail of daily or weekly necessities. Among the commercial firms at the District and Divisional levels some specialization exists. Import and export traders are concentrated in the two major ports Kuching and Sibu.

Credit is in Sarawak a major condition for success in trade. It is guaranteed personally. Credit links the firms engaged in import and export via the shops in the bazars to the farmers in the field. In turn the overseas trading firms are tied in a similar way to firms in Singapore and Hongkong, which are the major collecting and distribution centres in South East Asia.

Recently the Federal Government has initiated a Pepper Marketing Board which has its seat in Kuching. Malaysia is one of the world's largest pepper producers, of which 90% comes from Sarawak. The Board aims to increase the local share in the profits by controlling the pepper trade, setting standards for grading, and export promotion. At the moment the majority of the pepper production goes to Singapore from where it is re-exported. The Government intends to increase the share directly exported to consumer countries.

No such regulations exist with relation to the export of rubber. The West Malaysian price intervention system does not extend to Sarawak.

2.5 Administrative structure

Since 1963 Sarawak is one of the thirteen constituent states of the Federation of Malaysia. The Yang Di-Pertuan Agong (king) is the Supreme Head of Malaysia, though in most cases he acts on the advice of Parliament and Cabinet. He is elected for a five-year term from among the hereditary Rulers of nine West Malaysian States (all except Malacca and Penang). The Heads of the States Malacca, Penang, Sarawak and Sabath, which do not have traditional ruling families, are appointed by the Yang Di-Pertuan Agong. The legislative power is vested in the Federal Parliament consisting of the Yang Di-Pertuan Agong and two Houses, the Dewan Negara (Senate) and the Dewan Ra'ayat (House of Representatives). The first House consists of 58 members serving a six-year term of office, partly nominated by the State Legislative Assemblies. The second House consists of 154 members who are elected directly by the population for a five-year period, of whom 24 represent Sarawak. Only the Yang Di-Pertuan Agong can summon Parliament into session, prorogue or dissolve it, even against the advice of the Prime Minister. The House of Representatives can be dissolved and newly elected within the maximum prescribed period.

From among the members of the Federal Parliament the Yang Di-Pertuan Agong appoints a Cabinet consisting of a Prime Minister and an unspecified number of Ministers, the latter on advice of the Prime Minister.

The thirteen States may be described as the pillars on which the Federation is built. Under the Federal Constitution the subjects are listed which are the responsibility of the Federation and which are the responsibility of each State, some are under the joint responsibility of Federation and State, e.g. Education in Sarawak. Each State has its own Constitution (fundamentally the same), its own Head of State, in Sarawak called Governor, and single chamber Legislative Assembly. In Sarawak this Legislative Assembly is called Council Negri and consists of 48 members. From the State Legislative Assemblies the Heads of State appoint a State Cabinet under a Chief Minister.

In 1972 the State Cabinet of Sarawak comprised the following ministerial portfolios:

Chief Minister; Minister of Agriculture, and Drainage and Irrigation; Minister of Communications and Works; Minister of Lands and Forestry; Minister of Local Government; Minister of Youth and Sports; Minister of Welfare; Minister of Culture.

Changes in the composition of the State Cabinet and the allocation of responsibilities over its members between elections are not uncommon.

Reasons why someone is appointed a State Minister can vary considerably, but occasionally overlap. Some Ministers are expressive leaders who also have prestige outside their own population group. Others are working Ministers, capable of leading an important and difficult Ministry. A third category consists of those Ministers whose major task is to meet the people, explaining the Government's policies and intentions. The last category comprises the Ministers who are member of the Cabinet as representatives of a certain ethnic group. Their function is simply to be in the Cabinet (Milne & Ratnam, 1974, page 359).

The formation of ministries brought a new element to the administrative structure of Sarawak, where during colonial times directors of professional departments were ex-officio members of the State Legislative Council. Initially the ministries were mainly occupied with administrative matters, such as drawing up budgets, which is usually a routine procedure. This has left the professional departments with a certain freedom to formulate and implement their programmes.

Besides the agencies of the State Government, the Federal Government has set up offices in Sarawak to take charge of those affairs that in the Constitution are listed to be under its authority, as Education, Medicine and Health, Internal Security and Defence.

Both Central and State Government have set up statutory corporations which are considered to be non-governmental, though these bodies are totally owned, financed and controlled by the Government. Examples of these are Port Authorities, Land Development Authorities, Marketing Boards, Housing Companies, Electricity Supply Companies, the Council for the benefit of indigenous peoples (MARA), and the State Economic Development Corporation (SEDC). 'The main reason for this proliferation of Government corporations was to mitigate the rigors of normal financial procurement and personnel controls for activities which require energy, innovation, and dynamism and must respond quickly to changing situations, assuming that 'government' and its ordinary procedures are (and must always be) slow, legalistic and cumbersone' (Esman, 1972, page 88).

State and Federal Departments, as well as the statutory organizations, have besides their offices in the State capital, branched out to the Divisional and District level.

The State administration is centrally controlled by the State Secretariat headed by the State Secretary with its seat in Kuching, the State capital. The State Secretariat assists and is responsible to the Cabinet. The State Secretary, together with the State Financial Secretary and the Attorney-General, whose organizations have similar positions in the bureaucracy, belong to the principal advisors to the Cabinet. Under Colonial rule, and the first years after Independence, they were ex-officio members of the Cabinet. For administrative reasons the State is divided into five Divisions

with a Resident as principal administrative officer[1], each again divided into a number of Districts with a District Officer. The function of Resident is something peculiar for East Malaysia, not existing in the Peninsular States. However, these posts are very necessary for an efficient administration in this vast Borneo State, because the communication facilities make it difficult for many District Officers to keep in touch with the State capital directly. 'Although the Secretariats, their permanent secretaries and senior specialist personnel are important in as much as they form the nerve-centres of State administration, at the same time the Residents and their District Officers form the linchpins of the administrative framework' (Ongkili, 1972).

For a long time the District Officer has been the sole representative of the Government in the District. In his person a variety of functions was combined, among other functions those noticed by the public such as magistrate and revenue collector. The European officers of the past had the time to gain a deep knowledge of their areas and behaved like stabilizing father figures. With the increasing number of professionals in technical departments at the District level and the introduction of Local Authorities, the District Officer has been relieved of several of his duties. Also his role as executive has changed. The District Officer being a generalist can not simply command the services of professional officers with whom he has an unclear hierarchical relationship. His new role is one of a coordinator and mediator between the technical departments at the District level, performed as chairman of several committees, among which the District Development Committee. The District Officer nowadays is more concerned with development and change than with the preservation of law and order. Unfortunately many of the present District Officrs lack the intimate knowledge of their Districts which characterized their predecessors. The expansion of the Government Service, and the exodus of expatriates in the higher echelons created many opportunities for rapid promotion. This has caused the length of the tours of duty of a District Officer to decrease, sometimes shorter than one year.

The duties of a Resident are similar to those of a District Officer, though on a higher level in the Government administration. During the Colonial time Local Government had already been introduced in Sarawak. First it was confined to homogeneous ethnic groups, but soon altered in mixed Local Authorities. The purpose was to decentralize the Government administration and to increase the participation of the population.

In 1972 Local Government consisted on one Municipal Council (in Kuching) and 23 District Councils elected by secret ballot in 1963. For their income the Councils rely upon a grant in aid from the Central Government and a system of rates[2]. Under their authority are matters like primary education, mother and child health, sanitation, fire fighting and street lighting. The system of Local Government has never fully matured in the rural areas. The major reason mentioned is the poor quality of the Councillors. They are said to be unable to differentiate small matters from important ones and to be involved in bribery. Decisions of any importance by the Councils need the approvement of the Ministry for Local Government, or a professional department. Within the District, the District Officer exerts a great influence on the Councils and their staff (Milne & Ratnam, 1974, page 27). In 1963 the election of the Councillors also served to elect the members of the State and Federal Legislative Assemblies by a three-tier system. Since then no new elections for the Local Councils have been held, while those for the Council Negri and Dewan Ra'ayat in 1970 and

1 By the time of writing the number of Divisions was increased to seven.

2 In 1971 statutory grants and government revenue amounted to more than 80% of total revenue ((SGK) Approved Estimates 1971).

1974 were direct. Recently ideas to remove matters as primary education and health from under the authority of Local Councils have cropped up.

The optimistic idea that District Councils would take over most of the functions of the one time omnipotent District Officer has not come true. The technical departments are extending their own organizations to the district level, and it is the District Officer who is charged with the difficult task to coordinate these.

Besides the central administration, the technical departments, and the Local Authorities, the Native Chiefs form another agency by which the people of Sarawak are ruled. Most of the Native Chief System was imposed during Brooke rule. At that time there was hardly any system of indigenous leaders which could be used as a guide. In the course of time the Native Chief System has become an organic part of the people's life. Chiefs at the lowest level, serving one longhouse or a small village, are called Tuai Rumah with the Iban or Tua Kampong with the Land Dayak. Those at the next level, in charge of some hundreds of households are titled Pengulu with the Iban, Orang Kaya Pemancha with the Land Dayak, Kapitan China with the Chinese, and Tuah Kampong with the Malays. Malay and Chinese residential units are generally several times larger than those of the different Dayak tribes. For that reason these two ethnic groups do not have chiefs at the Tuai Rumah level. For the dominant indigenous non-Muslim population group in a District or Division there might be a Pengarah or Temonggong. Native Chiefs are Government appointed, generally after some consultation of the population in their area. The functions of the Native Chiefs are vague, apart from settling disputes among their own people according to their customary law. Generally they are expected to behave like intermediaries between the population and the Government. Those on the level of Pengulu and higher are paid a small salary, but are not considered to be Government servants, neither are they ex-officio members of any Government organization or committee. Not being Government servants, the Native Chiefs are free to engage in politics and several have become elected members of Local Councils or the State and Federal Legislative Assembly.

At the time of this research the Sarawak Government was envisaging a reorganization of the Native Chief system. The Chiefs would lose much of their independence and become representatives of the Government and explicators of its policies. The personal emoluments would be improved, but they would be denied the right to take part in politics while remaining a Native Chief.

3 Rural development in Sarawak

In the different historical periods of Sarawak different philosophies about development prevailed. The first part of this chapter deals with the period under the White Rajahs from 1841 until 1946. The second part concerns the period under the Colonial Government, and the third with the time since 1963 when Sarawak became an independent State within the Federation of Malaysia. Under the fourth and fifth heading the present development administration, and rural development programmes are discussed.

3.1 The Brooke period, 1841–1946

Although this period is longer than the other two which will be dealt with, no major changes occurred in the way the country was administered during this period. The change from personal rule towards increased bureaucracy at the end of this period was caused more by technical innovations than a conscious effort of the Ruler. The main occupation of the White Rajahs was to settle themselves and see to it that law and order prevailed. 'Brooke government with its limited resources was geared for maintaining order, not economic development' (Reinhardt, 1970). The staff of the Rajahs was very limited, barely enough to have a representative of their Government in every part of the country. Around 1900 the number of European officers was no more than 50, mainly recruited on personal recommendation. There were no specialists and the only training they received was during their jobs.

The financial policy was very conservative, always aimed at building up substantial reserves with expenses more than balanced by revenue. The Third Rajah followed this policy of cutting one's coat according to the cloth to such extent that he created, liquidated and resuscitated key posts to development such as Director of Education and Director of Agriculture between 1922 and 1933 along with fluctuations in the level of revenue.

For their native advisers, junior civil servants and warriors the Brooke's relied heavily upon the Malays, the community group they met in the coastal areas in South West Sarawak. From there they launched expeditions to pacify the rest of their country. In order to develop commerce and agriculture the settlement of Chinese immigrants was encouraged. They required little attention, being capable of organizing themselves to solve their problems, and to install basic amenities. They proved, moreover, to be loyal tax payers. The Dayak tribes living in the interior were very much left alone as long as they did not engage in unauthorized head-hunting and raiding neighbouring villages. However participation in the Rajah's band provided ample opportunity for these practices. Occasionally a government officer would visit the Dayak in their villages in a not always successful attempt to collect the annual house tax. Little was done to change their way of life. On the contrary the Dayak were encouraged to carry on with a traditional way of growing paddy in shifting cultivation because large areas of land were reserved for their use only. In these areas no person not native in Borneo could vest any rights. The planting of rubber which had started in

Sarawak after 1910 was discouraged by the Rajahs. They expected the price of rubber to drop drastically and urged the people to grow paddy, sago and pepper instead. The Rajahs were right, as the price of rubber has never been stable over a substantial long period. But the Dayak possessed sufficient land to plant other crops to rely on during periods of low rubber prices, so that this official discouragement was rather short-sighted and narrow-minded. Not being offered other ways to satisfy their need for cash, the Dayak were left no alternative than to plant rubber under an uncooperative Government.

The education of the people was severely neglected so that the development of Sarawak was hampered a long time after the termination of Brooke rule. Education was mainly left to the private initiative of Chinese organizations and Missions. In 1935 it was reported that 'no educational policy exists' (Le Gros Clark, 1935) and a properly operating Education Department was not established before 1939. In 1938 there were 33 Malay schools operated by the Government and 144 schools established by the Chinese community, while in 1940 the English medium Mission schools numbered 40 (Taylor, 1973). Harrison (1970) characterized Brooke rule with the following words: 'The Brooke family, middle class men from the West of England, with moderate intelligence and plenty of temper, but a great sense of responsibility and, above all, tall common sense, did keep Sarawak 'back' in relation to the general surrounding economic and political pressures of the epoch. Least kept back, most aided, were the Sarawak Malays. But it would be a basic misunderstanding of the process to suppose (as it is frequently supposed) that this general and positive slow-going (not laisser faire) was something extraordinary or contradictory to the sense of the country. 'Backwardness' is accepted in backwaters'.

After the Japanese occupation of Sarawak had ended in September 1945, Charles Vyner Brooke upon his return in 1946 decided to cede Sarawak to the British Crown. Probably he realized that if Sarawak was to be stirred up to take its place among the other nations a different approach from the one used during the last hundred years was necessary, a new approach which he with his resources and at his age could not launch.

The situation in 1946 incorporated several problems for the future. Nothing like a nation had emerged, because all the population groups had been treated in a different way, and a uniting force like common education had been absent. A part of the Malays had received some education and were subsequently accepted in the Government Service. Commerce and small-scale industries were the nearly exclusive domain of the Chinese. For the Dayak little had been done, except for the pacification of their regions and the reservation of large areas of land. This land however was nearly always inaccessible and there was no knowledge as to how it could be used in a modern and profitable way.

3.2 Colonial Government, 1946–1963

Because Sarawak had been occupied, it did not have the chance to build up sterling balances during the war. After the occupation the Colonial Government met a financial situation of little reserves and many commitments. It was clear that Sarawak could not help itself in a situation that was characterized by: 'the chief obstacles in the way of formulating and carrying out a balanced and ordered programme of development for Sarawak are the lack of basic information, the lack of staff and the lack of money' (MacFazdean, 1947). Advice from outside was called upon to develop the Colony's economic resources. To gain an intimate knowledge of the situation, surveys were planned. In 1947 the first population census was taken. Anthropological studies were made of the Iban (Freeman, 1955), Land Dayak (Geddes, 1954a), Melanau (Morris, 1953), and Chinese (Tien,

1953). Internationally and on national level it was hard to recruit staff with sufficient skills. The latter due to the limited educational facilities during the pre-war years and the nearly complete absence of education during the occupation. From the Colonial Development and Welfare Fund (C.D. and W. Fund) M$5 million was allocated to Sarawak, although this was far less than the M$13 million proposed to be spent during a five year period. From the allocation of the first funds available for development it can be seen that the Colonial Government wanted to develop the rural areas, the majority of the expenditure falling under the heads of Rural Development, Communications and Education. Still many communications projects had to be shelved because of a lack of funds. Under Rural Development the major item was the improvement of the cultivation of paddy, especially the development of wet paddy areas to limit the detrimental effects on the soil of shifting cultivation. Development planning was stimulated by the possibility of obtaining funds and technicians under the Colombo Plan. Development plans were constantly drawn up and revised to include rising costs. More schemes could be implemented within the plan period, because Sarawak profited economically from the Korean boom in the early fifties. Funds for development came from the Development, Welfare and Reconstruction Fund, later on called Capital Fund, which was credited by (1) grants of the Colonial Development and Welfare Fund; (2) loans when thought necessary; (3) surplusses of annual revenue and accumulated reserves. Because these sources were unreliable, it was desirable to establish this Capital Fund to prevent too drastic changes in funds available for development annually. The expenditure on development was not always a maximum because of the Government's desire for stability.

There was another principle which had a limiting influence on the amount of development expenditure. Once investments had been made out of the Capital Fund, the use and maintenance of the buildings, amenities etc. that had been procured, became charges on the recurrent budget. So as not to put too heavy a strain on future budgets, development expenditure, especially for social services, was not allowed to expand at its maximum rate.

The financial policy remained fairly conservative, deficit spending being the rule. Loans were raised only with the greatest reluctancy, as expressed in the Council Negri by the State Financial Secretary on December 4th 1956: 'We have, however, now reached a point where the raising of loans has become unavoidable, and we can no longer avoid this step. We must remember that many countries have run seriously into debt during the process of development, and we must therefore be careful to confine the raising of loans to economic projects, that is, to projects the revenue from which may be expected substantially to assist in the servicing of the loans'. And again on December 9th 1958: 'there were many things which we (Finance Sub-Committee of Supreme Council) should have liked to do, but we decided that it was better to defer expansion of services, no matter how desirable it may be to expand these services, rather than to increase our commitments in a time of recession'. Apart from unargumented requests for more development this view met no opposition in the Council Negri. On the contrary in 1956 the only speech in conjunction with the Supply Bill 1957 was made by Ong Kee Hui. He opened with: 'It is clear I think to Honourable Members that our honourable friend (the SFS) has been obliged to use the axe to chop expenditure more than the drill or the pincer to extract more money from the people'. In 1958 (December 11th) Yeo Cheng Hoe, another elected member, commented: 'Besides it seems so unfair to form the future against a load of debts for our children and children's children to repay and to repay with interest'. Speaking on the Development Plan 1959–1963 Ong Kee Hui said: 'Surplus balances had been possible in the Rajah's time because Government expenditure had been kept as low as possible even at the expense of slowing down the expansion of social services. It is important that this close scrutiny of Government expendtiture should continue' (August 25th, 1959).

I doubt whether Sarawak really could have spent much more than it actually did. Shortage of skilled labour was often the limiting factor, as mentioned by the Governor in his address to the Council Negri in 1951: 'The main reason why the money has not been spent is that the men or the materials on which to spend it could not be obtained.' Only by 1962 the situation had slightly improved, when it was reported: 'These figures (revised capital expenditure for 1962, 1961 and 1960) demonstrate the steadily increasing capacity to undertake capital expenditure, and therefore the accelerating pace at which the development of Sarawak is undertaken' ((SGK) Sarawak Ann. Rep. 1962).

For many years little had been done to prevent the situation of shortage of skilled staff. It was not recognized that educated and trained people are a prerequisite for rapid development, as can be concluded from the following objects of the Development Plan (1955–1960) ((SGK) Dev. Plan (1955–1960), 1954):

'1. To increase with the aim of self-sufficiency, the production of foodstuffs, the most important of which is rice.

2. To ensure as early as possible against recession of trade which might be caused by a collapse or serious deterioration in the market value of natural rubber. There must therefore be a reduction in the import of commodities which can be produced in Sarawak and simultaneously a development of alternative export crops.

3. To improve communications as an important pre-requisite to economic development.

4. To associate private enterprise with industrial development and to provide an opportunity for local investment.

5. To improve and expand social services within the capabilities of the country to maintain the increased recurrent expenditure.'

Only in the last object are the social services mentioned, accompanied by the warning that they are a very costly affair. However, the free surplus revenue balance at the end of 1954 was about M$52¾ million, or twice the annual recurrent expenditure at that time! This attitude evoked the following comments by the visiting Prof. T. H. Silcock (1956): 'There is not one major branch of development in which the lack of education is not the chief factor delaying further advance,' and 'it is therefore surprising to find education grouped as primarily a social service, to be afforded only after the economy has developed, rather than an activity of economic development.' Shortly after these remarks the recurrent expenditure on education increased considerably, from M$2 million in 1956 to M$10 million in 1958. Still the officers charged with the compilation of the Sarawak Development Plan 1959–1963 ((SGK) Sarawak Dev. Plan 1959–1963) foresaw difficulties in the adjustment between the output of educated boys and girls and the availability of jobs. They feared less shortage of skilled labour than a situation of unemployment of educated youth, and wrote down: 'There can be little doubt that Sarawak is facing considerable difficulties arising from a very rapid and costly expansion of the schools system which has not been matched by an equivalent expansion of the economic potential of the country.'

Both attitudes, to consider education merely as a social service and a fear for future unemployment, have certainly hampered the development of Sarawak, causing a lack of sufficiently trained man-power, and increasing the gap between the chances for the rural and urban youth. The effects were still clear in 1962, inability to recruit staff, as mentioned earlier, and educational facilities of low standard in the rural areas, many of the native schools only providing a four-year primary course, and most of their teachers without any professional training ((SGK) Sarawak Ann. Rep. 1962).

In the different development plans expenditure was heavily concentrated upon agriculture,

because it was realized that unless new mineral resources were discovered to replace the dwindling production on the Miri oilfield, Sarawak's economy would have to depend mainly on agricultural products. The first objective of the Development Plan (1955–1960) was to increase the volume of rice production, because Sarawak was, and still is today, a rice importing area. This was to be achieved, if possible, without any corresponding decrease in the manpower devoted to the growing of other agricultural products or to other productive activities. Much attention was also paid to the improvement of the rubber industry by the import and production of new high yielding planting material. The pepper industry, which due to a lack of demand had nearly completely vanished during the Japanese occupation was re-established. Gradually a change in emphasis became apparent in the approach to agricultural development. The experimental wet paddy stations had not proved to be a success in the attempts to settle the population from the hills in nearby swamp areas to grow wet paddy. Subsequently more attention was paid to the planting of high yielding rubber. A Rubber Planting Scheme was introduced under which suitable applicants were provided with planting material, fertilizer and cash grants. Later subsidy schemes were established for other major crops along the same lines as the Rubber Planting Scheme (see Appendix VIII). Also research and extension were extended.

As a pre-requisite for economic development, large sums had to be spent for the improvement of communications. In 1946 roads outside the urban areas were nearly non-existent. The construction of a trunk road, connecting Kuching with Simanggang and Sibu, and eventually with the two other Divisions, was the main project. Much attention was also paid to the construction of feeder roads.

The last Development Plan under the Colonial Government covered the period 1959–1963 and in 1962 was estimated to cost around M$161 million allocated to eight main headings as presented in Table 6. The distribution of expenditure over the Economic Schemes and Social Services as shown in Table 6 does not differ much from the allocation under previous development plans. The expenditure was met from the Capital Fund which at 1st January 1962 had a balance of M$34.3 million. Contributions amounted to about M$31.5 million in 1962, of which some M$10.1 million was a grant of the Colonial Development and Welfare Fund.

Table 6. Expenditure under the Development Plan 1959–1962, in 10^3 M$ and percentage. Source: (SGK) Sarawak Ann. Rep. 1962, page 24.

	10^3M$		%	
Economic schemes		92 793		57.8
agriculture	27 000		16.8	
forestry	732		0.5	
communications	60 961		37.8	
fuel and power	4 100		2.6	
Social services		35 391		22.0
education	17 732		11.0	
medical and health	9 458		5.9	
water supplies	8 202		5.1	
Miscellaneous		32 456		20.2
Total		160 640		100

The implementation of development projects was left to the Departments concerned. Whenever the population was directly involved as with agricultural schemes, the tendency prevailed to deal with individuals rather than with communities. Community development was limited to 'a number of individual schemes which are in the charge of persons especially interested in such work' ((SGK) Sarawak Dev. Plan 1959–1963).

3.3 Within Malaysia, 1963—present

The Sarawak representatives involved with the negotiations prior to the formation of the Federation of Malaysia were favourable to the new form of state. One of their main reasons was the expectancy that Sarawak would develop at a faster rate than under Colonial Rule. One of the topics in the Inter-Governmental Committee Report ((SGK) Inter-Governmental Committee Rep., 1963) was: 'The Malayan Government agreed that the figure of M$300 million should be accepted for planning purposes as the total of Federal and State development expenditure required in Sarawak for the first five years after the inception of the Federation of Malaysia'. The figure of M$300 million meant an average annual development expenditure of M$60 million which compares favourably with the development expenditure intended by the Colonial Government for 1963 of M$51.7 million, the highest during the Colonial period. A Sarawak Development Plan 1964–1968 was prepared under which it was intended to spend M$343 million, to be integrated in the First Malaysia Plan 1966–1970. Finally the amount to be spent in Sarawak was M$424 million, more than 90 per cent of it being provided from Federal funds. However the still very basic administrative machinery and infrastructure of Sarawak could not cope with all the projects necessary to spend the allocated funds. In 1966 (December 13th) the Chief Minister declared in the Council Negri: 'Development takes time to plan and organize. Now that plans have been drawn up, surveys made, contracts let and staff recruited, the Development Plan can go ahead at full speed'. Of the original provision of M$424 million only M$273.5 million was spent. This sum of M$273.5 million meant an increase of 71% compared with the development expenditure of M$160 million in the 1959–1963 five-year period. This percentage of increase is about the same as that for the increased public development expenditure for the Malayan Peninsula under the First Malaysia Plan compared with the Malayan Second Five-Year Plan. Hence in the first years after the foundation of Malaysia the willingness of the Federal Government to provide financial assistance to Sarawak certainly did not hamper its development process. For structural reasons the rate of increase of public development expenditure was not higher than under the last years of Colonial Rule. Shortage of staff remained a problem for many more years, until 1970 expenditure fell below the estimates.

After the formation of Malaysia the development plans remained focussed on the rural areas, but the nature of the objectives of development changed. During the Colonial period the objectives of development, as discussed in Section 3.2 were mainly given in economic terms. In contrast the objectives formulated in the Sarawak Development Plan 1964–1968 were more concerned with the welfare of the population. They were specified as:

1. to improve the farmer's livelihood and make the countryside a pleasant place to live in;
2. to provide employment for the country's population of working age;
3. to raise the output of the economy per capita and to protect living standards against the adverse effects of a probable decline in rubber prices;
4. to widen the variety of Sarawak production, emphasizing the development of other suitable agricultural products in addition to rubber and also giving encouragement to industrial expansion;

5. finally, while stressing the importance of development which will meet production and employment requirements, to improve and expand the social services to provide educational opportunities for the rapidly growing school age population, to extend the public health services over a wider coverage of the rural as well as urban population, and to provide more adequately for rural utilities.

The social and political objects of development plans became increasingly accentuated. Much attention was paid to the inhabitants of the rural areas. The first goal of the First Malaysia Plan (1965–1970) ((MGKL) First Malaysia Plan 1965–1970), into which the Sarawak Development Plan 1964–1968 was integrated, was: 'to promote the integration of the peoples and States of Malaysia by embarking upon a development plan explicitly designed to promote the welfare of all'. In the Second Malaysia Plan (1971–1975) ((MGKL) Second Malaysia Plan 1971–1975) the objective of national unity and of a just society is even more explicitly stated. 'It did not only declare that the standard of living in the rural areas will be raised. But also that opportunties will be provided to those community groups which before had practically been confined to the rural areas, to become engaged in other sectors of the economy. A two pronged New Economic Policy was embarked upon[1]. 'The first prong is to reduce and eventually eradicate poverty, by raising income levels and increasing employment opportunities for all Malaysians, irrespective of race. The second prong aims at accelerating the process of restructuring Malaysian society to correct economic imbalance, so as to reduce and eventually eliminate the identification of race with economic function. This process involves the modernization of rural life, a rapid and balanced growth of urban activities and the creation of a Malay commercial and industrial community in all

Table 7. Comparison of public development expenditure in Sarawak between 1959–1963, 1966–1970, and 1971–1975, in 10^6 M$ and percentage. Compiled from (SGK) Sarawak Dev. Plan 1964–1968, page 34, and (MGKL) Second Malaysia Plan 1971–1975, pages 68–71.

	1959–1963 (estimated)		1966–1970 (estimated)		1971–1975 (allocated)	
	10^6 M$	%	10^6 M$	%	10^6 M$	%
Agriculture	27.8	17.4	86.7	33.4	151.6	27.2
Transport + Public Works Department plant and equipment	71.5	44.6	80.5	31.0	150.6	27.1
Communications	5.3	3.3	18.4	7.1	47.2	8.5
Utilities	11.9	7.4	8.3	3.2	54.0	9.7
Industry	0.4	0.3	2.4	0.9	6.3	1.1
General	11.2	7.0	10.0	3.8	39.6	7.1
Social services	32.1	20.0	53.4	20.6	107.4	19.3
Subtotal	160.2	100.0	259.7	100.0	556.7	100.0
Security	—	—	13.8		51.4	
Total			273.5[1]		608.11[2]	

1. Federal expenditure amounts to 93%.
2. Federal expenditure amounts to 63%.

categories and at all levels of operation, so that Malays and other indigenous people will become full partners in all aspects of the economic life of the nation.'

Apart from a comparison of intentions and objectives of development a comparison of the allocation of public development expenditure under the different Development Plans is given below in Table 7. The share of the funds allocated to the development of agriculture was at its peak under the First Malaysia Plan, and remained comparatively high under the Second Malaysia Plan. The percentage used for transport decreased gradually while that for communications increased, indicating the change to a more sophisticated infrastructure. The share for social services remained stable at 20% of the total expenditure under all three programmes. But the amount of expenditure increased threefold.

3.4 Development administration

Development administration in Sarawak reflects closely the system that was installed in the Federation of Malaya in 1957 by the then Deputy Prime Minister Tun Abdul Razak, at present the Federal Prime Minister, who was also Minister of National and Rural Development. He realized that development suffered from lack of co-ordination between the Government agencies, and the inability of the public to make full use of the services the Government provided. To overcome these problems he followed a military style approach and set up a chain of Development Committees at the Federal, State and District level. In Sarawak also at the Divisional level a Committee was installed. These Committees were to meet regularly to plan and discuss development in their area in a special Operations Room equipped with a 'Red Book' from which in a glance information about the rate of progress could be obtained.

The following Development Committees, since 1972 called Action Committees, exist in Sarawak: A State Development Planning Committee (SPDC), under chairmanship of the Chief Minister, consisting of the other members of the State Cabinet, the State Secretary, the Federal Secretary and the State Financial Secretary. Its executive secretary is the State Development Officer, an officer of the Federal Ministry for National and Rural Development. This officer is also the chairman of the Working Subcommittee of the SPDC, in which the heads of professional departments are represented. The Divisional Development Committees (DDC) are under chairmanship of the Resident, members are the District Officers from the Division, and the divisional heads of professional departments. Elected representatives of the people can be members of the Divisional Committee at the Government's invitation. Much of the actual work of co-ordinating the different professional departments at divisional level is done by the Administrative Officer (Planning and Development) who is a subordinate of the Resident, but as well responsible to the State Development Officer.

At the District level District Development Committees are established. The District Officer is chairman, members are representatives of professional departments. Also members of the population can be invited to take part.

The functions of the Development Committees on the different levels are ((SGK) Dev. Instruction, 1969):

State level: to consider proposals for development from Divisional Development Committees and to weld them into a State Plan. The SPDC has to co-ordinate the work of departments at State level for the implemention of development projects, and to ensure that development work is implemented according to the Plan.

Divisional level: to collect and consider proposals for development from the District Develop-

ment Committees, to prepare each year detailed proposals for development work within the framework of the State Plan to be carried out during the following year in the Division, and to set down priorities for submission to the State Planning Development Committee; to coordinate the work of separate departments to ensure that cooperation in the implementation of development projects is achieved.

District level: to prepare and complete a 'Red Book' Plan for the District and to collect and submit proposals for development work within the framework of the Red Book to be carried out during the following year in the District and to set down priorities for submission to the Divisional Development Committee.

The set up of Development Committees and the procedures to be used differed a great deal from the bureaucratic practices up to that time. These originated directly from the Colonial period and were mainly concerned with order and regularity, not with experiments. In order to make clear that he meant business with his new approach the first years after this planning system was launched Tun Razak toured the country intensively and delivered many speeches trying to instill a new dynamic attitude into the Government servants. Being one of the most powerful persons in the Malayan Government, second only to the Prime Minister Tunku Abdul Rahman, Tun Razak's praise and reprimands were of high conern to the officers in the field. Non-cooperation was regarded as sabotage. However the attempt to change the static mentality of the officials to a dynamic one was not successful in the long run. 'The system survived Razak's inability to supervise it intensively after he assumed additional responsibilities beginning with Indonesian confrontation in 1963' (Esman, 1972, page 105). The system of Development Committees working from Operations Rooms had been taken in by the established bureaucratic agencies and become completely routinized. The Development Committees in Sarawak which were installed only after Independence in 1963, had moreover never experienced Tun Razak's close supervision. Another objection that can be made against the created organization for development is that it never moved away from construction projects. It can be best characterized as an organization to speed up building programmes. The reason lies in the special connotation the word development has in Malaysia. As already mentioned for Sarawak, Colonial Governments were always anxious not to overspend. This attitude caused them to split their budget in two parts, one for recurrent expenditure, which amounts were comparatively stable over the years, and a 'development' budget which fluctuated along with the Governments financial position depending on the revenue from exports. The development budget was used for any activity which had the character of an investment. Still the pace at which investments were made was hampered by the expected effect they might have on future expenditure because of operation costs. The differentiation between recurrent and development expenditure is still in use, and has implications for the Development Committees. The Committees deal only with those activities which are to be financed from the development budget. They have the character of one time investments, and are mainly in the sphere of construction of buildings, roads, bridges, wharfs, commercial centres, agricultural subsidies etc. The personnel engaged in these construction activities, as well as those that will work in and with the completed facilities, and costs of maintenance, are items on the recurrent budget, with regard to which the Development Committees have no special task. So it can happen that in a Development Committee the erection of a new police station is extensively discussed, but not the operation and upkeep of an irrigation scheme, the problem of school attendance, methods of extension to win the people for new agricultural and hygienic measures etc!

Besides increasing the efficiency of the Government organization by establishing Development Committees, Tun Razak wanted to create better relations with the public. Malaya had become an

independent nation in 1957 and in future its Government would have to obtain the confidence of the people in general elections. It was realized that it would take time before effects of large-scale infrastructural projects would be felt in the rural areas from where the UMNO, the dominant ruling party, obtained the majority of its votes. It was necessary that development could be seen in the rural areas in the short run. Thus a special category of Minor Rural Projects (MRP) was introduced under which villages could be provided with basic amenities such as roads, bridges, water supplies, etc. Representatives of a village can make a request to the Development Committee in their District, which has to investigate whether the project is viable and to assign a degree of priority, after which the proposal is forwarded to the Divisional and State level. If a project is approved and funds allocated, the implementation is again under the authority of the District Development Committee.

The MRP programme takes only a very limited part of the development expenditure. It is estimated that in Sarawak under the First Malaysia Plan M$4.5 million or 1.6% of the public development expenditure was used for 'Community Services', which include the MRPs. The allocation under the Second Malaysia Plan was M$33.51 million or 5.5% ((MGKL) Second Malaysia Plan 1971–1975, page 71). However the political significance of the MRPs is large. The approval and the opening of village development projects are political events. Especially during the first years that village development projects were made available, on the spot approvals by Cabinet members were frequent. In that way they personally gained credits for bringing development to certain areas. By approving a request on the spot a Minister bypassed the development administration resulting in frustrated members of Development Committees, complaining that they were used as rubber stamps ((SGK) Minutes Council Negri, 1964, September 26th). Sometimes an approval had to be revoked, because the intended project was not feasible. Afterwards a more subtle way was used by approving requests that were given low priority by the Development Committees ((SGK) Minutes Council Negri, 1968, September 26th, December 12th).

As a rule any project for which the Government has provided assistance is officially opened by a member of the State Cabinet, because it gives the Ministers an opportunity to deliver a speech about the development progress that has already been made as well as that to be made ((SGK) Minutes Council Negri, 1968, September 12th). As mentioned in Section 2.5 some Cabinet Members have the role of touring Minister; one was even jokingly referred to as the Minister of Water pipes. At these functions the Minister is usually accompanied by high-ranking officers of different departments.

Another indication of the political importance of the MRPs is the amount of space (about one-third) used for an enumeration of MRPs in Sarawak in an official informative report ((SGK) Sarawak Dev. Progr. 1964–1967).

Ideas in Malaysia about the role to be played by the public in rural development are conflicting to say the least. In the Rural Development Directive no 1 ((MGKL) Rural Dev. Dir. no 1), about the use of the 'Red Book' system, one of the elaborations on the general aim of the Government—Rural Economic Development—was 'educate, convince and inspire the rural dweller that the productivity, progress and prosperity of the Nation is in fact the sum total of individual effort by each and every son of the land; and so put the onus of the future advancement of the Nation squarely on his shoulders and make him feel that the destiny of Malaya, without a doubt, is in his own hands'. But in another official publication ((MGKL—Min. Nat. Rur. Rev.) Techniques for developing, 1965) it was declared that development must be done in phases. First the Government would shoulder its responsibilities by constructing a framework of development, after which, with a clear conscience, it would be able to call on the rural people themselves to work harder and to raise

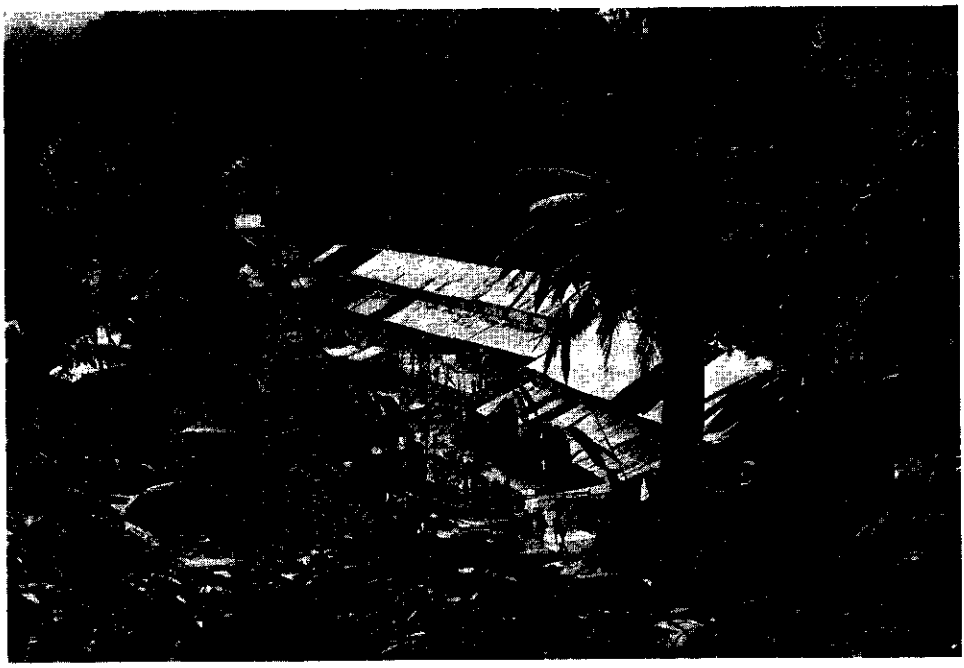
their standard of living. In an Appendix on Community Development to the above mentioned Rural Development Directive the guiding principle of community development was defined as: 'to arouse the interest and enthusiasm and enlist the participation of the individual in the advancement of the community as a whole'. But it continued to say that 'there is little scope for active public participation in public works'. The reality was that nearly all projects aimed at the village unit were in the infrastructural sphere and concerned the construction of amenities and improvement of accessibility. The active involvement of the population in these projects was very limited. But the expectation from the official side was that a Government busy installing village projects would induce the individual rural dweller to work hard on his own land. Raised outputs of individual holdings would mean an increase in the prosperity of the communities, and of Malaya as a whole.

This concept of community development assumes that a community is only the sum of individuals living in it. Requesting projects was the major activity left to the village populations in the process of community development. Requests have poured in, and at the present rate of implementation it will take years before all projects that have been recommended by the Development Committees are constructed. For example funds needed for recommended projects in the First Division of Sarawak in 1972 amounted to M$3,378,021 of which 35% for projects given first priority. Funds allocated during 1971 amounted to only M$148,072 (information Administrative Officer Planning and Development). Whenever the population is asked to assist in the construction of a project, this happens on an ad hoc basis organized by the professional officers charged with the implementation. These officers have little knowledge and interest in community development. Their major concern is that their work goes according to schedule, not to generate enthusiasm for the advancement of the community. No specialized community development workers exist. Notwithstanding, in public addresses politicians and high-ranking officers, frequently urge the people to work in gotong royong (mutual help) style, and to show the communal spirit ascribed to rural villages.

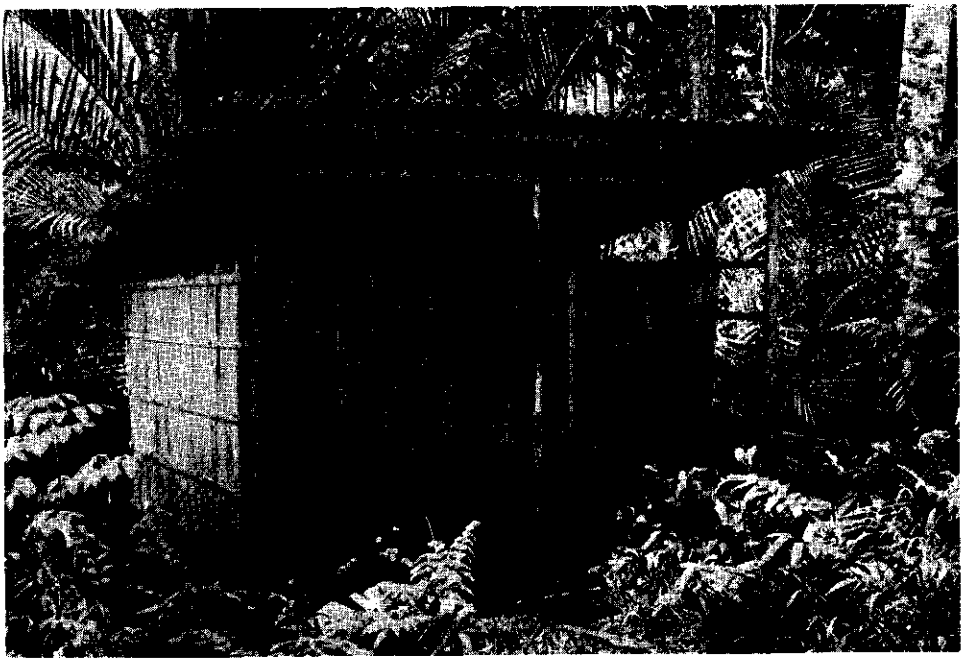
The contribution by the Development Committees to rural development at village level has remained very limited. They invite and entertain requests only for activities which, by applying a standard routine, can be realized in a short period, irrespective of these requests being urgent and needed. Though the Committees brought together officers of different departments, they did not become multi-disciplinary teams working with an integrated programme for the development of a village. An officer of the Federal Development Administration Unit reported about the work of District Development Committees that it had stagnated at the level of deliberating about small construction projects and amenities. 'Such activities as rice production and marketing, control of livestock diseases, fertilizer use, school attendance, or family planning were never included in the red books or on the large wall charts' (Esman, 1972, page 223–4).

3.5 Rural development programmes

In Sarawak, as elsewhere in Malaysia, two approaches to rural development can be differentiated. One, which has its origin in the Colonial period, is concerned with already populated areas. It is implemented by different departments which are only slightly coordinated by the Development Committees. The second approach, comprising Land Settlement Schemes, was started only after Sarawak gained independence within Malaysia. Settlement Schemes are situated on unused State land, or land that has been acquired from its users. After the land has been opened up, planted with a cash crop, and a village with basic amenities has been built, the selected settlers move in. The settlers have to repay part of the investments by deductions on the sale of their future produce. The



Longhouses of Mapu Mawang at dawn.



Latrines longhouse-style.

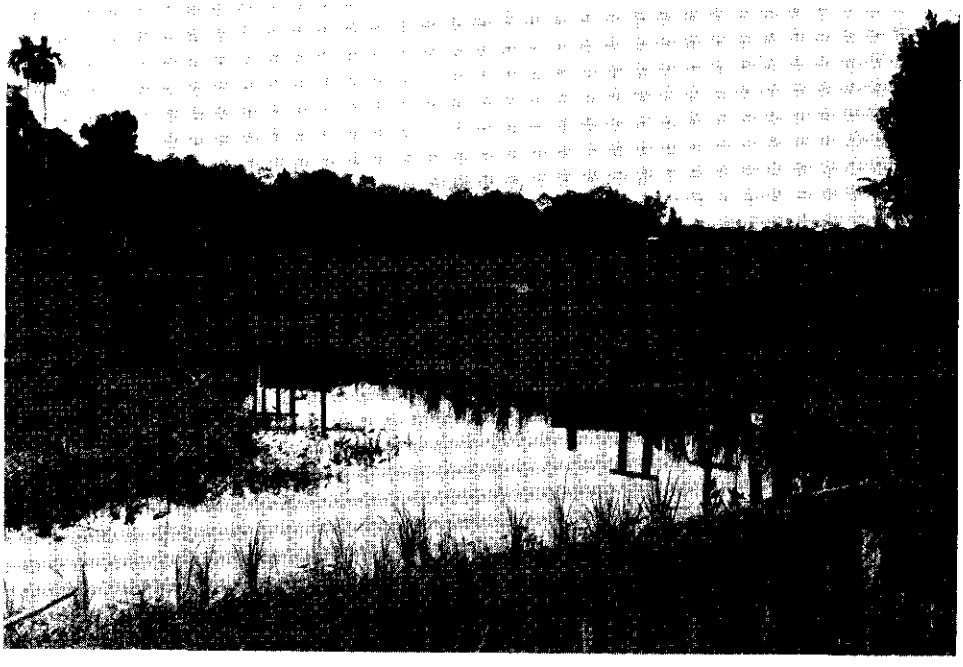
Sunday morning in Murut Plaman, churchgoers returning home. Note the differences in quality of the houses. *foto Juliet Williamson.*

Clear water is brought to Engkaru via a bamboo pipe. Containers for transport and storing water are also made of bamboo.

Dibbling holes for paddy seeds on a hill paddy farm. *foto Jon Daane.*

Sowing paddy directly in a swamp paddy area. *foto Jon Daane.*

Group working on a hardwood dam to irrigate a valley. *foto Juliet Williamson.*



Valley area improved under Assistance to Padi Planters Scheme.

number of Settlement Schemes is limited. The seven schemes in use or under construction by 1967 together comprised less than 20,000 acres and 1,600 households (Lee Yong Leng, 1970, page 173). The management of Settlement Schemes is the responsibility of a statutory body, up to 1972 the Sarawak Development Finance Corporation, in which year it was transferred to a newly created Land Development Authority. Because this study is not concerned with Settlement Schemes they are not elaborated upon here.

The first approach aimed at improving conditions in already populated areas with methods less drastic than the complete overhaul caused by a Land Settlement Scheme. It comprises a large variety of programmes, projects and schemes, extensively described in Appendix VIII. They are administered by the different Government agencies as well as a few voluntary bodies. Among these programmes several categories can be differentiated.

– Subsidy schemes

By providing the individual rural dweller with planting material and implements free of charge, often with a little cash added as long as he meets certain conditions, an attempt is made to introduce new crops or improved varieties of crops already under cultivation and to induce the farmer to improve his standards of cultivation. These individual schemes are allocated through the Development Committees.

– Rural credit

Small loans are provided to individual rural dwellers to enable them to start or to extend their agricultural holdings or retail business. These are provided by two statutory bodies, the Sarawak Economic Development Corporation and the Majlis Amanah Ra'ayat (MARA) or Council for the benefit of the indigenous people.

– Construction projects

Under the MRP programme villages are provided with small infrastructural works and basic amenities.

– Organizations at village level

By having villagers organized in groups, economics of scale can be made use of. These village organizations can work upon the advancement of the community. Under this category are Cooperative Societies, Paddy Planters Schemes, Women's Institute, Bidayuh Association etc.

– Social services

Health services are increasingly extended to the rural areas. Primary education has been made available to almost every part of Sarawak. Besides, training and extension facilities exist for the adults, as there are Adult Education, courses in Home Economics, and Farmer's Training Centres.

The side by side presence of subsidies and loans has created confusion and misunderstanding. Some people refuse to repay their loans, while others are unwilling to accept a subsidy, afraid the Government would confiscate their land if they were unable to meet the conditions. Characteristic for nearly all programmes is the large extent to which they have been standardized and routinized. This is especially clear with the Department of Agriculture, which of all agencies charged with rural development has the greatest number of intensive relations with rural dwellers. Procedures and rules are laid down in manuals and are expected to be strictly followed by implementing officers as well as receptors. These directives confine the thinking about development, and have provided the ultimate standard for officer's behaviour in bringing development to the rural areas. Circumstances and aspects not mentioned in the manuals are neglected. So far there has been little question about the effectiveness of the different programmes. The routine was expected to produce the intended results as long as it was properly followed. First official doubts arised in 1971 when it was realized that large acreages of Government subsidized rubber of high yielding varieties

remained untapped. The rural sociologist of the Department of Agriculture was directed to investigate this matter. The next year the Economics branch of the same Department started an evaluation of the effects of courses given in Farmer's Training Centres.

Because procedures are standardized the number of times they have been carried out can be easily counted and produced in statistics. This is important for a Government eager to show its concern with rural development. The importance attached to 'production figures' can be explained from the circumstance that up to 1970 deficit spending was the rule in Sarawak. Lack of qualified staff and difficult communications have always been greater impediments to development than shortage of funds. This has led to a situation where the number of projects implemented, and funds spent, are regarded to be the indicators of development, and not the intended effects of these activities and expenditure. Goals of development have been substituted by the means to development. Sometimes field officers are praised by their superiors for having been able to hand out all the subsidies allocated to their area, without any mention of the future effects these will have. The constant pressure for results has caused field staff to be mainly occupied with the issue and control of assistance schemes. Also the recruitment of new applicants for subsidy schemes is one of their major occupations. An enumeration of all the possible assistance schemes and an invitation to applications are frequent topics in their addresses to the public. Sometimes these speeches turn into outright persuasion, 'come on, take it, believe me, it is good for you'. The problems of the rural people for which no solution in the form of a standard packet is available are hardly noticed.

The remarks above have been made with explicit reference to the development activities of the Department of Agriculture. The same preoccupation with producing results can be recognized in the programmes under which village amenities are provided. The difference with the agricultural schemes is that applications outnumber the funds available. But investigations of the viability and necessity of a project are limited. The population is hardly involved in the construction. Training, supervision and arrangements for the use and maintenance of the amenity provided are completely absent. This lack of real contact with the people who are supposed to benefit from the project constructed has caused that many of these projects remain unused and/or deteriorate quickly because of a low standard of upkeep.

Compared with the subsidy schemes and the construction programmes, the activities by official agencies which aim to stimulate the rural people to work for their own betterment and that of their communities are of minor importance in Sarawak. Cooperative societies, adult education classes, 4H clubs and Women's Institutes are the ways used to organize and unite the people at village level. However, they offer little attraction to the people. Few special facilities or exclusive benefits have been made available to these organizations. Efforts to make the people work themselves in these organizations on the improvement of their villages and thus to realize the possibilities of concerted action are frustrated by the presence of village construction projects. The villagers have got used to a situation where things are done for them, not by them. More information about the reactions of the population to the different rural development schemes aimed at the village unit provides Chapter 13 'Village organization'. In Appendix IX several case studies are presented.

4 Position of the Land Dayak in Sarawak

4.1 Distribution and origin

The Land Dayak are one of the smaller population groups in Sarawak. They are entirely confined to the interior of the First Division, consisting of the Districts of Lundu, Bau, Kuching Rural and Serian (see Chapter 2 and Appendix VII). The Land Dayak have never settled themselves in riverain areas, in contrast to the Iban or Sea Dayak, originally upland people too, who nowadays are found in the hills as well as in the river deltas. Lee Yong Leng (1970, page 91) pointed out the striking difference in Land Dayak population in the two adjacent Districts of Serian and Simunjan, both drained by the River Sadong. The Serian or Upper Sadong District has the highest density of Land Dayak, while there are no Land Dayak villages in the Simunjan or Lower Sadong District. In the riverain area of the Serian District, immediately adjoining the Simunjan District, Land Dayak settlements are already scarce. Only after World War II were two Land Dayak villages founded in this area, Sebemban and Munggo Kopi. The population of both villages originates from Tebakang, a large upstream village in the heart of Land Dayak country with a very limited territory. The Land Dayak were probably reluctant to move downstream because the riverain area required them to adapt their culture and they were not prepared to do so. Swamp paddy instead of hill paddy would be the major crop. Also the river deltas were already populated by Malays and Iban from which the Land Dayak suffered a great deal in pre-Brooke times. The Malay overlords who ruled their areas on behalf of the Sultan of Brunei tried to extort tribute from the population for their own benefit. Also the Iban always eager to collect fresh heads lived downstream.

Most probably the Land Dayak were the first inhabitants of the area which at present comprises the First Division of Sarawak. Different versions of the legend of Datu Patinggi, the first Malay to settle on the South West coast of Sarawak, mention Land Dayak villages such as Koran, Krusen and Taup in the headwaters of the Sadong (Roberts, 1950). The Land Dayak entered their present area from West Borneo, nowadays part of Indonesia, crossing the watershed. This watershed has never been a real barrier to any traveller; traffic has strongly diminished since the 1960s because of security measures. Little is known about the history of the Land Dayak (Elam, 1937). Similarities with Assam are pointed at, as well as relics of a Hindu culture. The latter are not very specific indicators about the origin of the Land Dayak because in the time of Majapahit the whole Malay archipelago was Hindu influenced. Hinduism was probably an overlay and not an original trait of the Land Dayak culture (Banks, 1947).

The Land Dayak have never extended their area beyond the First Division. Probably the poor quality of the soil in the Second Division adjacent to the First kept them from venturing in this direction (see Pringle, 1970). They suffered from attacks by the Iban, who entered Sarawak in the Second Division. However the Land Dayak have not been expelled or absorbed by this restless, ever migrating people, as were many other tribes living in the Second, Third and Fourth Divisions before the Iban entered these areas.

4.2 Dialect groups

The Land Dayak are differentiated in many groups and subgroups. The term Land Dayak has been invented by outsiders and applies to the original non-Muslim inhabitants of the First Division. Leach (1950, page 54) gave the following definition of Land Dayak: 'All those communities of the 1st Division of Sarawak, whatever their dialect, which possess, or recently possessed a 'headhouse' (Baloi, Panggah) as a feature of their village organization.' It is not known whether any relationship between the major groups of Land Dayak existed before they entered Sarawak at different points of the watershed, probably more than twenty generations ago. The Land Dayak along the Sadong river refer to themselves as Bidayuh, meaning: we, the people of this area (the hills). This term differentiates them from other people coming to the area later in time, but does not indicate a common origin. Nowadays the term is increasingly used by the Land Dayak in the other parts of the First Division. Organizations on the State level accepted the term Bidayuh in their name, e.g. Bidayuh Section of Radio Malaysia Sarawak, Bidayuh Association and Bidayuh Youth Club. In this study the term Bidayuh will be used when the Land Dayak of the Serian District are discussed, leaving the term Land Dayak for the wider category.

The Land Dayak speak a variety of dialects, classified into different major categories by different writers. Topping (1970) after his six-week survey thought that all Land Dayak speak one language. Within this language five major dialect groups exist, which are not mutually intelligible for the speakers of each group. These are the dialects of Lundu, Pasir Tengah, Bau, Kuching and the Upper Sadong. He again differentiated these five major groups in a total of 22 sub-dialect groups. Many of these dialects resemble the language spoken by the Sarawak Malays more than any other major Land Dayak dialect.

Many alien elements have entered the Land Dayak culture at different points in time. Their traditional songs contain so many Iban and Malay words that they are not easily understood by the young people unless they are really interested and study this flowery language. Many Malay and English terms have slipped into everyday language. Striking examples of the latter are the verbs to complain, cancel and postpone, probably gained through contacts with bureaucratic organizations. On practical grounds the Bidayuh section of Radio Malaysia Sarawak recognizes three dialect groups, those of the Bau/Jagoi, Biatah and Bukar/Sadong communities, each allotted an equal amount of broadcasting time. As a result the relative small Selakau communities in the Lundu District are deprived of broadcasts in their own dialect. In an attempt to foster a common identity among all the Land Dayak the organizers of the Bidayuh section are extending their 'integrated' Bidayuh programme which is for all the Land Dayak and includes contributions in the three different dialects.

4.3 The stereotype of the backward Land Dayak

Many people inside and outside Sarawak have a certain stereotype image of the Land Dayak, the image of a friendly and humble, but also very backward people. An early traveller like Wallace reported: 'I am inclined to rank the Dayaks above the Malays in mental capacity, while in moral character they are undoubtedly superior to them. They are simple and honest, and become the prey of the Malay and Chinese traders, who cheat and plunder them continually. They are more lively, more talkative, less secretive, and less suspicious than the Malay, and are therefore pleasanter companions.' Because Wallace only travelled in the present First Division he undoubtedly referred to Land Dayak. But two pages later he commented: 'They (the Dayak) have the usual fault of all

people in a half savage state—apathy and dilatoriness; but, however annoying this may be to Europeans who come into contact with them, it cannot be considered a very grave offence, or be held to outweight their many excellent qualities.' (Wallace, 1872, pages 88 and 90). Gradually however a different picture developed, that of: 'an indolent race, conservative, proud and dirty and in headhunting days an easy prey for any marauding Sea Dayak', recorded by a District Officer of the third Rajah (Elam, 1937). In the Colonial period a member of the Natural Resources Board wrote: 'They (the Land Dayak) have (however) often been the victims of the various invasions, and of persecution, and thus have become a timid and retiring people, suspicious of change and progress, and asking little but to be left alone' and 'Though there are signs of an awakening and an appreciation of modern ideas among some of the people in the more accessible areas, the Land Dayak can hardly yet be regarded as a real asset to his country.' (Roe, 1952). Geddes (1954a, page 112) did sum up the situation with: 'The Land Dayaks of the Sadong are at present thought of mainly in terms of problems.' Though he thought it unfair to call people with 'a lack of obvious outward show' problematic, the general opinion has hardly changed. Present day writers still describe the Land Dayak in words such as: 'a mild and very conservative people' (Jackson, 1968, page 49), or 'their less progressive nature' (Lee Yong Leng, 1970, page 88).

In contrast to the Land Dayak, the Iban, another Dayak tribe, are generally referred to as dynamic and progressive. However, the contrast is not as large as the popular belief wants it to be. Many objections can be made against the dynamic nature of the Iban. Pringle (1970, pages 37, 109–209) pointed out that in recent history the Iban continuously changed their residence, but seldom their economic system, except for the Iban along the Saribas river. They comprise about 15% of the Iban in Sarawak. However, the Saribas, who deserve the description progressive because of their early economic changes, have painstakingly preserved their cultural traditions. Earlier Leach (1950, page 26) had noticed that among the Iban 'one of the most sophisticated Christian houses in the whole country appeared to maintain all the formal organizational rules of the society even more rigidly than a somewhat inaccessible and primitive 23-door house'.

At present the image of backwardness and conservatism of the Land Dayak can easily be refuted, for instance by pointing at the adaptations in the agricultural system. Now land is becoming scarce, Land Dayak increasingly rely on swamp paddy and pepper. But it remains interesting as to how the stereotype of backwardness came into existence. Even more so because a number of Land Dayak have developed feelings of inferiority in accordance with it. The reason often presented for the conservative nature of the Land Dayak is the period of oppression by Brunei overlords and Iban headhunters before the Brooke pacification. Also the hardships experienced during the Japanese occupation and the upheaval caused by military personnel searching for guerilla forces during Confrontation and its aftermath, would have fostered a passive attitude. Undoubtedly the Land Dayak were among those who suffered most in the Brunei and Japanese period, and many stories about the hardships of those times are still recounted. The Confrontation period has not made such a deep impression. Food was available in sufficient quantity, discarded military rations and equipment were collected and many a young lad earned an extra dollar with the armed forces.

However, not only the unruly periods in the history of Sarawak should be mentioned as causes for the reticent and suspicious behaviour of the Land Dayak, the neglect by the Administration also played a part. Although living in the immediate vicinity of Kuching, the major centre of Sarawak, the Land Dayak have been paid less attention to than the Malays and Iban. As has been stated earlier in this study the Brookes relied heavily upon the Malays in the administration of their domain. The Malay society was clearly stratified and members of the higher ranks were appointed

to the various native advisory and magisterial functions. The first appointed State Representative Council in 1867, the Council Negri, consisted exclusively of Malays. Still during the reign of the third and last Rajah nearly only Malays were recruited for the function of Native Officer. The Malays were unified by the Islam, although not necessarily all had a deep knowledge of it, which was accepted by the Administration on an equal footing with Christianity. No missionary activities were allowed in Muslim areas.

The Iban created the greatest problems for the Brookes in their attempts to pacify the country and therefore attracted much attention. Leaders such as Bantin and Rentap openly challenged the new rulers and were not defeated until there had been several great and difficult battles over a prolonged period. However, once peace was made they became amiable friends and close allies of the white rulers. Another reason why the Iban have attracted more attention from outsiders might be the custom in the Sarawak Civil Service of posting newly recruited cadets to the outstations. There in a solitary position most likely they met Iban, the largest indigenous group in Sarawak, with a relatively homogeneous culture. Also the Iban speak one single language not very different from Malay, the lingua franca in Sarawak. This facilitates contacts with them. Once these officers were transferred to Kuching to fill higher ranking posts they were already saturated with impressions of Sarawak and its people and did not set themselves to study the comparatively difficult and alien Land Dayak culture and dialects. This tendency is very clearly expressed by Ward, Resident First Division 1915–1923: 'I always regret that my multifarious duties in Kuching left me few opportunities to know more of the Land Dayaks' and 'The little groups Land Dayaks I came across in the town appeared to me unprepossessing, shy, and inclined to be stupid. I ought to have made greater efforts to cultivate their acquaintance because government officers as a rule show a pathetic lack of interest in them and no one that I can remember ever mastered their language. As a race they are so quiet and unobtrustive that one was apt to forget their existence, but Sarawak has no subjects more loyal or peaceful' (Ward, 1966, pages 178, 179).

In frequent contacts with powerful outsiders the Land Dayak have learnt to be suspicious about their motives. Instead of resisting them openly, they have developed relational patterns to hold them at bay. By entertaining visitors as most honoured guests, the Land Dayak try to avoid any commitments.

This ability is illustrated in the following story about a newly appointed District Officer. During one of his first visits to a Land Dayak village the young District Officer was asked to explain an administrative regulation. He talked at length about it, and finally, deep in the night, his audience assured him that now they really understood and appreciated the measure. The next morning the District Officer left the village feeling very satisfied and proud about his capacities to understand the people and to communicate with them. It was quite a shock to him when some months later he happened to meet his predecessor and found out that a year before the same villagers had asked the same questions and had expressed the same gratitude after a lengthy explanation! However, it is wrong to classify this attitude of not immediately engaging with any outside proposal or activity as conservative. The preference for a second thought does not mean that a Land Dayak fails to see what is to his advantage; it is in the first place a defensive mechanism.

The ethnic heterogeneity of the areas where Land Dayak reside provides a third reason for the Land Dayak ranking low in the opinion of so many people. Goldmining around Bau in the Nineteenth Century attracted many Chinese so that the present First Division became a relatively densely populated part of Sarawak. Descendants of the Chinese miners established themselves as market gardeners, rubber tappers and pepper cultivators, and gradually became engaged in commerce. Some of the Malays in the area gained admission to the Civil Service. Compared with these

co-inhabitants of the First Division who were government employees, sophisticated agriculturalists and tradesmen, the Land Dayak practising shifting cultivation could not appear anything else than backward and indolent.

Besides a subgroup of the Land Dayak, living along the Kayan river in the Upper Sadong District, outrightly refused to plant rubber, a major cash crop in the first half of the Twentieth Century. Though this taboo applied to a minority only, it did not contribute to a positive image of the Land Dayak in general. As will be described in Chapter 11 the taboo on the planting of rubber could only remain in force because of support by the Administration.

Another effect of the heterogenous population of the First Division which certainly has confused many a writer about the Land Dayak, is that a pure Land Dayak culture does not exist any more. Frequent contacts with the Malay and Chinese culture could not be evaded, the Land Dayak territory being too small to persist in the traditional methods of obtaining a livelyhood. 'As a result some Land Dayak communities are badly 'detribalized', and these are unfortunately the ones which the average European is most likely to encounter. But the general reputation of dissoluteness that the Land Dayak has acquired seems to me quite unjustified' (Leach, 1950, page 26).

With the introduction of democratic procedures for the election of representative councils for the first time during the Colonial period the Land Dayak were able to influence public life more in accordance with their position as fourth largest ethnic community in Sarawak, about 8½% of the total population. Land Dayak have been elected members of the State and Federal representative councils several times. In the seventies the Land Dayak as a group were publicly recognized. The Governor bestowed one of their politicians with a Datukship, the highest Order in Sarawak, and another became a member of the State Cabinet. It is remarkable to note that both politicians originate from the Upper Sadong District, where Land Dayak form about 60% of the population, the highest proportion of Land Dayak in all Districts. From areas where other ethnic groups besides the Land Dayak are present in substantial numbers no prominent Land Dayak have yet reached these high levels.

As a conclusion to this section it can be said that the Land Dayak did not get much attention and encouragement from the Administration for many years. This neglect was mainly due to competition by other, more numerous and sometimes more troublesome ethnic groups. The Land Dayak, used to being treated badly by outsiders, tacitly accepted this inferior position, which in turn contributed to the still popular idea that they are a conservative and less energetic people.

5 The Upper Sadong District, the research area

5.1 Population

5.1.1 The Bidayuh

The majority of the population of the Upper Sadong District is Bidayuh, the largest group of Land Dayak (about 40%) (see Table 8). The Bidayuh are rural people living in roughly one hundred villages spread over the District, with a concentration in the west and south. In general the Bidayuh occupy that part of the District south west of the Kuching–Serian–Simanggang road until Balai Ringin, about eighteen miles south east of Serian (see Map 2).

The size of Bidayuh villages is expressed in the number of houses or doors. The head of a household has to pay an annual house tax to the Local District Council, in accordance with the size and quality of the building. Villages vary in size from 4 to 200 doors, the average size is 48 doors and the mean only 40, which indicates that most villages are of a very limited size.

The origin of the Bidayuh is obscure, and relationships between the villages can not always be traced. A distinction is often made in the District between the Bukar and Sadong Land Dayak. The Bukar live in nineteen villages in the northern part of the District, which can all be traced to the still existing village Lanchang. The Sadong inhabit the other Bidayuh villages. The Bukar villages were the first in the District to come into contact with the outside world. Now they are characterized by a high proportion of Christians, many educated people (primary as well as secondary), dark glasses, long haired youths, and a certain eagerness to sit in committees and to engage in politics. Or as a Sadong put it: 'Those Bukar are so very proud, all want to sit on the first row, everyone thinks he can be the village headman' and a Bukar commenting his own group: 'We are more

Table 8. Population of the Upper Sadong District, and its administrative centre Serian. Source: (MG-SBK, Dep. of Stat.) Population Census 1970.

	Upper Sadong District		Serian	
		%		%
Malay	5 089	9.5	522	23.6
Sea Dayak (Iban)	6 034	11.2	96	4.4
Land Dayak	32 369	60.3	297	13.4
Chinese	9 258	17.3	1 244	56.3
Others	908	1.7	50	2.3
Total	53 658	100.0	2 209	100.0

developed, and more talkative, compared with the Sadong.'

Among the Sadong two subgroups are sometimes differentiated, those living in the headwaters of the Kedup and those of the Kayan river, the principal tributaries of the Sadong river. This categorization excludes a number of villages, among which are the Gahat and Riih groups. The Kayan are said to be the most pessimistic group of the Bidayuh. They suffered from the taboo on rubber planting.

During the survey information was collected in all the villages about mother, grandmother, sister and daughter villages, which has been expressed in the diagrams shown on Map 2. Large clusters exist around Lanchang, Tahup, Gahat and Mapu, smaller ones around Riih Mawang, Koran, Slabi, Tamu, Engkaru and Mentu Mawang. The clusters of Lanchang, Tahup, Slabi and the villages of Temong and Tebedu claim descendance from Senangkan Guyan (Rutoi Mawang), which village existed in the Nineteenth Century in the headwaters of the Kayan river, the right hand branch of the Sadong. A few other clusters and villages along this river like Riih Mawang, Koran, Sijijak and Tama probably also originate from this Senangkan Guyan. Senangkan Guyan was founded by people from Sungkung (Mawang Tampun) across the watershed in West Borneo. Other inhabitants from Sungkung founded the villages of Gahat and Meriam Bedup. The villages around the Kedup river, the left hand branch of the Sadong, seem to be of a different stock. Even less is known about their origin, some villages are said to have 'always' existed, or to have been founded by demons. An attempt by Roberts (1949) to relate all villages to one common origin, Bugau in West Borneo, contains many uncertainties and black spots. All that can be said with certainty is that the first inhabitants of the headwaters of the Sadong, came from West Borneo across the watershed. At first their settlements were far apart, leaving vast areas of reserve in between them. Subsequently these reserves have been occupied by people of the first settlements, gradually filling up the whole area. Of course no exact dates are available, also genealogies which could possibly provide information about points in time are few in the area. Only the number of offshoots from a certain village gives some information about the length of period of its existence.

Migration across the watershed has continued ever since the first settlers came to the area and at present still continues on a small scale. The later migrants most often settled themselves in already existing villages, which enabled them to enjoy the security and facilities of an established community. Settling in an existing village was advantageous to the inhabitants of the village too, compared with having a community of unrelated intruders on the outskirts of the village area. In that way at least a certain amount of control could be exercised over the immigrants. When the newcomers came to stay within the village they were accepted on an equal foot by the longtime settlers (Geddes, 1954a, page 10).

Occasionally a household or an individual person wants to change its residence from one village to another for some personal reason like continuous misfortune in its present surroundings. Such changes are easy to make, the only condition is that in the new village of residence an ancestor has lived and farmed.

Marriage partners provide another stream of fresh blood into existing villages. Circumstances connected with the latter two types of migration are discussed in Chapters 7 and 9. This constant influx and absorption of outsiders once a village is established causes heterogeneity in descent of a village population.

5.1.2 Other ethnic groups

The Iban live in the hills east of Balai Ringin and in the riverain area north east of the

Kuching–Serian–Simanggang road. Like the Land Dayak, the Iban are mainly subsistence agriculturalists.

Close to the Serian and Tebakang bazars are a few Malay villages, as in nearly all other administrative centres in Sarawak. Their inhabitants are government servants or labourers, and are engaged in some additional farming. Another pocket of Malay villages exists near the Samarahan Rubber Estate at the northern edge of the District.

The Chinese are the second largest ethnic group in the Upper Sadong District. They do not only dominate the bazars, but comprise an important part of the rural population as well. More than 80% of the Chinese in the District belong to the Hakka dialect group, which traditionally is engaged in agriculture. Provisions in the Land Code aim at restricting the Chinese to areas declared as Mixed Zone (see Chapter 9). The Chinese farmers are engaged in commercial agriculture, which makes them favour well accessible areas. Thus the major concentration of Chinese is along the Kuching–Serian road. However, shortage of land at reasonable prices has forced them to move to isolated areas as well. Already in 1933 the District Officer reported: 'There are twenty pepper gardens immediately at Terbat, and thirty at Tebedoo. There are undoubtedly a number of Chinese-owned pepper gardens in isolated and distant parts of the Ulu, often far inland from the river, for which no sort of title or permit is held' (Sarawak Gazette, 1933, page 91). During the Confrontation period most of the Chinese in the border area were evacuated for security reasons. Many of them were settled in the three protected villages in the Kuching Rural District. Now patches covered with lalang grass near Tebedu are a reminder of the time that pepper plantations thrived there. The construction of new roads has caused a new influx of Chinese gardeners, which is particularly obvious along the Serian–Simanggang road. They hold the land outside the Mixed Zone either as a legal sublease from the native owner, or they rent the land illegally for prices sometimes as high as M$300.00 per acre per annum.

5.2 Infrastructure

Kuching, the major centre of Sarawak is situated on the lower reaches of the Sarawak river. Because the Sadong river has its mouth at some distance from the Sarawak river, the Upper Sadong area has been relatively isolated for a long time. Before World War II travelling to Kuching took at least a couple of days. This is in strong contrast with the Bau District, which was easily accessible by the Sarawak river.

A road directly linking Kuching with the Upper Sadong area was not completed until 1930. This road ended in Serian, a small bazar, situated on the Sadong river downstream from Tebakang, an administrative centre. A subsidiary road connecting Tebakang with Serian was constructed in 1934, enabling the District Officer to reach Tebakang from Kuching by car in less than three hours (Sarawak Gazette, 1934, page 69). Before World War II transport in Sarawak was mainly waterborne. However, the upper reaches of the Sadong river are often unnavigable, even for boats with an extremely small draught such as those built by the Bidayuh. There small tracks traverse the country, leading from one village to another. Serian bazar has increased considerably since then. The Kuching–Serian trunkroad has been improved and extended continuously. Now it reaches beyond Sibu, the capital of the Third Division, and eventually it will link the major centres in all Divisions. Travelling time between Kuching and Serian, a distance of 40 miles, has been reduced to about one hour by car.

Since World War II more roads have been constructed. A feeder road from Tebakang to Tebedu, a bazar in a pepper producing area near the border, was completed in 1958. Security

reasons speeded up the road-building programme and other roads were built connecting Tebakang with the Mongkos area near the border, and linking the Tebakang–Tebedu road with the Pedawan road in the Kuching Rural District. A minor road leads from the Kuching–Serian road to the Samarahan Rubber Estate at the northern edge of the District. Another road, leading off the Serian–Simanggang road to Gedong in the Lower Sadong District is under construction. This will be the first motorable overland connection between this District and other parts of Sarawak. Along these roads buses ply several times a day. The one way far for the maximum distance of 23 miles to the District centre Serian is about M$2.00, a return ticket from Serian to Kuching costs M$3.60 (Daily wages for agricultural labour range from M$2.00 to 3.00).

Many villages are connected with the trunk and feeder roads by small earthern project roads which are passable for the four wheel drive vehicles of government officers and traders when no heavy rainfall has occurred for a few days.

5.3 Economic structure

A total of twelve bazars, some as small as one shop, are spread over the District. The locality of several bazars still reflects the time that transport of goods was exclusively by water. At present only the bazar at Pangkalan Amo, situated at a tributary of the Kayan river, can be reached by water alone. At present the majority of the bazars are situated along the Kuching–Serian road, where besides Bidayuh villages also many individual Chinese homesteads can be found. Bazars have become meeting places for people from different villages and different ethnic communities. Many have been provided with schools, clinics or are at least regularly visited by the travelling dispensary. Government offices and depots are found in Serian and Tebakang, the most prominent bazars. These also include a residential area. Nearly all the bazar shops are owned and operated by Chinese. They carry a common stock of consumer goods, and buy products from the farmers. Each shop has a more or less fixed group of customers. Clientele among the Chinese is often based on membership of the same dialect group. Also many a shop has been able to establish itself as sole trader with a number of Bidayuh villages, where it collects rural produce and supplies small Bidayuh-operated village shops. Successful trade in the rural areas is to a large extent based on credit. The shopkeeper provides foodstuffs, fertilizers and other essential commodities on credit and sometimes even small loans, in the hope of gaining a steady supplier of agricultural produce. Because the legal possibilities for Chinese shopkeepers to foreclose native debtors are very limited, they will generally not enter credit relationships with them unless they feel able to recover the debts by social control. The natives not personally acquainted with a Chinese shopkeeper therefore experience difficulties in obtaining the necessary inputs for their farming operations. Once credit has been provided the farmer can exert a certain influence over the shopkeeper. By repaying regularly limited amounts of his debts he can motivate his creditor to give additional credit. The shopkeeper has no choice than to give this additional amount of credit because otherwise he would surely be unable to recover the loans given. The debtor has no other risk than to lose the possibility to buy on credit from that particular shopkeeper. Officially no interest is charged. The shopkeeper finds relief in his margins and by underestimating the weight and quality of products offered. However if these differences become too obvious, the shopkeeper runs the risk that his debtors will sell their goods at the backdoor of a different shop (Tien, 1953).

The shopkeepers themselves often buy their supplies on credit too, either from retail shops in the area, or directly from the importers in Kuching. Improved communications with Kuching have increased the number of dealings with the latter. Also trading firms from Kuching have opened

branches in the rapidly expanding bazar of Serian.

The major crops of the District are rice, rubber and pepper. Rice is either grown as hill paddy or swamp paddy. The latter type of cultivation is gradually replacing the first, now population density is increasing. Estimations of the area under cultivation for the season 1968/69 were 13,000 acres under hill paddy and 9,400 under wet paddy. The production in that season was estimated at 9 million pounds of hill paddy and 11 million pounds of wet paddy ((SGK-Dep. Agric.) Agric. Statistics 1969). All rice is grown for home consumption. Only in situations of acute shortage of cash, or in rare cases of abundancy of rice is a little sold. Total consumption exceeds total production in the District, as in the whole of Sarawak. The deficit is made up by imported rice.

Pepper is grown on a large number of small plantations, generally not larger than one acre (600 pepper vines). Production of this labour-intensive and difficult crop is around five katis (3 kg) of black pepper per vine. The fresh berries are normally dried and sold as black pepper, but if the difference in price is large enough, the better qualities are processed into white pepper. The outer skin is removed after the berries have been soaked in water for several days.

Rubber has been planted extensively in the District, the ordinary type as well as the high yielding varieties provided under the subsidy schemes. Rubber tapping takes place on mornings when it does not rain, and when the farmer has no other pressing occupations. Rubber production is very price elastic, the price of M$0.35 per kati seems to be the level at which tapping comes to a complete stop. Tapping and processing techniques of the majority of producers are extremely crude. The sheets are sold unsmoked and generally graded as the lowest quality.

Vegetables, fruits and other crops are cultivated in small quantities, mainly for home consumption.

5.4 Administration and services

For a long period the Sadong District was one unit, which extended from the border with Indonesia to the South China Sea. Simunjan in the riverain area was the District-centre, and inland Tebakang a sub-District centre. When after 1930 the Administration increasingly became concerned with the daily life of its rural subjects, the Sadong District was divided in the present Upper and Lower Sadong Districts. Because of its better accessibility from Kuching, Serian became the administrative centre of the Upper Sadong District. Tebakang remained a sub-centre.

The District Officer (DO) is the principal Government Officer in the District. He is assisted by two Sarawak Administrative Officers (SAO) and a number of clerks. Subjects like primary education, mother and child health, maintenance of minor roads, environmental sanitation, fire fighting and street lighting are under authority of the elected District Council, which is assisted by a paid staff. The District Office and the Council Office are both situated in Serian. Other services concentrated in Serian are secondary schools, dispensary, post office, agricultural extension, adult education and a police station. Furthermore the centre contains a bus terminal, two petrol stations, two cinemas, a sawmill and other small industries, and a large number of shops.

Several days a week the Government Office in Tebakang is open. There the public can go to the post office, meet a Sarawak Administrative Officer, agriculture staff, and obtain licenses. The second static dispensary of the District and a Mother and Child Health Clinic are also situated near this bazar.

Primary education is provided by: 84 schools, situated in bazars and rural villages. Of these schools 58 are operated by the Local Council, and the remainder by Chinese Committees and Christian Missions. Nine Mother and Child Health Clinics are spread evenly over the area. At

Tebedu, during the Confrontation period a hot bed of insurgency, is the second police station of the District. Near Bunan, where many barter traders from Indonesia enter Sarawak, is a customs and immigration office. The Department of Agriculture has a Research Station and a Farm Institute for training purposes at Tarat.

The Public Works Department has depots in Serian and Tebakang. With 200 labourers it is one of the largest employers in the District. To provide stone for extension and maintenance of roads three quarries are operated.

Two military camps are present near Serian and several smaller ones along the border. As a consequence of improved cooperation with Indonesian forces in the search for communist guerillas at both sides of the border some of the latter camps were abandoned recently. The larger part of the District is still under curfew by night. Sometimes during security operations longer curfews, even round the clock, are imposed on certain areas for a short period. Neither the presence of armed forces, nor the guerillas for which they are searching, seemed in 1971–1972 to influence daily life in the District to a very large extent.

Three Christian Missions are active in the District. The Anglicans (Society for Propagation of the Gospel), the first Mission present in the First Division, has found its followers mainly among the Bukar in the northern part of the District. The Roman Catholics started their work in Tebakang, but later they transferred their station to Serian. A second Mission Station has been opened by them in Bunan, near the border. At present the largest number of Christians in the District are Roman Catholics. Large churches have been built at both their stations. The Seventh Day Adventists are comparatively newcomers to the District and have found followers dispersed over the area. A large school is operated by them in the vicinity of Serian. Wherever a number of families belonging to the same Christian denomination are present they have built themselves small chapels where one of the local members leads the weekly service. The Christian Missions were the first to offer facilities for primary education to the population of the district. At present the Missions are still in charge of eighteen schools. They receive a grant in aid from the Government.

Buddhist temples and mosques are found in the vicinity of bazars, where the majority of the Chinese and Malays are living.

About one-third of the Dayak population (Bidayuh and Iban) of the District still adheres to their traditional religion.

6 Bidayuh residential pattern

6.1 Village territories

A total number of 97 Bidayuh villages is situated in the Upper Sadong District. Locally these are known as kampungs. Around each village are the fields where the inhabitants grow their paddy and other crops. Bidayuh villages are situated along streams which even during dry spells provide sufficient water for drinking, cooking and bathing. There are no indications that the Bidayuh previously built their villages on top of the hills as did the Land Dayak in other parts of the First Division for security reasons. The boundaries between the village areas have been officially surveyed piecemeal. In Appendix X the size of some village territories and the number of inhabitants are presented.

When the inhabitants of two neighbouring villages have the same ancestors a boundary cannot really exist according to Bidayuh law. Bidayuh land tenure gives every person the right to use the land that has been cleared of virgin forest by an ancestor. However, from the point of view of convenience rights on land situated far from one's own village are seldom exercised. The fields are left to descendants of the first cultivator living in the nearby village. This has produced a situation of unclearly separated territories.

The boundary between two not directly related villages is of much more concern to their inhabitants and disputes provide the successive District Officers with a fair amount of work. These disputes have not always ended in a way satisfactory to all parties involved. The revival of dormant conflicts has brought some District Officers to sigh that the Bidayuh merely quarrel for their own enjoyment. In the Sarawak Gazette of 1940 the travelling District Officer reported: 'Steady progress has been made with descriptions of village boundaries. It is interesting to note that the councils of Land Dayak villages display far more enthusiasm than do those of Malays who usually appear to be rather bored with the scheme. There is no doubt that Land Dayak councils see many pleasant evenings ahead wrangling over land affairs with neighbouring villages, and it will be a most important step in the right direction if they can in future be induced to settle all such disputes between themselves.' An earlier report reads: 'The usual Ris-Lanchang boundary dispute has again arisen,' and continues with the remark: 'It is my opinion that these interior tribes have far too much padi land and, instead of cultivating properly only sufficient for their needs. they spend most of their time quarreling with their neighbours regarding extensions of their already too large boundaries.' (Sarawak Gazette, 1929).

6.2 Village fission

Village fission is a common process in the area. Some generations after establishment of a village the same processes which occurred in the mother village and which caused the creation of the daughter village will be felt again in both. Increasing population creates land shortage which until

recently could only be counteracted by using fields far away from the village. Working far away from home has the disadvantage that much time is wasted by walking to and fro. Some families will overcome this problem by staying overnight in huts near their fields for some successive days, or even weeks. But during such a period they lack the security and sociability of the village. The establishment of a permanent offshoot of the village may be considered when land shortage has reached such a stage that every year a number of families have to stay in their farm huts during the season in order to devote enough time to the cultivation of their crop. An offshoot is commonly referred to as *plaman*, a village with one or more offshoots will use the term mawang in its name. The offshoot can either be situated on land that has been used before by people of the mother village, or on land still covered by virgin forest. In the first case the group of pioneers has to be restricted to those who have rights on those fields, while in the latter everyone can join in, including inhabitants from some other villages. The land opened up often had the status of reserve of one or several related villages. There are no histories of Bidayuh driving other people away in order to occupy their land. The last time villages were established on virgin land was during and shortly after World War II. People from Jenan founded Murut, inhabitants from Gahat migrated to Paon Gahat, from Sebintin to Paon Rimu, and as has been mentioned inhabitants of Tebakang migrated to the riverain areas. In these cases several other villages had to be by-passed in order to reach uninhabited land (see Map 2).

The process of establishment of a new village takes several years. First the pioneers live in temporary huts, gradually to be replaced by permanent dwellings, in former times always situated in one or more longhouses. In the initial period the pioneers still rely on the old village for religious specialists to perform at certain ceremonies, decisions of the village court in their internal disputes, and the village headman to represent them with the Government, but later persons from among themselves will officiate in these functions. Fission is completed when one of the new settlers is recognized by the Government as headman of a separate village. By then the new village has become independent in social, economic and political matters. Generally it will drop the word plaman from its name. The mother village usually continues to use the term mawang in its name, indicating that it is already an old settlement.

An offshoot situated nearby the original village is not that likely to gain the status of a politically independent village. District Officers do not like to increase the number of villages they have to deal with. From the point of view of an administrator it would be better if units were larger than the present villages (see e.g. Esnen, 1972). However, it is doubtful whether certain villages with a nearby offshoot can still be considered and treated as a social and economic unit.

At present offshoots can only be established on land already in use by the old village. The reason for their creation is normally conversion to one or more Christian denominations of a part of the inhabitants of a village. The Christians move out of the original village in order to end or to avoid quarrels, and not to be subject to traditional taboos. A site close to the roadside is often preferred for settlement. Village fission for religious reasons is not always as dramatic as one might think. Mostly the first converts in a village are young people who have not built permanent houses yet. Their belongings can be moved easily. The young converts try their best to differentiate themselves from the old village along the continuum traditional-modern style of life, and the new settlement quickly become socially and economically independent. But because of the Government policy not to allow too many village units, they seldom become politically independent. The inhabitants of the offshoot are forced to rely on functionaries from the old village for their representation with the Government and as arbitrator in their internal disputes. These are people with a different religion and style of life, who often expelled the innovators from their village. Such a situation easily creates

ill-will and hence the new settlements have no link with the administration. Sometimes after many years when old leaders have deceased, and those who remained in the old settlement also have accepted Christianity, relations improve. Examples of village fission (mainly) because of religious reasons are: Tarat, Murut, Tangga, Kakai, Koran and Krusen.

6.3 Longhouses

Traditionally all doors in a village are situated in one or more longhouses, the common type of dwelling among the different population groups in the interior of Borneo. Generally, these longhouses resemble an urban row of terrace houses, either one or two storey, raised on stilts several feet above the ground, and with a covered gallery in front of it. One's first impression is that a long house is a communal dwelling, but a second look reveals more of its real character. Every household living in it has its separate apartment with a door leading to the gallery. Construction and repair of the apartment and the gallery in front of it are the sole responsibility of its owners. Their design depends on the owners' ideas and the availability of materials. From the air the differentiation can be seen easily, roofing materials as sago leaves, hardwood shingles, corrugated iron and asbestos are used side by side by the owners of different apartments. In fact the only things the participants in the building of a longhouse have to agree upon are the height, the width, who will erect which part of the dividing walls and to a certain extent the period of building. During the building period, which extends over several years, apartments in different stages of completion can be observed. Sometimes in between already erected apartments an open space is reserved for a household which has not yet gathered enough materials to start building. The only communal property of the longhouse households are sometimes the notched poles used as stairs leading up to the gallery, which are generally of a flimsy nature. Some active people erect ladders of good quality in front of their doors, but most don't like to spend much time on the construction of an object which afterwards will be frequently used by people who have not contributed to it. Often the stair leading to the loft of an apartment, which is seldom used, is of a better quality compared with the steps leading up to the longhouse, to be negotiated by all members of the household several times a day.

Tracks within the village are also of a poor quality. The ladder up to a longhouse may resemble a chicken ladder, the footpaths are often like duck walks! The reason for this poor quality of public properties is the difficulty the Bidayuh experience in finding a proper way to divide the efforts over the potential users. In Chapter 12 more will be said about the difficulty to bring people together for communal activities.

A properly built longhouse with hardwood stilts and walls of sawn planks lasts at least twenty years. Initiative to build a new longhouse is taken when an old one becomes ramshackle or when a number of newly married couples living with their parents want to establish a house for themselves.

Bidayuh longhouses have always been rather short compared with those of other inland population groups. They hardly ever contain more than fifteen households. Therefore in a village of average size more than one longhouse is present. They are sometimes connected by trunks or bamboo walks on stilts. The way longhouses are grouped together seldom gives an orderly impression. The major criterion in the selection of a building site is that no large variation exists in the level of it, which would cause problems for those who had to erect their apartment above an inclination.

The households in a longhouse do not form a permanent group. They may break away and join another group when a new longhouse is built. Generally the person taking the initiative to erect a new longhouse will build his apartment in the middle of it. However, among the Bidayuh the village

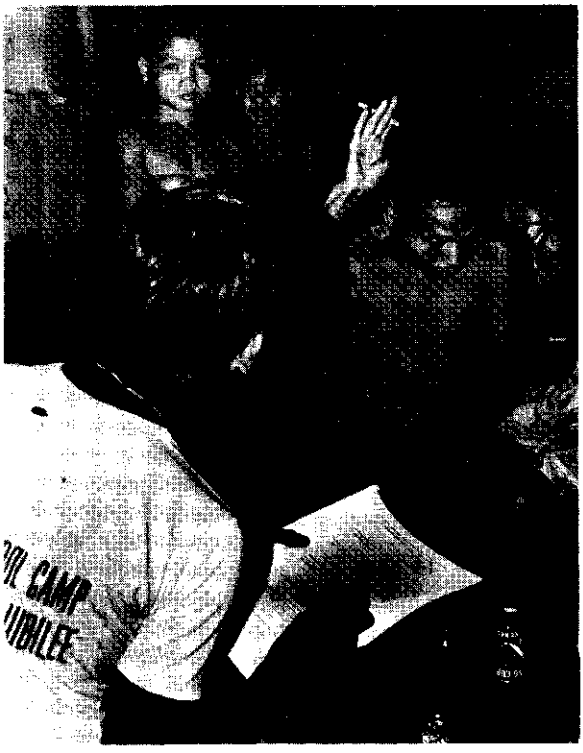
Pruning the top of a mature pepper vine. Because the softwood post has taken root, the vine is crowned by a bunch of leaves. *foto Jon Daane.*

Discarded rubber mangle. In 1972 the price of rubber was no inducement to tapping.

Traditional female dress.

Groovy young men. *foto Jon Daane.*

Participants in a village meeting.



Interviewer at work.

Toddlers are often left in the care of school children. foto Juliet Williamson.

leader does not necessarily occupy the largest apartment in the middle of the longhouse as is common among other longhouse dwelling groups in Sarawak.

6.4 Detached dwellings

Instead of longhouses an increasing number of Bidayuh nowadays fancy detached dwellings. At the time of the village survey (1971) 45% of the households in the whole area occupied a separate house. The percentage of detached houses is significantly higher in the easily accessible villages where urban influences are most strongly felt. The popularity of single houses coincided with the introduction of Christianity in the area, and Christians have made great use of the new type of houses in order to differentiate themselves from the adherents of the traditional religion. However, the occupants of detached houses are not necessarily Christians and vice versa. The appearance of Malay villages serves as an example to those who want to live in a detached house. It is however doubtful whether the Bidayuh farmers will be able to accumulate the same amount of funds as the Malays in the area who are more integrated in the money economy.

The Bidayuh tend to build their houses closer to each other than the Malay do. Because of the lack of overall planning by any authority and the difficulties posed by the rolling terrain the introduction of single houses has not resulted in more orderly villages. House sites are selected in a haphazard way, the tracks leading to them are unclear and seldom well maintained.

Very few Bidayuh have built houses like the rural Chinese, who live in single houses with earthen floors, nearly always situated on or close to their plantations. Bidayuh, however would benefit little by moving their permanent houses from the village to their fields. Though nowadays most of them have some permanent plantations, the Bidayuh are still shifting cultivators, and the fields used in rotation are scattered over the whole village area. Tracks to the fields radiate from the village, connections between them are scarce.

When a Bidayuh is asked why he wants to build a separate house he will most often state that the longhouse is dirty, does not leave him enough privacy, or simply that it is old fashioned. In fact he is giving reasons most occasional visitors to a longhouse would give without having had the chance to observe the positive functions of this type of building. It is not realistic to compare newly built separate dwellings with deteriorated longhouses. With the present spacing of most of the individual dwellings, the inhabitants still suffer from neighbours who do not take care of their refuse in a proper way. The noise is hardly reduced and privacy has not increased. A longhouse offers ample scope for improvement with materials like glass windows, planed planks, bricks and cement, as were used for longhouses in Pichin and Payau Berus.

6.5 Sanitation and hygiene

Traditionally the floor of a Bdiayuh house is made of bamboo strips about two inches wide tied onto beams connecting the stilts, with spaces of approximately one inch in between. The longhouse galleries are constructed likewise. Also the large majority of single dwellings has this type of raised floor. It provides for ventilation in a hot and humid climate. It gives insects like bedbugs and cockroaches little place to hide compared with floors of interlocking planks. All types of refuse can be easily discarded through the openings. By night human excrements also find a way through the floor.

When pigs are left free to roam under and around the houses they will act as scavengers, and they do not burden their owners with preparing pig-food more than once a day. Roaming pigs stir the soil and keep it barren, which has the advantage that it gives mosquitoes little chance to breed. As a consequence scavenging pigs are a valuable asset in a malaria eradication campaign. The mud

seems to be of little concern to the longhouse dwellers. They encounter it every day in their country with an annual rainfall well over 100 inches. Because the urban-oriented development workers are not used to the only half domesticated inland pig they frequently recommend that the villagers impose a regulation that pigs have to be kept in sties. It is not hard to convince the Bidayuh that with roaming animals their village will never resemble a semi-urban area. A little bit of blackmail may sometimes be applied, like: 'if you want a school to be built here, you have to arrange that no pigs will ever enter its compound'. Regulations like this do not meet too much opposition. Not all households raise pigs. Once the large herds have been eliminated and only a few animals in sties are left, there is little chance that the previous situation will be reintroduced. Feeding pigs is the task of old ladies, who are glad to be freed of it. From the above described ecological balance it can be concluded that once pigs have been removed from the village scene sanitary measures like latrines and refuse collection are very necessary in order to prevent the village turning into a big smelly rubbish heap. However, these latter measures are not likely to meet everlasting success. Dustbins regularly emptied by dustmen do not exist in Bidayuh villages, and once a pitlatrine has been filled up it is seldom replaced. Besides, unless carefully covered, pitlatrines are ideal mosquito breeding places. It is clear that the changes in sanitary customes advocated by well-intended outsiders easily can lead to hygienic situations worse than existed before. If any changes are deemed desirable, the first things to be done are to build proper latrines and to install rubbish collection. Pigs should be fenced only when these are in common use and not likely to be abandoned in future.

6.6 Future residencies

Building proper houses becomes increasingly difficult for the Bidayuh. Very few stands of timber of suitable size and quality to serve as building material are left in their area. Because of the introduction of cash crops like pepper the Bidayuh can spare little time for collecting materials from the jungle and housebuilding. But the income derived from the cash crops is seldom sufficient to buy ready-made materials in the bazar. The building process takes several years. First materials like wood, bamboo, rotan and sago leaves have to be collected from the jungle, or to be bought in small amounts from occasional cash incomes. When hardwood posts and roofing material are present a start will be made by building the covered skeleton. After that there may be no activities at all for a period of a year or longer, money and time being scarce. An apartment may be finished either with planks, homemade or bought in the bazar, or with temporary materials like sago leaves and lengthwise split and unrolled bamboo.

During the building period, when the original dwelling has been dismantled to obtain materials which can be used a second time, the Bidayuh live in a temporary hut made mainly of bamboo. When these huts are situated at the back of the apartments under construction they may be connected later to the houses to serve as a kitchen.

Bidayuh do not store their paddy in their houses. By building separate paddy stores the risk that a sudden blaze might destroy both home and paddy store is minimized. Especially in large longhouses, where in each apartment a kitchen fire is burning almost continuously, the danger of fire is high. The paddy store itself also offers possibilities for temporary housing. By constructing a second floor on a lower level in between the supporting poles a temporary dwelling place can be made.

With the present shortage of building materials and the strong preference for detached dwellings many Bidayuh are living in what they apologetically and optimistically call temporary houses. However unless a prolonged rubber and pepper boom occurs, it is likely that they will have to live in temporary houses for ever.

7 Household, marriage and kinship system

It has already been pointed out that a longhouse consists of a number of individual dwellings joined together, and that the group of households living in a longhouse itself is not stable.

It is the household which is the basic social unit in Bidayuh society. This feature is reflected in the administrative custom to describe the size of a village according to the number of doors. Formerly when walking along the gallery of a longhouse, one could easily count the number of doors leading to the separate apartments and thus know the size of the village. The Bidayuh household is an independent unit, economically, socially and spiritually. The household has to provide its members with shelter, enough food and cash for their expenses. The members are responsible for the cultivation of the fields and gardens, and their labour is substitutive in the village labour exchange. The household forms the group in which children are born and brought up, old people are cared for, and it provides members with moral support.

For the Bidayuh the religion of the head of the household extends to all the other members, though missionaries do not record the unbaptised parents and grandparents in their files. The members of a household observe the same taboos, the breach of which by one member might affect the others as well as himself.

In village ceremonies each household with its offerings is represented separately. Rituals performed in case of sickness of one single person, or pests in one or more fields are limited to the household concerned. If after a ceremony restrictions are imposed on the movements of people for a number of days (pantang), these apply to the members of the households who have taken part in the ceremony.

Living together under the same roof, sharing meals, pooling labour for the prosperity of the crops, help for the young and the needy, observance of common taboos, these all constantly reinforce the feeling of unity in the household. Though the household is a close-knit unit, and all members are aware of their responsibilities to it, it does not severely limit their individual freedom. The head of the household cannot direct the other members to be engaged in a specified way at a certain time. Instead every member knowing his or her duties, performs them when he or she finds the time suitable. Junior members may start plantations of cash crops on their own, which will help them to found independent households themselves in the future. They are entitled to keep proceeds from it as pocket money. Individual members may adopt a new religion, different from the rest without many difficulties. Everyone is free to enter friendships, even with members of households whose leaders are not on good terms.

Bidayuh are very fond of children. Men and women, adults as well as adolescents can often be seen carrying and playing with babies and toddlers, their own as well as those of their co-villagers. To keep the children happy is the most important motto, and almost all their wishes are complied with. At a very young age children look after themselves most of the time, and decide how to spend their days. Even though they have much freedom, norms and values are well internalized. When a child persists in disobedience for a few days, e.g. by not going to school or not doing some small

household duties, apparently the parents give in, but they will not stop lamenting about it. A similar attitude prevails with regard to co-villagers who show deviating behaviour. They are accepted as long as it does not directly affect the well being of others. 'It is his or her way' is an expression often heard. But the public discussion of everybody's behaviour prevents many deviations. More about this topic follows in Chapters 12 and 13.

The average size of Bidayuh households is 6.9 persons (the standard deviation is 2.6). At the core of a household is a married couple with their offspring. The male partner is considered to be the head and representative of the household, with the female exerting much informal influence. The household might be extended with a third and sometimes with a fourth generation. These include one or both parents of one of the partners of the core couple, and grandchildren if one of their children living with them is married. Four generation households are rare, the lifespan of a Bidayuh is seldom long enough to enable so many generations to be alive at the same time. Besides relatives connected with the core couple by a vertical line of descent sometimes other persons are members of a household. Often they are unmarried siblings of one of the spouses, especially when their parents have died. People from broken homes sometimes select a related household which would welcome some additional members. Even a distant relationship gives enough grounds for such a change of residence. People who cannot claim any blood relationship with another member of a household are rarely found in it, except for 'adopted' children. Adoption is a gradual and informal process which extends to orphans or children maltreated by step-parents. These children are provided with food and shelter, and they assist in the daily activities of their household of adoption. However, they never become lawful descendants. A different type of adoption occurs when a marriage remains childless. Then the unlucky couple turns to more fortunate relatives to get permission to bring up a nephew or niece as their own child, so as not to be without descendants when they grow old.

The frequency of occurrence of the different types of households is shown in Table 9.

The general pattern upon residence after marriage is that newly-weds stay for a certain period with the parents of one of them. In principle they are free to select either parental side. The choice can be based on the number of people already living in the house. When partners are from different villages the amount of land which they will be entitled to use, and increasingly the accessibility of the residence, are criteria for selection. Shortly after marriage the young couple will start to make preparations to establish an independent household and when they have one or more children they are able to do so. By moving out space becomes available for a younger sibling who wishes to marry. It is very seldom that more than one young married couple live in the same house.

Another custom which limits the principle of free choice of residence is that a youngest child is

Table 9. Different types of Bidayuh households, in percentage. n = 400.

One generation	1.0
Two generations	60.0
Two generations + others not vertically related	4.0
Three generations	28.0
Three generations + others not vertically related	3.5
Four generations	3.0
Four generations + others not vertically related	0.5
Total	100.0

expected to stay with its parents after marriage in order to look after them during their old age. Therefore at an early age a youngest child is treated as favourite. But any other child might take its place if particular circumstances or personal likes and dislikes require so.

To take up residence with parents has advantages over establishing a new household, which to a certain extent compensate for living together with different generations. No time has to be devoted to the erection of a new house, and there are more adults which gives a wider scope for the distribution of duties over the people present.

The above described custom of marrying in for a limited period explains why households comprising one couple without descendants or other relatives are very rare, and extended families hardly exist.

Bidayuh villages are neither endogamous nor exogamous. Now communications between villages are improving an increasing part, though still a minority of the population is marrying a partner from a different village. The Bidayuh are really ambilocal, there is no tendency for either the male or female partner to continue to reside in his/her place of origin, see Table 10. To a Bidayuh in-laws are important and relations with them are as cordially as with their blood relatives. The principle of ambilocality, the absence of extended families, and the formation of new households indicate that there is nothing like exploitation of daughters-in-law by an old mother. Instead every member of a household will try to make those who moved in recently feel comfortable, and so add to the stability of the marriage.

The limited size of a household gives little opportunity for specialization and a rigid division of duties over the members. The ideal situation is when husband and wife can devote most of their time to agriculture, leaving their small children in the care of their parents or an older child. When such babysitters are not present generally the woman has to stay at home to look after the youngest children. With only one working member a household experiences severe difficulties in making a living. As soon as one of the school children, preferably a daughter, is old enough to look after its younger brothers and sisters, it will be kept at home to do so, enabling the mother to work in the fields. Thus by day a Bidayuh village looks deserted, only a few old people and young children carrying toddlers being present. Sometimes a man will stay at home and let his wife go to work so that she may enjoy the social contacts with other people working in the same field.

Old people try to stay active and useful as long as possible. They will be occupied in the fields as long as they can walk to and fro. There they work slowly but steadily. Grandmothers take turns with mothers of young children to take care of household activities and to prepare food for the pigs. Young girls have already many duties such as child care, collecting wild vegetables and feeding fowl, which sometimes are a hindrance to their education. Young boys, especially when they have sisters, are free of these activities. They are expected to attend the lessons at school but several boys in every village play truant and roam through the village and its outskirts in a small group. Girls are

Table 10. Origin of marriage partners, in percentage. 465 couples in 400 households.

Both from village of present residence	72
Male partner from village different from present residence	14
Female partner from village different from present residence	13
Both from village different from present residence	1
Total	100

engaged in agriculture at a younger age than boys. Details about the major activities of both sexes in different age groups are presented in Table 11.

Few rules guide the selection of a spouse. It is generally agreed upon that first cousins should not marry, neither should second cousins. However few objections are raised to a marriage between second cousins when their common great-grand-parents have deceased. Marriage between related people belonging to different generations is very rare. It is said that a child can not marry its uncle or aunt, even when they are of the same age. Selection is left to the boy and girl directly involved. Most of them experience some love affairs, but soon they will pick their definite partner and express their wish to marry after a short period of semi-secret love. At that time boys are about twenty years old, girls a few years younger. The parents declare that if the young ones really want to marry they cannot say anything against it, and advise the new spouses not to quarrel and to work hard. At a simple meal, in the presence of a few friends and relatives the marriage is made known to the public. If the partners are Christians they will seek the blessings from the Church. As long as a young wife is not pregnant divorce is very simple. If bad omens are received, or if characters do not match, divorce can be arranged by mutual consent, both partners returning to their original household. If a married couple who has established an independent household and have children wish to divorce, the village headman and elders have to rule about the division of children and property. Bidayuh marriage is monogamous. Occasionally a travelling man will have a mistress in a different village. This seems to be nobody's concern, except his wife's and some zealous Christians. Bidayuh spouses tend to guard each other jealously. However one should say without very much reason. Few want to put at stake the children and property of the household to which they have contributed. Divorcees, widows and widowers do not stay alone for long. To make a decent living a household needs at least two adult members, which makes that people who have become single actively look for a new partner.

Table 11. Major time occupation of 2729 persons belonging to 400 households, differentiated according to sex and age group.

	Agriculture (%)	Housekeeping (%)	Labourer (%)	Schooling (%)	Not working (%)	Absolute total
Males						
age group:						
0– 9	—	2.4	—	24.1	73.4	534
10–19	41.9	2.7	5.9	34.5	15.0	301
20–59	83.6	1.4	13.9	—	1.2	490
60+	70.9	20.0	—	—	9.1	55
Total						1380
Females						
age group:						
0– 9	0.6	5.2	—	21.2	72.9	484
10–19	56.8	11.7	0.3	22.3	8.9	350
20–59	84.1	13.8	—	—	2.1	472
60+	34.8	51.1	—	—	14.0	43
Total						1349

Because there is no period of official engagement an almost abrupt change occurs in the life of a Bidayuh upon his/her marriage. Before marriage, teenage boys and girls tend to group according to their sex. These groups work together in the fields and again cluster on return to the village in ever giggling groups. Life has not to be taken seriously yet, sometimes they will take a few days off, to stay at home or to visit relatives in a different village. If possible on Sunday they will try to visit the district centre in order to attend a church service and for a show at the cinema. Trips outside the village provide a good opportunity to meet a possible partner. At night unmarried boys sleep together in the headhouse (if there is one in the village) and girls regularly spend the night in each other's house. Some will secretly have varied sexual experiences. Occasionally there is a possibility for dancing in modern style, which distresses the elder people who complain about the noise till deep in the night, with little effect however. Immediately after marriage the newly weds face a different world. The welfare of the household becomes of major concern and regular work in the fields is necessary. Little time is left for travelling, except for visits to a bazar for commercial and administrative reasons. Modern dancing has become impossible. Sexual contacts are reduced to mere procreation. Within the village this sudden change is well accepted and does not seem to be problematic to anyone. But when married men are outside their own immediate surroundings, they often take the chance and behave like bachelors. Because women are more tied to their villages they experience greater problems.

The Bidayuh kinship system is ego focussed. Relatively little attention is paid to ancestors, few Bidayuh know the names of their ancestors beyond the great-grandparental level.

Descent among the Bidayuh is cognatic, the male and female line are equally important. Sometimes relationships with one side become dormant for pragmatic reasons. For example when one of the marriage partners has changed his/her place of residence it becomes difficult to align equally with both descent groups. However, the relationship may be revived whenever it seems fit to do so. Examples are families who move to another village to take part in the harvest of fruit trees or fishponds which their ancestors had planted or constructed. Or if a household experiences too much ill-fate in one place it might move to another village where they can exert rights on land because ancestors have lived there. It is the kindred which is important to a Bidayuh. The boundaries of it are vague. Contact is lost with members who migrate to other villages, while others living nearby, though only distantly related may become one's closest friends.

Because villages are small and not exogamous, the kindreds of their inhabitants overlap to a large extent. The knowledge of being related to each other, though the relationships is not always exactly known, helps to strengthen the feelings of unity within a village. Generally kinship terms are used to address co-villagers, and some people are even at a loss when they are unable to find such a term for one of their neighbours. Obligations to the members of one's kindred are few, except for those living in the same household. One may select a few close friends from among the kindred members, and be generally friendly with all others. Some friendships are permanent, but others are strengthened and loosened according to the whim of those involved.

8 Religion

8.1 The traditional religion

What until now has been referred to as the traditional Bidayuh religion is in fact an inconsistent conglomerate of beliefs and rituals. A great number of variations exist between villages, and probably also in time. The origin of the constituent parts is different and vague. Each cult has its own priests or priestesses. No competition seems to exist between them. Some ceremonies are restricted to one cult, in others priests of different cults take part. Here the traditional Bidayuh religious system is discussed only superficially. For a more detailed description the reader is referred to the standard monograph on the Bidayuh by Geddes (1954a).

The Bidayuh recognize a supreme spirit called Tampa, the creator of life, who does not interfere in daily affairs. The supreme evil spirit is called Mindu. The spirits of deceased men and women, still present in the first stages of the afterworld, are of direct importance to the people living in this world. Their help is called upon during performances of the ancestral cult. The spirits of some outstanding people are known by name, the others are placed in one large category.

Besides spirits of human origin, there are spirits related to places and objects. Individually or in community, the Bidayuh try to obtain their assistance too. Places likely to be the residence of spirits are the top of a mountain or a waterfall, to which an individual person may make a pilgrimage. The spirits residing there should never be disturbed. This has had the happy consequence that the top of many mountains has remained under primary forest, a first necessity to prevent erosion.

A common example of an object to which supernatural powers are ascribed is a stone found inside the hollow stem of a bamboo. These artifacts are stored either in a closed box in the village headhouse, or in a specially erected building. Once in every few years a ceremony is organized to honour such an artifact.

Demons are a different category of invisible creatures the Bidayuh believe to exist in this world. They are feared, but man can try to fight and deceive them. For instance by wearing wide brimmed hats, especially when carrying an infant to the bathing place, a woman can protect herself and her child against their attack. The increasing number of separate houses might indicate that the fear for demons is becoming less. However, many people still do not go out alone in the dark.

Different types of birds are regarded as messengers of the spirits. It depends on the type of bird and the direction it flies whether the omen has to be considered as good or bad. The observance of omens is especially important when selecting new paddy fields or building a house. The omen birds do not have a great influence on daily life. They are observed merely for reasons of convenience. If necessary they are ignored or avoided. A man living in a certain village who is not willing to do any work unless he has received favourable omens is generally described as extremely lazy by the other villagers and never as a devote person.

Besides the omens there are a large number of other taboos and regulations that have to be observed. Some of them apply to the members of one household only, others to a whole communi-

ty. Common ones among them are food taboos, the prohibitions on calling loud a person's name and to sound a gong without a purpose. These all might anger the spirits, or call them in at a wrong moment, resulting in harm to the evil-doer or his household. Though charms are frequently talked about, little magic (black and white) is used among the Bidayuh. They fear staying outside their own well-known surroundings and especially among different ethnic communities like the Malay and Iban.

The ancestral cult is probably the oldest item of the Bidayuh religious tradition. Its ceremonies are directed at the ancestors of the people present. As pointed out in Chapter 5 the descent of the population of a village is heterogeneous. In every village one or more male priests (called tukang tabur or nabur) reside who can perform at the ceremonies. At such a ceremony, which can be held either on a village or household scale, the priest invites the ancestral spirits to attend the party which has been arranged for them. Gongs are beaten to carry the invitation over a large distance.

In return for the party the spirits are expected to help their hosts. A ceremony like this is held at every major occasion like the new year festival, or after completion of a longhouse. After a ceremony the movements of all those who took part in it are restricted for a number of days (pantang). No one is allowed to leave or enter the village. Nowadays people who think they cannot afford such a waste of time escape the restrictions by leaving the village before the end of the festival. In individual cases of sickness the ancestral priest can be invited to perform a ceremony for a certain fee in order to cure the disease. Then the restriction afterwards applies only to the household of the suffering person. The ancestral priest is also important for observing and interpreting omens, before a decision about the locations of new paddy fields is made.

Besides the ancestral cult a women's cult exists, that is however hardly performed nowadays. A number of initiation ceremonies are held over a period of years, in which all households with girls of ten years and older take part. The number of priestesses (tukang barih) in a village capable of performing these rites is generally larger than the number of priests of the ancestral cult. The male counterpart of the women's cult is aldready extinct. Geddes (1954a) did not report about it in his study. Elam (1937) mentioned an initiation ceremony, but due to secretiveness of the Bidayuh, he did not get to know many particulars about it. No rivalry exists between the priests of the ancestral cult and women's cult. The latter sometimes take part in the rituals of the former, waving with chickens and murmuring their own spells. It is all believed to be for the common good.

The position of priest, or priestess, is open to any interested person who has a relative willing to teach them the different rituals with their long recitations of spells. Thus nearly every adult in a village can achieve the position of religious functionary. Geddes (1954a, page 28) explained the comparatively large number of religious practitioners in a village from the human desire to master a skill and art, not from a pursuit of economic or social benefits. Indeed at the end of a ceremony the share in the offerings to the spirits a priest can take home can hardly be regarded as a recompense for his efforts. Also a priest is not paid much respect by his fellow villagers, neither during the ceremonies, nor in everyday life. A ceremony is generally a chaotic affair, whilst the priest or priestess casts the spells, the other attendants enjoy the gathering. Only a few of the priests are influential people in their society. They perform at the larger, village-wide ceremonies, leaving the minor affairs to their colleagues. Sometimes they occupy the office of village headman as well. However, attainment of a combination of these positions depends on other skills besides proper knowledge of rites and ceremonies.

People who like to put on a little bit of show sometimes assume the role of spirit medium. Some like to dress in a fancy way, and take pains to excel in dancing, in Bidayuh as well as in Iban and Malay style. They can be consulted in cases of sickness as well in the rare cases of magic. Their

effects on the people are limited. Only a few of them enjoy a reputation outside their own village. A very extraordinary case occurred in 1973 when an inhabitant of Kakeng become renowned for his healing powers. Crowds of people of all ethnic groups went up to his house for treatment, the heavy traffic badly deteriorating the road to the village. The reputation vanished as quickly as it had been established. A nice windfall profit was made by the 'doctor', who had charged M$1.00 per consultation, as well as much larger ones by the traders from the nearest bazar, who had provided transport, meals and refreshments.

The spread of modern medicine has decreased the influence of the different types of spirit mediators. There is no competition because of the difference in effectiveness, cost and simplicity. Only when modern medicines seem to have no effect do people sometimes try their luck by having a ceremony performed.

The production cycle of paddy which extends from June until March is accompanied by a number of rituals. The most important ones are at the time of clearing, weeding and harvesting. Priests of the ancestral cult and women's cult are in charge of them. The Bidayuh new year festival occurs between the harvest and the new clearing season. Then every household again has rice to eat; sorrows and problems can at least be temporarily forgotten. It is the time for a big party with a happy mood prevailing in the village. The priestesses visit every household to bless it, pigs and fowls are killed to be eaten along with the new rice, and everybody is free to visit all the households to share in the food. Nowadays the desire to go all out to entertain lavishly at least once a year is sometimes directed at the visit of an official person, or the organization of a school sport day instead of the new year festival.

In less than a quarter of the villages traditional rituals can still be performed on a village-wide scale. Small pockets of traditionals often do not have the ritual specialists, and do not bother to invite them from other places. They gradually become people without a religion, or freethinkers, not by a positive choice but by changes occurring around them.

8.2 The Christian religion

Since World War II Christianity has made large inroads in the Bidayuh society. At present two-thirds of the Bidayuh state that they adhere to the Christian faith. The Roman Catholic (RC) Mission has found the largest number of followers, well over 40% of the Bidayuh in the District. The Anglican Mission (Society for the Propagation of the Gospel, SPG) and the Seventh Day's Adventists (SDA) each are represented with slightly more than 10% of the Bidayuh. In the First Division the Anglicans started their work from Kuching gradually moving south along the Penrissen Road. In the Serian District they remained confined to the northern part. Nearly all their adherents belong to the Bukar group. The Roman Catholic missionaries started their work from Tebakang, the former centre of the District. They found some followers among the Bukar, but the large majority of their adherents live along and south of the Sadong river. In this area they probably will convert the larger part of those still professing the traditional religion to Roman Catholicism in the near future. Hence these two missions will influence separate areas. Within their territories they have to some extent been successful in converting all the inhabitants of a village within a limited period of time. This has prevented major village cleavages. The SDA Mission was the last of the Christian missions to expand its activities to the District. It has attracted many people who for some reason wanted to differentiate themselves clearly from their neighbours. Early adoption of Christianity by some villagers created factions in a number of villages. If later the non-Christian faction thought a change of religion desirable, the earlier animosities made them turn to a different mission.

Sometimes a whole village could be convinced by SDA missionaries, but generally their followers live in villages of mixed religious composition.

The main attraction of the missions was education. The Bidayuh looked upon the European rulers and administrators who could read and write, operated complicated machines and possessed effective medicines, as very powerful persons. When the missionaries, representatives of the same race, offered opportunities to acquire these skills, many were eager to grasp their chance. First education was only provided in boarding schools situated in the mission stations, later village schools were opened. In those early times even adults flocked into the classrooms. Along with the elementary education many students accepted the religion of their instructors. Afterwards, when the educated young people returned to their villages full of pride, they tried their best to behave in a style different from their parents. Religion was a way by which this new style could be well demonstrated.

Though the traditional set of beliefs and rituals of the Bidayuh is quite flexible and changes over prolonged periods have been common, there is little scope for the integration of the Christian religion. It cannot be compromised and is advocated by young people with little authority in the village organization. Great quarrels occurred upon the return of the first young, zealous Christians, so that they either had to move out of the original village, or had to climb down for a couple of years.

Besides education and a general atmosphere of modernity another attraction of Christianity was that it put less restrictions on economic life. Fewer festivals, no compulsory offerings, and no confinements to the village after a festival, were reasons for the Bidayuh to change their religion and to adopt one day a week for worship and resting instead. However, it is probable that by the latter pattern more productive time is wasted than under the traditional religious system[1]. The strong economic motives for conversion have made the missionaries complain about 'the purity of the souls' of their disciples. One of them stated: 'they leave one house, but fail to enter the next'.

Christmas has become the principal festival for the Christians. Unfortunately the scale of the celebrations is limited because it falls in a part of the year when many households are already short of rice. Easter, which follows shortly after the paddy harvest, is more easily a gay occasion. Hardwood crucifixes and bottles of holy water in the fields, blessing of the seed by a missionary and prayers have replaced the traditional blessing ceremonies. The changes in ritual have not caused too great problems because adequate substitutes were available.

More difficulties arise with courtship, marriage and mutual aid. The SDA principles cover the widest range of subjects and include outright prohibitions like the ban on smoking, use of intoxicating beverages, consumption of pork and certain types of fish, use of heirloom properties such as gongs and jars, and living in longhouses. The last are prohibited because they would facilitate sliding back into old, and thus bad, customs. Most of the SDA followers do not strictly comply with these restrictions. But at the same time they feel that it is a more real and powerful religion because of all the taboo-like restrictions.

The Bidayuh belonging to the Anglican denomination are well served by clergymen of their own ethnic group living in the heart of the area inhabited by Anglicans. Roman Catholics and Seventh Day's Adventists still have to rely on foreign missionaries. The number of SDA pastors attached to their school near Serian enables this mission to closely guide the comparatively small number of their followers. The RC missionaries face the greatest difficulties in visiting their disciples. The

1 See e.g. Geddes (1954a, page 83) who counts a maximum of 25 days a year that a person in Mentu Tapu could not work because of religious restrictions.

three missionaries are unable to visit the large number of villages in the inaccessible part of the District where many Roman Catholics reside, more than a few times a year to hear confessions and to serve mass. The remainder of the year their people are left in the care of laymen and in urgent cases have to visit the mission station.

The acceptance of Christianity has opened the way for people to rise to positions of authority within a village at a very young age. The scarce number of clergymen has made laymen very important in the propagation of the new faith and day to day guidance in its principles. Only young people who have been taught to read can perform these functions because knowledge of the Bible, prayer and hymn books is necessary. But the mere facts of being a Christian and the ability to read and write do not guarantee effective leadership. In the Bidayuh society a leader is expected to have patience and never to criticize his followers openly. These are qualities which are difficult to combine with the position of a young Christian (in his village addressed as catechist or church elder), who wants to recruit more followers and constantly has to correct the people who have accepted the new faith. Most often resentment exists around a catechist, within and outside his flock. Short training courses in religious matters are provided for the catechists. However, not all can find the time to attend these. The SDA Mission works with a third category of religious leaders. Besides foreign missionaries and the representatives of the religious community on the village level, it employs a few paid missionary workers (guru) on an intermediate level. These guru are locally recruited people who after their secondary education have received a training in religious affairs in a mission station. A guru lives for one or more years among the people who have expressed interest in the SDA principles. He will explain the new faith, lead religious ceremonies, see to it that the different restrictions are closely observed, and instruct the people in new agricultural and house-building methods. Because of the superior education and training of a guru, and the fact that he is not closely related to the people he works with, he is not likely to meet the resentment most of the village catechists encounter.

As soon as a small group of villagers have accepted Christianity they are eager to erect a small chapel for the weekly services, including a sermon by their principal leader. The chapels are built by combined efforts and financed from donations of those concerned. Generally the mission makes a contribution in kind. Sometimes problems do arise about people who join the new faith after the chapel has been built and paid for. These can be solved by putting them in charge of necessary repairs or extensions. The permanent presence of a chapel in itself is in great contrast with previous times when for every festival a new shelter was erected. Adherents of other religions than the traditional one and Christian denominations are rare in Bidayuh villages. Conversion to Islam and Buddhism has existed for a long time, but is almost completely restricted to people marrying Malays and Chinese and becoming adopted in those ethnic groups.

The tolerance, flexibility and adaptability of the Bidayuh in their religious life were clearly demonstrated when in Riih Mawang a young girl was lost in the secondary jungle, while her parents were burning the new paddy fields. The tukang tabur performed his ceremony, Christians prayed their rosary and sang hymns, while the spirit medium in a Chinese temple in the bazar was consulted too. The final result was that the girl was found unharmed in a nearby farm hut a few days later.

9 Land tenure

Since James Brooke established himself as Rajah alien ideas and practices with regard to land tenure have been introduced in Sarawak. However, the White Rajahs, as well as the colonial administrators who succeeded them, attached great importance to the customary rights of the native people, compared with the administrations in other foreign dominated countries. They recognized the need to respect and protect these customary rights and in particular they were anxious to prevent the indigenous people from impoverishing themselves by the disposal of land. Though after the introduction of a Land Settlement ordinance in 1933 a start was made with the settlement of native rights to land, and the registration of title in accordance with the principles of the Torrens system, little progress has been made. After World War II supplementary legislation was introduced to define the rights to land of natives and non-natives ((SGK) Sarawak Ann. Rep. 1962).

At present five categories of land exist: Mixed Zone Land, Native Area Land, Native Customary Land, Reserved Land, and Interior Area Land. Of these Mixed Zone Land, Native Area Land, and Reserved Land are so by virtue of declarations by the Government. Native Area Land may also be created by the issuing of title to replace a native customary right to a piece of Native Customary Land not covered by one of the declarations referred to above.

Mixed Zone Land comprises less than ten per cent of the total area of Sarawak. Besides, land in areas which have been earmarked to be Mixed Zone, but for which no title has been issued yet, or which is held by the State, is still under native customary tenure. Members of all ethnic groups as well as corporations may hold title to Mixed Zone Land. Due to the circumstance that the greater part of Mixed Zone Land is still held under native customary tenure, no more than three per cent of the land in Sarawak can be alienated to any person or corporation, irrespective of its ethnic classification.

Only persons of ethnic groups and corporations, which are classified as native by law, may hold title to Native Area Land. Also for much land within this category no titles have been issued yet, and therefore it is actually still under native customary tenure. Native Area Land comprises about five per cent of Sarawak's total surface.

Native Customary Land is all the land held by natives of Sarawak under customary tenure. Normally Native Customary Land is not surveyed and recorded by the Government, except in rare cases when disputes about land rights have been settled by Court Order. Issue of a title for land under customary tenure turns it into Native Area Land, even when it was not classified as such in a declaration of the Government. At present, surveys prior to issue of title are undertaken in blocks. Individual applications are no longer entertained. Registration of customary rights is left to village headmen and elders who keep the repartition for the territory of their village in mind. Subject to local custom native customary rights on land may be transferred to other natives of Sarawak.

Reserved Land is a category comprising land which is reserved by the Government for various purposes, including forest reserves and national parks.

Interior Area Land is a rest category, consisting of land on which no customary or other rights

exist. It is mainly under primary forest. Since 1955 native customary rights can only be vested at the expense of Interior Area Land with a permit from the Government ((SGK—L. & S. Dep.) Mapping for development, 1967).

Because nearly all the land in use by Bidayuh is held under their system of customary tenure a description and discussion of this system follow.

Earlier in this study it was mentioned that Bidayuh villages are primarily territorial groups. The complex of community rights a village has on its territory is often called *right of disposal* in the literature on customary rights in South-East Asia[1].

Under the communal right of disposal, inhabitants of the village have the right to make use of the territory and its products for their individual benefit and that of their families. The individual has the right to hunt, to collect plants and to claim wild trees in order to collect fruits and honey. Besides the individual villager has a right of pre-emption in unused communal land. It is this right of pre-emption which was created the present repartition of land. Before an individual can exercise his right of pre-emption on a piece of land he has to inform the village headman, who is also the supervisor of land, of his intentions. The headman has to check whether any other inhabitant has already established rights on that particular plot. By putting efforts in a piece of land an individual establishes a personal bond between himself and the compound, which in the literature is called the native right of possession. With the Bidayuh the native right of possession of the person who has cleared a piece of land from primary forest is eternal. Upon his decease his rights are transferred to his heirs, the male as well as the female, and in turn to heirs of their heirs and so on. Consequently the native right of possession on a particular piece of land becomes vested in a group of people, often addressed as a descent group. Actually a descent group is only a category because its members do not meet and interact as a group. All the members of a descent group have the right of preference to the land first cultivated by their common ancestor. This right to a piece of land endows each member with the privilege of appropriating for further cultivation a field which has already been under cultivation by someone else (Ter Haar, 1962, page 105). A member of a descent group can exercise his right of preference by informing some other members about his intention to use a field to which the group has the right of possession, and by marking the plot. Normally a husband will represent his wife when the household has decided to use land that belongs to a descent group of which the woman is a member. If two or more persons intend to use the particular plot at the same time two rules guide the decision who has priority. The first rule is that the claimant who (or his father or grandfather) has cultivated the land less recently has the best rights. If this rule does not force a decision a second rule is applied, the oldest claimant has to be allowed to make first use of the land because he is less likely to have a chance in the future[2]. In shifting cultivation the fallow period is often seven years or longer. The system does not necessitate a detailed knowledge of genealogies. It is enough to know the claims of one's parents. If these were valid, those of their children will be valid too. The location and boundaries of every field are well known to all villagers.

1 Right of disposal is a translation of the Dutch term 'beschikkingsrecht' introduced by Van Vollenhoven in 'Miskenningen van het adatrecht', 1909. As Ter Haar (1939 and 1962) admits the term is etymologically misleading because of the absence of power to alienate the land. However, little confusion exists because Van Vollenhoven carefully described the essential features of the right of disposal.

2 These two principles were first recorded by Geddes (1954 a, b) and seem to apply to a large number of Bidayuh villages. In one village, Engkaroh, a different system was found. There the person who made use of a piece of land most recently had the strongest right of preference.

Because of the labour exchange they have usually worked on nearly all of the fields and remember who has made use of every particular field. The first cultivators often choose the boundaries of their plots to coincide with points in the terrain that can be recognized easily, like small streams and ridges. When these were not available, boundaries are often marked by purposely planted fruit trees and bamboo bushes. Also the difference in size of the regrowth, as long as adjacent plots have not been cultivated in the same year, helps to recognize the separate fields.

The principle to keep estates undivided must be seen in relation to the system of shifting cultivation. Division of a field, normally a few acres in size, would result in such tiny plots that cultivation would become inefficient. To assign the whole fields belonging to an estate to different heirs would probably favour some heirs at the expense of others. Fields are unequal in size, accessibility and fertility. Often land that can be cultivated (almost) permanently, such as swamp land and plantations of perennial crops is divided among the participants in an estate.

The land tenure system described was suitable in a time when shifting cultivation was the only agricultural system, and land was not scarce because the possibility to migrate was still open. Nowadays it is very difficult to recognize the original system of land tenure. Circumstances have changed: primary forest is absent, which means that no new land can be opened up; cash crops have been introduced.

Because primary forest has been cut down during many generations there are at present a large number of descent groups, which increase in size progressively every generation. Descent groups frequently overlap. For example, brothers and sisters form a descent group with regard to the land their father cultivated for the first time. However, with regard to the plots their paternal or maternal grandfathers brought into cultivation, the descent group also consists of their paternal or maternal uncles, aunts, and their offspring as far as they are still alive. Due to marriage between members of different generations of a descent group one person can have claims to the same piece of land along different lines of descent. Growth in size of the descent group is not limited; only migration restricts people from exercising their rights. Still their rights do not lapse. If they or their children decide to return to the village of origin, the dormant rights can be revived. Because of marriage between members of different descent groups the size of these groups also increases. Marriage also affects the number of descent groups a person belongs to. As a consequence of the different tendencies mentioned, nearly all persons in villages founded a number of generations ago have the native right of preference to nearly all fields within the area of disposal of their village. Thus it is very difficult and often impossible to sort out which persons have priority to certain pieces of land according to the two rules mentioned earlier. The village population sometimes decides to do away with the system of land tenure. Instead the headman assisted by the village meeting assigns every year each household a piece of land in relation to its needs.

Perennial crops such as rubber and pepper have caused an increasing individualization of the land tenure system. The first planters of these crops selected land on which they had justified claims. If their right of preference was not exclusive, officially they had to seek the consent of the other members of the descent group. However many failed to do so. Generally the way of coping with this agricultural innovation was to extend the original land tenure system to perennial crops. When the cash crop died the land would again become available to other members of the descent group. Intervals would become longer, but the principle of taking turns in the cultivation of a certain piece of land was in this way not altered. So if early industrious planters had not consulted their descent group no immediate conflicts arose. People reassured themselves with the idea that in the future they would be able to use that piece of land. However, the problem is when can a crop be considered to have died? Pepper plantations die after approximately ten years, but the regrowth is

often lalang grass which makes future use of the land nearly impossible. Rubber trees may become unproductive after a number of years, according to the skills of the tapper, but not all trees in one plantation die. Owners of old unproductive rubber plantations still regard them as their personal property, a kind of reserve for future enterprises. Rarely do they abandon the plantation so that the land can be used by another member of the descent group. The customary law does not include regulations by which rubber plantations out of production revert to the descent group. Some far-sighted people have taken advantage of this situation. They have planted rubber on many plots to which they did not have an exclusive claim, not with the intention of ever tapping the trees, but of making their right of preference equivalent to a native right of possession. These attempts are frequently successful, as will be shown. Thus the principle of alternating use of the fields of a descent group becomes violated.

Land transactions are not uncommon between members of the same community.

They occur as sale, pledging, as well as rental, the rent either pre-paid or paid annually. Land transactions are easiest when only one person has a right to the land. It is practically impossible to reach agreement with all members of a descent group. However, when the land is in use by one person, and planted with a perennial crop, he individually can transfer the land, regardless of the other members of the descent group. Then the right of preference is transferred. With perennial crops no time limit is affixed to the right of preference so that the land can always be transferred, no matter how old and exhausted the crop is. Most often the person who acquires a plantation of old unproductive rubber cuts the trees down in order to replace them by a better yielding variety, or to plant pepper instead. In theory the owner of a right of preference has been replaced by another person. In fact the native possession of a descent group has been permanently transferred to an individual person.

The price that Bidayuh pay for land is seldom higher than M$200 per acre. The level reflects more the scarcity of cash than the abundance of land. Appendix X shows the average number of acres of land per household for the area of disposal of a number of villages. People who are the fortunate owner of a native right of possession or preference to a reasonably fertile plot close to a road receive M$200 or more annually when they rent out their land to a Chinese pepper grower. Mild resentment exists about these dealings in land with Chinese because it is realized that they reduce the total area of land available to the villagers. People who have rented land to an outsider will make use of their other claims in the descent groups more frequently. Only a few villages have stressed the customary regulation that no land within their area of disposal can be alienated or rented to outsiders.

In many villages one or more Chinese men have gained access to land through marriage with a Bidayuh woman. These women's right to land make them especially attrative to landless Chinese. Their households usually live on a plantation on a well accessible plot and keep aloof from the village. Culturally they can be categorized as Chinese, but they occupy land under the Bidayuh system of tenure.

Disputes about land between persons of the same village which according to Geddes (1954 a and b) were very rare twenty years ago, occur more frequently nowdays. The village survey showed that in the season 1971/72 in 16% of the villages one or more conflicts occurred about land suitable for the cultivation of paddy. A high population density and perennial crops have stepped up the competition for land. Land disputes arise because of ignorance of the markings on a plot made by someone else, and lack of communication within descent groups. If persons involved are unable to divide the land among themselves they will seek a ruling of the village court. Sessions of the village court about land rights are generally lengthy. First it is checked whether claims of both

parties are justified. Events from a long time ago are recounted, which help to reconstruct genealogies and to recall other occurences which might be important. If both claims are well founded and none of the parties can be persuaded to withdraw their claim, the village court nearly always rules that the plot has to be divided. Then claimant as well as well as defendant have to look for another piece of land to cultivate in addition to their share in the object of dispute. In case of a permanent division, as with swamp land, one of the parties involved may sometimes try to seek a ruling from a higher authority such as the Orang Kaya Pemancha, or Native Chief Court by adding new arguments like number of offspring etc. However, the decision of these higher authorities is rarely different from the one given at first. In a few villages where land disputes are very frequent or many illegal land transactions have occured, the Lands and Survey Department has stepped in by adjudicating the holdings of land. All plots are surveyed, ownership identified or attributed, and titles issued. The adjudication process is an important step towards future undisputed individual ownership, but is not sufficient with the present state of agricultural and administrative development. If families fail to divide an estate, and to have it registered with the Government, it might well become a starting point for a new descent group, and after a few generations the problems are exactly the same as before the adjudication process.

Bidayuh have rights to fruit trees similar to those to land. Every tree is called after the planter or, when it is a wild one after the claimant, and all the descendants of this person are entitled to collect the fruits. Except for trees planted under the fruit-tree subsidy scheme no real individual orchards exist. Close to most villages an area can be found fully planted with fruit trees. The majority of the households have rights to some of these trees. However, the trees belonging to a descent group do not necessarily stand beside each other. Solitary fruit trees stand all over the area of disposal of the village. Their planting was often by mere accident, someone passing out a seed he had swallowed the day before when he was eating fruits. All trees are known by name and are the native possession of an individual or a descent group. All members of a descent group have the right to collect fruits of their trees. The collector becomes the owner of the fruits, if more than one is present the harvest of that moment has to be divided. No retribution is given to descent group members not present.

Within the area of disposal of some villages, there are caves in limestone formations. Valuable edible birdnests can be collected in these caves. The right to collect these birdnests from particular areas in the caves was established and is distributed over the inhabitants of a village similar to the rights to land and fruit trees.

Originally the land tenure system of the Bidayuh was characterized by native rights of possession owned by descent groups. Nowadays individuals de facto own the native right of possession. But not every individual is getting a fair share of the lands to which he originally had a claim. This change has become possible because of the introduction of perennial crops.

Inequality of land resources has always been a feature of Bidayuh life, because the ancestors of some were more active in felling primary forest, and some people could trace more ancestors within the village than others. But this inequality never had very serious effects, because even the smaller holdings were big enough to allow a decent living. Besides, the possibility of migration was still open. However, the introduction of rubber provided industrious and far-sighted people with an even better opportunity to reserve land for their individual use than establishing rights by felling of primary forest. Besides the proceeds of these plantations are sometimes used to buy more land. Under the present division of land and with present agricultural techniques the children of people who possess relatively few claims on land will experience difficulties to obtain a sufficient income from agriculture. A landless class might emerge within a few generations.

10 Labour

Earlier in Table 9 data were presented about the occupations of both sexes in different age groups. It is recalled that girls are engaged in agriculture at a younger age than boys, but the first years after marriage, and again after having reached the position of grandmother, women stay at home frequently for child care and other domestic duties. Men and women remain active even in their old age, their tempo might slow down, but as long as their feet can carry them they make themselves useful. Retirement from active duties is very rare. Among the Bidayuh there are some activities which are not done by members of both sexes. Felling big trees, digging, preparing the soil for pepper gardens, carrying heavy loads of produce and forging are done entirely by men. A few other activities, not necessarily less strenuous than those of the men, like carrying water, collecting firewood and pounding paddy, are the women's domain. Households without adult male members can obtain the male labour they need from the labour exchange.

There is no mutual help between households. Often it is even absent when close blood relationships exist. This fact might shock an outsider, but Bidayuh have nothing to spare for an unfortunate co-villager. Every household has to survive in itself. For regular activities like tilling the fields, cultivating plantations or forging which need more workers than a household can provide, a strict reciprocal system is used. A day of labour has to be repaid by one day of labour or its equivalent in cash. For special activities like building a house, or carrying a new-made boat to the stream, which have a festive character, a man may call upon friends, who often are also relatives, and relatives, who often are friends, to assist him. At the end of the day he is obliged to give all workers a meal of outstanding quality which also contributes to the gay mood prevailing on such a day. In due course similar requests for assistance can be expected from the persons who helped him.

Labour specialization hardly exists and thus households are not dependent on each other. Some people have trained themselves to render services such as midwife, undertaker or ritual specialist. Whenever they are called upon they charge a small fee in paddy or cash, not higher than the equivalent of a few days paid labour. The joy of mastering a special skill is more important to them than the income that can be derived from it. In the case of deliveries some people try to reduce their expenses by inviting the midwife for cutting the umbilical cord only, or not calling her at all.

10.1 Allocation of labour

To get an impression of how many days are spent productively the activities of the members of ten households with a total of 37 economically active persons in Riih Daso were recorded for six weeks in the months October and November 1971. For these months a peak exists in the labour profile of the cultivation of paddy, while in the cultivation of pepper a lull occurs. Because of low prices tapping of rubber had to come to a complete stop. The ten households were selected at random from among the 67 in the village. Every evening people were asked about their activities in the

morning and the afternoon. Half a day was thus used as counting unit. The total number of units for every person is 84, for all the persons involved 3108. The 37 persons were differentiated in five categories: adult men, full time farmers (9 persons); adult men with a (semi-)permanent job outside the village (4 persons); adolescent boys (6 persons); adult women (15 persons); and adolescent girls (3 persons). Because of the limited period of observation, the size of the sample and of the subcategories, the data presented give only an impression of how time is spent. The information obtained cannot be generalized. The amount of time spent in a productive way is remarkably high, about six days every week. Unmarried people allow themselves a little more relaxation than married people. In October and November cultivation of paddy is the major activity. However I have no information that in other months the other items apart from pepper would receive more attention. The item village work includes contributions to the construction of a community hall as well as engagements in the 4H club and Women's Institute. This item is only a very minor subject in the whole range of activities. The larger part of the time categorized under else must be credited to a young unmarried boy, hunting for a job in Kuching. The number of days the people had to stay at home because of illness is low, the amount of time spent on obtaining treatment and medicine comparatively high, due to mothers accompanying young children. The data in Table 12 indicate that Bidayuh seldom sit idle at home and that there is no spare time. Checking the hours actually worked per day shows that their number is not very high and there is scope for improved efficiency.

Working hours vary from village to village, but within a village they are fairly constant because of the labour exchange. Table 13 gives a review of three villages. The variation in the time of departure from the village depends on where people eat their breakfast, at home or in the field. Much time

Table 12. Time spent by 10 households (37 active persons) in Riih Daso on different crops and activities during six weeks in October–November 1971, in percentage.

Crop or activity	10 households, total 37 active persons	9 adult men full-time farmers	4 adult men with a job outside the village	15 adult women	6 adolescent boys	3 adolescent girls
Paddy	48	57	4	53	44	66
Pepper	7	14	6	4	6	2
Rubber	0	0	0	0	0	0
Other crops	1	3	1	1	0	0
Permanent labouring	7	0	68	0	0	0
Housekeeping	13	2	5	27	3	6
Collecting jungle produce	1	0	0	1	0	
Visit bazar for trading	1	1	0	2	1	0
Village work	2	2	3	0	5	2
Else	4	4	0	1	16	0
Total productive time	84	83	87	89	75	76
Visit dresser	2	2	1	2	2	1
Sick	3	5	1	1	5	3
Relaxing and Sunday duty	12	11	11	8	19	19
Total unproductive time	17	18	13	11	26	23

is unproductive because it is passed walking to and from the fields, and taking a rest from the walk. As a rule of thumb it can be said that the rest period is as long as the period of walking. Fields far away which are said to have a higher fertility because they have been worked on less, cost an enormous amount of (unproductive) labour. If rain starts to fall half way during the day, as often occurs during the rainy season, work comes to a halt. Then the number of effective working hours is even lower. In the lunch period women take the opportunity to collect jungle vegetables such as fernleaves and bamboo shoots, and firewood, which they carry all the long way home afterwards. In the afternoon, after reaching home, women are busy with household duties. Men will do odd jobs, if any, play with their children, or sleep. To avoid wasting too much time walking to and fro every day, some families stay for a number of successive days and night in a temporary hut on their field. If schoolchildren belong to the household this is difficult to arrange. The data in Table 13 apply to the labour exchange system.

Table 13. Schedule of working days in three Bidayuh villages, for people engaged in the labour exchange.

Village	Leave village	Start working	Lunch period	Stop working	Back home	Nett hours working per day
I	8.00 a.m.	9.45	11.30–1.30 p.m.	3.00	4.00	3½
II	7.00	9.00	12.00–2.00	4.00	4.45	5
III	7.30	9.00	12.00–2.00	12.00	3.00	3

If a group of people going out to work consists of members of one household only, working hours can be different. Some households work very long hours. They return home after dark, as gossiping neighbours might remark. Members of a few other households do even less when they are among themselves than when they are accompanied by strangers.

10.2 Systems of labour

There are four ways in which the work can be done in a Bidayuh's fields and plantations[1]. He can either do it himself with the help of other members of his household, or he can make use of the labour exchange. But if he has sufficient cash he can employ others, either at a daily rate, or on contract for a specified amount of work. Because of financial and social circumstances the most preferred method can often not be followed, see Table 14.

The four different systems are described in detail below.

10.2.1 Labour exchange

In many villages labour exchange or pingirih is still regarded as the standard and ideal method of doing agricultural work. The principle is that members of different households work on each

1 A matrix of associations between the items and indexes from Appendix III concerning labour is shown in Appendix VI. The information presented was derived from the survey of households.

Table 14. Most practised work method as a percentage of the most favourite work method.

Most favourite work method	Most practised work method				Absolute total
	household members only	labour exchange	daily paid labour	contract	
Household members only	68	30	2	0	172
Labour exchange	8	92	0	0	161
Daily paid labour	35	36	29	0	55
Contract	70	10	10	10	10
Absolute total	156	221	20	1	398

other's fields and plantations on a strict reciprocal basis. To an outsider the system seems to work extremely smooth. Early in the morning people gather at a fixed place in the village, where they will gossip for a quarter of an hour. Some hint that there is work to be done in their fields that day with as few words as 'to-day I go'. A few minutes later they start walking and the rest of the people present, who ten minutes before did not have the vaguest idea where they would work that day, divides themselves over the different work groups. In principle everybody in the village can join every group. The size of these work groups varies, and can be well over twenty persons. Especially at the start of a new paddy season work groups tend to be large. Everybody has to provide his own food and brings his own bush knife. In the field the men sharpen their own knives, the owner of the field does so for all the women present. After having received labour from a number of households, the receiving household has to repay this if its members had not worked with the contributing households before. However, there are no exact regulations about the period within which the repayments have to be made. Neither is there a rule that male labour has to be exchanged for male labour; only old people and young children are excluded from the labour exchange. A household might bring a labour group to its fields for some consecutive days, before it starts repaying the labour debt. To repay his debt the debtor has to wait until the other goes to work on his fields, and he himself is free to follow. The labour exchange makes an accounting system necessary, but it is completely in the minds of the persons involved. The accounting is rather complicated because of the interchangeability of members of one household, the lapse of time between opening of the relationship and repayment, and the fact that part of a workgroup comes to repay, the other part comes to indebt. No household is ever really free from labour debt, but at the same time it is entitled to repayments from other households. Few arguments arise about the repayment of labour debts, all the members of a household assist each other in remembering to what they are entitled, and what obligations the household still has. If a debt has not been repaid for a long time the debtor may be pressed to settle it quickly, but sometimes permission is granted to delay repayment for an indefinitive period. Payment in cash at the rate for daily paid labour is another possibility. However this method of reimbursement is disadvantageous to the debtor because a paid worker is expected to work harder than usual in the exchange system. On the other hand, people who have small cash debts with others in the village sometimes repay these by joining a labour exchange group, taking advantage of the slower pace of work. In some villages regulations have been made to prevent the accounting system from becoming too complicated. Examples are the stipulation that it is not allowed to indebt a person for more than one day, or the formation of closed exchange groups of

about ten persons which work each others fields in strict rotation. But most villages do well without these regulations. In fact, it is surprising that everyone knows exactly the amount of credit and debt of his household in the labour exchange, but only very few count the total number of days that has been worked on a certain field. Realization of the latter would contribute much to economically sound farm management. The most important reason given for the labour exchange is that it provides optimal condition for human company and sociability. Or as the Bidayuh put it 'when working together we don't feel the sun burning on our back'. This sociability can be noticed all the time, the people constantly talk and joke. Unmarried people have a good chance to observe the diligence and other qualities of the members of the opposite sex. Favourite ways of teasing are blackening each other with charcoal and throwing mud.

Besides sociability, human company provides security too. If one meets with an accident alone or when accompanied by only one person, it is difficult to return to the village. Apart from common accidents such as breaking a leg, there is the scare of headhunters, especially strong at the start of a new season, and in modern times of communist guerillas. Another evident advantage, never mentioned by the Bidayuh, is the short time in which a task like clearing can be finished. At the same time it is a drawback because the crop receives little constant attention.

The labour exchange has three important disadvantages. The first is that neither the number of labourers, nor the days when they work can be exactly regulated. A person who early in the morning announces that he is going to work in his field will not know the exact number of people that has followed him before he arrives at his field. In some villages if he finds the number too large, he can reject workers from households to which he is not indebted. Because these people have often walked for one hour such rejections easily create ill-will and therefore are seldom made. In order to limit the size of their group some persons will quitely invite a few debtors and depart extra early, making detours to confuse possible followers. A person who early in the morning finds that he is the only one who intends to work on his field may cancel the idea quickly to prevent him being indebted to the whole village. In such a case everybody returns home, spending the day on odd jobs and sleeping.

Secondly the amount of work done by a person in labour exchange tends to be less compared with a person working in his own field, or for cash payment. The owner of the field decides how long should be worked and sets the pace. But the working speed of a group tends to be that of its slowest, most easily diverted member. A measure to guarantee a standard amount of labour is to set out in advance the area intended to be worked that day. However, there are no calculations of so much land to be done per worker. The workers go side by side, making sure that they do no more than the others present. People notorious for their long working hours and large areas to be done per day become the subject of gossip and their work groups are avoided if possible.

The third drawback is that the owner of the field or plantation can exert little influence on the quality of the work done by people that have followed him to exchange labour. To teach other adults how to work is something not done. This is of little importance for work on paddy, because the cultivation of that crop is well-known to everybody, but it does matter for pepper, a very delicate crop. As a consequence labour exchange in pepper is less common than in paddy, work groups are small and generally limited to a few friends invited one or more days before. Besides the information presented in Table 12 about the amount of time spent on different crops and non-agricultural activities, it was also recorded how much of the work was done in labour exchange, by paid labour, or by members of the household only. This information is made available in Table 15. This table shows that labour exchange is far more popular in the cultivation of paddy than of pepper. The young unmarried people are more engaged in labour exchange than married people.

Table 15. Three systems in which labour was spent by 10 households (37 active persons) in Riih Daso during six weeks in October–November 1971, in percentage.

	10 households total 37 active persons	9 adult men, full-time farmers	4 adult men with a job outside the village	15 adult women	6 adolescent boys	3 adolescent girls
Labour exchange						
bring people to own paddy fields	6	6	1	7	7	9
join others to their paddy fields	19	12	2	18	30	39
bring people to own pepper plantations	0	0	0	0	1	0
join others to their pepper plantations	1	1	0	0	3	2
total	26	19	3	25	41	50
Working with household members only						
in paddy	23	37	2	28	6	3
in pepper	5	11	6	3	2	1
total	28	48	8	31	8	19
Working for a payment						
in paddy	1	2	0	1	0	0
in pepper	0	1	0	0	0	0
permanent job	7	0	8	0	0	0
else	0	1	0	0	0	0
total	8	4	8	1	0	0

Especially married men work a good deal of their time (54% in this case) in their own fields and plantations, leaving the repayment of labout debts to other members of their thouseholds. By this arrangement constant attention to the crops of a household is guaranteed.

10.2.2 Daily paid labour

Occasionally a Bidayuh has the opportunity to work for a co-villager for payment. Often this is his only way to obtain some cash when the rubber price is so low that tapping is not worthwhile. Any proceeds of the pepper harvest are likely to be finished quickly and generally paddy is too scarce to be sold. Very often these labourers have been unable to harvest sufficient paddy for their own use. Working for payment is called 'to eat from an income' (makan gaji). Payment of the worker is either in cash or, with his agreement, in kind. Payment in kind sometimes offers slight advantages to the employer. He can buy rice in bulk at a price per unit lower than the one used to calculate the amount to be paid to the workers. Or it is possible to give female workers a dress, bought in the bazar at a price lower than charged in the village shop, which is used as conversion rate. Daily wage rates vary from village to village, the highest are M$3.00 for male and M$2.00 for female labour[1]. Rates are lower in those areas where there is little opportunity for employment because few people have planted cash crops. Sometimes the employer provides a meal, but he is by no means obliged to do so.

Generally employers are those who participate in the cash economy a little more than their employees. A few people are employer as well as employee in different seasons. People who own extensive pepper plantations or themselves derive a steady income from a non-agricultural occupation can afford to employ regularly one or more labourers. Besides, regular employers tend to be self-sufficient in paddy production compared with non-employers. For one or more days of paid labour the initiative is either taken by the employer or by the employee. No permanent relations exist by which persons are obliged to employ someone or to work for another at first call, except in an occasional case of acute hardship of a close relative or very good friend. No one can depend in times of hardship on a relatively rich villager, neither can the latter command the services of one or more persons whom he favours by occasional employment.

10.2.3 Contract labour

Sometimes a farmer who employs his co-villagers for payment wants to ensure that he gets a good return for his outlay by making an agreement to have a specified amount of work done for a fixed sum. This is especially popular with people who cannot accompany the worker themselves because of their own employment outside the village. Activities like cutting of grass in swamp areas and destumping of areas to be planted with pepper are often contracted out. Both are measured by pajak, a square with a length ten times the distance between finger tips when arms are spread, roughly corresponding to a hundred square fathoms. Strong young men are the ones who apply for these contracts, the prices of which are more or less fixed in a village. By working hard and making long days they are able to earn a higher salary per day than at a daily rate. Further characteristics of employers and employees are the same as those mentioned under daily paid labour.

1 Here the difference in the amounts of work done by men and women is acknowledged. In the labour exchange the difference is ignored. Entering the cash economy makes the Bidayuh more productivity conscious.

10.2.4 Working with members of own household only

An important part of the Bidayuh think that to work with household members only is the most profitable method. It is probable that the recent introduction of crops like rubber and pepper has increased the proportion of people who have this opinion and act in accordance with it. In both crops the engagement of a large number of people at the same time is undesirable or impossible for technical reasons. Owners of flourishing pepper plantations regard them as too precious and delicate to allow strangers to tend them. Increased involvement in a cash economy and decreasing yields of paddy per unit of land and labour have made a growing number of people painfully aware of the disadvantages of the labour exchange.

Some households find it difficult to change their practice to comply with their opinion about profitability. Especially women and unmarried children regret the loss of sociability which is inherent to the labour exchange system. Social control too hampers the extent of change to each household working individually. Remarks like: 'do you think you can be better off than the rest of us by such ways' are regularly made and keep some households involved in the labour exchange.

10.3 Non-agricultural labour

In most of the easily accessible villages a few men have been successful in obtaining a steady job, like labourer in the Public Works Department, a stone quarry or in an army camp. If the employer does not provide transport, these workers have to travel by bicycle or public transport. The labour required is of unskilled or semi-skilled nature and the salary is sometimes as high as M$6.00 per day, double the amount a man receives when he is employed by a co-villager. Though their households have a fairly reliable source of income, it does not mean that they lose their interest in agriculture. Because of the important independent position of the women much of the agricultural work can be left to them. When male labour is indispensable hired labour is used or the man takes a few days leave. The comparative wealth of those households with a permanently employed member is reflected in the large amount of bought foodstuffs in their diet, the standard of clothing, a slightly better house and the possession of some luxury items like watches, radios, bicycles and jewellery. Few of the households are able to reserve money for lasting and profitable investments in agriculture or commerce, though because of their reliable source of income traders are willing to sell them fertilizers and other essential inputs on credit. Generally the style of farm management of these labourers is of a subsistence farmer more than of a market-oriented farmer. The fact that most of the actual work is left to women reinforces this situation, because they attach more value to food crops.

People who because of their secondary education have gained admission to the skilled ranks of the government service, like teachers, seldom live in their home village. Because of frequent transfers they move from one house provided by the government to another. Thus villages are deprived of their educated inhabitants, possible innovators and potential leaders.

11 Agriculture and other economic activities

In this chapter first the agricultural system of the Bidayuh is briefly described. Next the different types of crops are discussed, including a short description of the cultivators and the relevance for the social structure in a village. The effects of subsidy schemes directed at improvement and stimulation of cultivation of certain crops are mentioned.

Under the heading 'farm management' the integration of annuals and perennials into a farm plan is dealt with. Especially the profitability of the different crops per input of labour is investigated. Also aspects of farm management are related to social attributes, in particular I tried to assess the position of the agricultural innovator in a village. Further the distribution of agricultural knowledge and government assistance form part of this heading.

Under the subtitle 'income and expenditure' the size of yields per household and their marketing is discussed.

Finally a review is given of the enterpreneurial activities in commerce, agricultural industry and transport, new ventures for the Bidayuh.

11.1 Agricultural system

The most striking aspect of the agricultural system of the Bidayuh is the great variety of crops cultivated and activities engaged in. Traditionally dry paddy grown in shifting cultivation on the hills is the primary crop of the Bidayuh. Cultivation of wet paddy, collecting of jungle products and hunting were additional activities. Since World War II cash crops have become more important. At first nearly all the cash income of the Bidayuh was derived from the sale of rubber. But in the 1960s pepper gradually became the major cash crop. Because of the rapidly increasing population, and the area under cash crops, the amount of land available for dry paddy in shifting cultivation is insufficient for optimum production. More and more households are becoming dependent for their staple food on wet paddy, which is cultivated in a more intensive way.

The technology used in the different agricultural activities is simple. All work is done manually. The range of implements is limited to hoes and different types of knives for felling, weeding and harvesting. Baskets are used for collecting and transport. A special type of knife is used for cutting the bark of rubber trees. Containers, a flat table and roller, and acid are essential in processing the collected latex. The few people who own mangles for flattening the rubber sheets place these at the disposal of their co-villagers for a small fee. Sometimes the mangles are owned collectively. For the work in pepper plantations hoes and weeding knives are the major implements. Some relatively prosperous farmers own handpump sprayers to apply weed-killers and pesticidies. Use of fertilizers and other chemicals is nearly entirely confined to the cultivation of cash crops.

Income from the different agricultural activities is low, especially the cash income. The primary motive in agriculture is to produce enough food for home consumption. As will be shown in this chapter only a minority of the households attain self-sufficiency in rice, which means that many

have to eat root crops and sago. The income from cash crops is low, especially in periods of depressed rubber prices.

At present pepper offers the best prospects as a source of cash income. Unfortunately most of the Bidayuh lack the knowledge, experience, capital and time for the proper establishment and maintenance of pepper plantations. The proceeds derived from pepper are at best a few hundred dollars per household annually. From this sum necessary production costs and investments have to be met. Besides pepper and rubber little produce is sold for cash. Only 30% of the households reported that they had marketed a quantity of other crops or animal products that year.

A number of factors hamper the development of the agricultural enterprises of the Bidayuh. A major one is the impossibility to take any risk. Hence they engage in a large number of activities, subsistence crops as well as cash crops, in order to spread risk as much as possible. Thus on the level of the individual farm the Bidayuh practise a policy of self-sufficiency, which the Government aims to attain on the national level. However with the Bidayuh, putting a few eggs in many baskets adversely affects the level of production. Farmers experience difficulties in allocating their labour and attention over the different projects, so that none is looked after in a proper way. Marketing costs per unit are very high because of the limited quantity of marketable produce. Another limiting factor is the lack of demand for agricultural products. Because of the distance from major concentrations of people, fresh products can hardly be sold. Only non-perishable products can be marketed in substantial quantities.

11.2 Main crops

11.2.1 Hill paddy

Non-irrigated paddy is commonly referred to as hill paddy, which for Sarawak is an approriate name because of the limited number of cultivable plains in this country. Few of the hills have high peaks, but their slopes are often steep. The story often told in Sarawak of a man who tumbled down his farm is not without grounds.

Hill paddy is grown in shifting cultivation, the fallow period ranging from five to twelve years. If one considers the kind of terrain there is not much erosion visible. On slopes that have been cultivated frequently sometimes sheet-erosion can be observed, the top soil of a large area having shifted down into the valley. Any further shortening of the fallow period would certainly have detrimental effects. Cultivation of hill paddy starts in June, when the fields are cleared of undergrowth. After a few weeks the larger trees are felled and the organic material is left to dry until a day suitable for burning just before the start of the wet season in September. If the burning is not complete the field has to be cleared of smaller branches and stalks, which otherwise would make weeding troublesome. Seeds are generally saved from the previous harvest. Sowing is done directly. Men dibble holes approximately one foot apart, into which the women plant a small handful of seeds. This activity is a gay occasion in which often an extraordinary large number of people take part. Within an hour a whole field of one acre or more can be finished. The seed is brought to the field very early in the morning, and sometimes the night before, to evade bad omens. Even Christians still practise this custom. Cultivators of hill paddy practise exchange of labour comparatively often, and especially at the start of the season work groups tend to be large, sometimes over twenty people. This practice can partly be explained by the mood which prevails at the start of a new season. The fear to go unaccompanied to remote bush covered fields is another reason.

Normally the Bidayuh weed their fields twice, with an interval of two months. Nowadays the

cultivation of hill paddy has ceased to be a simple system of slash and burn, still possible when the fields were cleared from virgin or long-standing forest; in a short fallow period, nine years or less, the regrowth of trees does not reach such a density that grasses and other weeds die because of lack of sunlight.

Frequently the paddy crops, hill as well as swamp paddy, are attacked by rats, green paddy bugs (*Leptocorysa* sp.), army worms (*Spodoptera mauritia*) and brown spot (*Helminthosporium oryzae*). Few farmers know the cures, or at least realize that these exist, and even less practise them.

Harvesting starts in February, at the end of the rainy season. The time depends on the variety of seed that has been used. Several households plant more than one variety of different taste and quality. The wish to retain a certain variety of paddy is an inducement to cultivate it. Harvesting is done by cutting the ears, which are threshed by trampling in the village.

Most hill paddy farms vary in size between one and two acres, and very few households cultivate more than four acres at a time. Five to six gallons (1 gallon or gantang contains 4 katis or 5.3 lb paddy) of seed are used per acre. The amount of seed used often gives the most reliable information about the size of a field.

Studies on the input of labour in the cultivation of hill paddy in Sarawak are scarce. Geddes noted two Bidayuh cases, 47 and 102 days per acre of which the latter seems to be the most representative. The data presented by Freeman about the Iban farms cleared from secondary growth range from 50 to 66 days per acre ((SGK—Dep. Agric.) Handbook, Prod. Data 1971). The difference between the outcomes of both writers is mainly because the Iban along the Balleh spent fewer days on weeding. With harvests which seldom exceed the level of 150 gallons per acre, and regularly are only half of this ((SGK—Dep. Agric.) Progr. Rep. Survey FTC Trainees, 1971), the value of the paddy produced per day labour generally varies between M$0.50 and M$1.00[1]. The actual returns are higher because of crops interplanted with the hill paddy. Of these maize is the most important. It is harvested in December, about two months before the paddy harvest, and brings relief in a period of food shortage.

Very few farmers in the sample (2%) used Ammophos, a subsidized fertilizer which the Department of Agriculture claims can increase yields by 30%. The others do not think it worth the cash expenditure of M$1.00 per acre, and the efforts to be made in application and collection. Also some farmers complain weeds grow better with fertilizer.

The survey revealed that about two-thirds of the Bidayuh are engaged in the cultivation of hill paddy. Especially the older generations are represented. The followers of the traditional religion are often believed to grow paddy because of their religious cult, which is closely related to the cultivation cycle of paddy. However there is no indication that Christians abandon hill paddy more easily. The amount of land under hill paddy in the sample of households in the season 1972/73 was roughly the same as the previous season.

11.2.2 Swamp paddy

The cultivation of swamp paddy which for a long time has been subsidiary to hill paddy is gradually replacing the latter. Two-thirds of the households in the sample grew some hill paddy, the proportion engaged in the cultivation of swamp paddy was three-quarters. Swamp paddy fields are

1 In 1972 the Government guaranteed price was M$16.00 per pikul (133 lb or 60 kg).

concentrated in small valleys in between the hills, along the upper reaches of small springs. Many of these valleys are not larger than a few acres. Fields in the larger valleys, downstream are often liable to flooding and therefore unsuitable for cultivation without sizeable investments in water control.

The importance of swamp paddy for the production of the staple food in the diet of the Bidayuh has resulted in an increased area under cultivation. This extension could be realized by shortening or cancelling the fallow period of two or three years, and by the construction of small irrigation or drainage works which make cultivation less liable to irregularities in rainfall. Fertilizer is propagated by the Department of Agriculture to counteract a declining fertility. The cultivation cycle starts in August when most of the preparation on hill paddy farms have been done. The grass on the fields is cut and left to dry, burnt, turned upside down, dried and burnt once again. In the meanwhile a nursery is made, river blocks and dams are repaired or completely reconstructed when the bamboo and grass have decayed.

The rice is transplanted on irrigated parts of a field, higher patches are sown directly. Though transplanting is labour intensive, the efforts are later compensated when less weeding is necessary. The fields are often situated so that one field drains into the next at a lower level, and so on until the water finally reaches the river bed. This system requires close co-ordination of activities which is reached informally. Each cultivator observes the progress made by his neighbours. Repairs to river blocks, and closing and opening of these are done under the guidance of a senior cultivator.

Similar to hill paddy, work on swamp paddy fields is often done by labour exchange. The harvest of swamp paddy falls mainly in April. The total size of the swamp paddy lots of one household seldome exceeds two acres. About half of the households cultivates one acre or less. The amount of seed used per acre is four to five gallons. Harvests range between 200 and 300 gallons per acre, but can be as high as 500 gallons in well established Assistance to Padi Planters Schemes. In the sample the yields per gallon of seed obtained by participants in schemes was significantly higher than those of non-participants. The labour input per acre (about 100 days) is only slightly higher than with hill paddy, provided no major investments have to be made in water control works ((SGK—Dep. Agric.) Handbook, Prod. Data 1971). Thus the cash equivalent of the output per workday is at least double that obtained from hill paddy (±M$1.60 vs M$0.75). However, only the best yielding plots bring a return per work day higher than M$3.00. In most Bidayuh villages this amount is regarded to be the standard daily wage for male agricultural labour. Though swamp paddy is essential to reach a high level of self-sufficiency in rice, there were no indications that the acreage in use by the sample of households in 1972/73 had increased compared with the previous season. Probably all land suitable for this crop was already in use.

11.2.3 Rubber

Already early in this century the Bidayuh could observe the cultivation of rubber by Chinese. However it was not before 1950 that they themselves became engaged on a substantial scale in the planting and cultivation of this perennial crop. Within the village communities there was much resistance to the planting of rubber, expressed in the belief that the soul of paddy might be disturbed by the presence of rubber. For a long time the foreign rulers had passively supported these indigenous fears by making the planting of rubber subject to Government approval and regulating the number of trees per farmer, which according to some informants was not more than 25 trees (app. 1/8 acre). The reason behind this regulation was that rubber and the cash earned from it might upset village life, and especially would create a shortage of rice. See for instance the

following report of the District Officer in the Sarawak Gazette. 'Many requests to open rubber gardens were made as usual but no more tickets will be issued now until the land has been seen to be unfit for padi first' (1926, page 251). Three years later he wrote: 'In spite of the recent experience of the price of rubber, applications are still being received for land for planting this. Every effort is being made to discourage the planting of rubber, but attempts to dissuade such applicants have been fruitless' (1929, page 59). This opinion was still vivid after World War II when the Governor in one of his addresses to the Council Negri remarked: 'Perhaps the greatest danger at present is that land suitable for intensive wet padi cultivation will be permanently damaged by new planting of rubber' ((SGK) Minutes Council Negri, 20th November, 1950). Nevertheless enterprising men in some villages managed to plant small plots of rubber. Unlike those in the Kayan area, taboos on rubber along the Kedup river were not very strong. The number of rubber plantings increased steeply after the Japanese occupation, especially when the Government actively encouraged the cultivation of high yielding varities by initiating subsidy schemes. The survey showed that ninety per cent of the households possessed some rubber plantings, either established by the initiative of the owners only or with Government assistance. However, most plantations are small, the majority of those planted with local varieties do not exceed two acres, those planted with high yielding varieties are seldom larger than three acres.

It is usually seven years between planting and the first tapping of rubber trees. Sometimes after five years of careful maintenance high yielding varieties can be brought into production. Planting and maintenance of maturing rubber trees needs a reasonable amount of labour which most farmers try to minimize. By issuing cash grants, which are dependent on the quality of maintenance, the Department of Agriculture ensures that participants in the Rubber Planting Scheme stick to the rules. For many households these grants amount to 20% or more of their annual cash income.

Tapping and processing are done by individual households, often by single persons, when the price level of rubber permits them a reasonable return for their labour. Many social aspects and stigmas connected to rubber tapping are discussed in Appendix VIII. Rubber can only be tapped on clear days, as rain would dilute the latex. The tappers leave their house upon first daylight or even before. By early in the afternoon the yield of the day has been crudely processed into wet rubber sheets. These can be sold to the rubber traders, who take care of the smoking.

Rubber plantations are small, few households own more than five acres. Still the majority of households is unable to keep them in full production. Share tapping hardly occurs. Often returns on labour are low, a survey made under the FTC Farm Management Project ((SGK—Dep. Agric.) Progr. Rep. Survey FTC Trainees, 1971) revealed that yields per hour are approximately half a kati (1.3 lb) in plantations of ordinary rubber, and one kati from high yielding varities. The better layout of the plantations with high yielding clones especially facilitates the collection of latex. Working days in these plantations are about half of those in plantations with ordinary varieties (5 h vs 10 h), so that the income per day derived from both is almost equal. The incisions can only be made early in the morning because the latex flow diminishes progressively after sunrise. Thus with an improved layout there is only a limited increase in the number of trees that can be tapped in a day.

Bringing a rubber plantation into production, for the first time or after a period of neglect, incorporates some initial costs for spouts, glass cups, hangers, pans etc. Many tappers try to circumvent this expenditure by using sardine tins or bamboo stems for the glass cups, and muddy biscuit tins for enamelled pans. The mud is applied to facilitate the removal of the coagulated latex, but it adversely affects the quality of the processed sheets. Sheets produced by Bidayuh are nearly in-

variably graded as lowest or sub-standard by the rubber traders.

At the 1971/72 price level of M$0.25 a kati, corresponding with M$1.25 per day, nearly all tapping was stopped. Only four per cent of the surveyed households reported to have sold any rubber in 1972. Many complaints were heard: in the shop even two katis of rubber would not but buy one kati of sugar, while during the Korean War one kati rubber was equivalent to at least ten katis sugar. This style of argument shows how rubber was used to obtain those daily necessities which cannot be homegrown or made. When at the end of 1972 the price again rose to M$0.40 per kati, corresponding with M$2.00 per day, some people resumed tapping.

11.2.4 Pepper

It was not until some time after the Japanese occupation that the Bidayuh started to grow pepper, although this crop had been cultivated by Chinese in their immediate vicinity for a long period. In 1930 the District Officer of Sadong reported in the Sarawak Gazette (page 120): 'Sprinklings of Chinese throughout this area (Ulu Kayan and Ulu Kedup) have planted pepper which all seems to be doing well. The Land Dayak however are quite apathetic about these good examples of profitable planting.' Few Bidayuh profited from the boom period in the early fifties when pepper was as valuable as gold and even a spoonful of pepper could be marketed.

The large majority of households in the sample had planted pepper, more than half of the households possessed fruit-bearing vines. However, the size of the plantations is limited.

Pepper makes high demands on the soil; it needs good fertility, and above all good drainage. This land can only be found on hill sides, which makes terracing essential to prevent erosion. Prior to planting, the site has to be destumped carefully, to minimize the chances of diseases later. Foot rot, also called sudden death (caused by *Phytophthora* sp.) is the most disastrous. Pepper shoots are obtained from mature vines, placed in a shaded nursery, and transplanted after a few months. Pepper vines need the support of a pole 10 to 14 feet long. Hardwood is essential, but during the first months most farmers make use of bamboo to delay the expenditure on hardwood poles (M$1.50–2.00 each). If the farmers cannot afford or collect it from the forest, soft wood is used instead. These poles have several disadvantages: they rot and collapse under the burden of a mature vine, or they take root and use part of the soil fertility. After planting, pepper needs constant attention: the plantation has to be maintained and kept free from weeds, the plants have to be pruned, manured and sprayed against pests. No harvest can be reaped until the third year after planting of the pepper shoots. In the meantime the cultivators try to obtain some income from intercropping. Some grow groundnuts or ginger, which both have a good market. However most people grow root crops, or even hill paddy in between the rows of peppervines.

By applying fertilizer in different parts of the plantation at different times the farmers ensure that the vines do not all flower and fruit at exactly the same moment. Otherwise harvesting would create a major problem. Harvesting takes place in the months June to August. In this period 50% of total annual labour is required, 153 work days per acre (600 vines) ((SGK—Dep. Agric.) Handbook, Prod. Data 1971). Often hired labour is necessary. During these months pepper competes with paddy for labour, clearing of land for the latter crop coinciding with the harvest of the first. The green pepper berries are processed into black pepper by simple sun-drying. If the difference in price between white and black pepper is large enough, at least 25%, the larger and riper berries can be processed into white pepper by soaking them in water and removing the outer skin, after which they are dried. Few Bidayuh cultivators are able to grow berries of such quality to be worth the additional labour input.

A study ((SGK—Dep. Agric.) Handbook, Prod. Data 1971) revealed that for the establishment of a good yielding plantation of one acre during the first two unproductive years 374 work days and around M$2,000.00 in cash are necessary, the latter mainly for posts and fertilizer. During the productive period, which may range from the third to sometimes well over the tenth year, annual costs for fertilizer, chemicals and tools are around M$1.00 per vine. It is especially the costs of establishment that most Bidayuh are unable to meet. They try to circumvent the difficulties by starting with small plantations and gradually extending these, reinvesting the proceeds of the first plantings. Other ways are to economize on the costs of poles and fertilizers, by using soft wood poles and giving less fertilizer than necessary, using 'burnt soil' as a substitute and selecting plots high in natural fertility. Low amounts of fertilizer result in poor growth and a small output per vine. In the sample households that cultivate pepper used on the average a little less than 3 lb of inorganic fertilizer per vine at a cost of M$0.40 against the 4½ lb recommended by the Department of Agriculture. Their production per vine was on the average only two katis of black pepper, with a market value of roughly M$1.00 per kati. However, in properly established and matured plantations the normal yield is five to six katis per vine. The actual labour input is hard to estimate. It is probably below the optimum because now pepper cultivators have to devote time to their food crops as well. Around 300 work days per acre pepper are necessary during the productive period each season ((SGK—Dep. Agric.) Handbook, Prod. Data 1971). Nevertheless even if this amount of labour is spent, and at the present input of fertilizer, the net cash return per work day, the costs of establishment being excluded, amounts to M$3.10, which compares favourably with the returns on paddy and rubber.

The cultivation of pepper is a delicate affair, which needs detailed knowledge, constant attention and a liberal input of labour and money. But labour and attention are insufficient because few cultivators derive such good incomes from their plantations that they can fully concentrate on these without having to grow food crops. Knowledge on economic subjects spreads with difficulty in a Bidayuh community, as discussed in Chapter 13. Most information about the cultivation of pepper is obtained by observation of other cultivators, of which the Chinese were the first in the area. This way of extension does not guarantee accurate information on matters, which cannot easily be observed, such as pruning, amount of fertilizer and time of application, and the different types of chemicals to be used. Mistakes between pesticides and weedkillers are a result of this lack of detailed knowledge. Lack of knowledge on the prevention and eradication of foot rot, for instance by destroying infected vines and putting infected plantations in quarantine, is another example, which has resulted in the untimely end of many a plantation. All households with mature vines reported that they had lost vines because of diseases.

Until recently pepper was not subsidized, and as a consequence extension on the cultivation of this crop did not always have a high priority with the field staff of the Department of Agriculture. The introduction of the Pepper Subsidy Scheme in 1972 has increased the staff's involvement with this crop, of which the participants in the new scheme benefit directly. One purpose of the scheme is to assist those farmers who are financially unable to establish a high productive pepper garden by supplying them with grants in cash and kind. These grants, however, cover only a minor part of the initial expenses (see Appendix VIII), so that lack of capital will remain one of the most serious handicaps in the establishment of a plantation. The traders are willing to give credit for the recurrent expenditure on fertilizer during the productive years, but only to those who have a productive plantation of substantial size. Then the farmer is bound to sell at least part of his produce to the trader who has supplied him with fertilizer. Prices charged for fertilizer on credit are approximately 15% higher than for cash. Few Bidayuh have requested and obtained a loan from an institutional

source, though no fixed security is asked for by the State Economic Development Corporation. At most one or two households per village have received loans. Unacquaintedness with the rules of loan taking, and the attitude that assistance should be given free of charge account partly for this low proportion. There is also the fear that the pepper plantation could die untimely and the household would be unable to repay the instalments.

Who have been successful in establishing plantations of mature pepper? Cross-tabulation of the information obtained from the survey shows that of those with at least 200 mature vines there are proportionally more people who occupy a function in their village, either a traditional existing or a newly established one, who have received some formal education, and also those who belong to a Christian denomination. Often a member of such a pepper cultivating household earns an income outside agriculture. Such a reliable source of cash is important for the investments that have to be made in pepper plantations. Pepper cultivating households often have many workers and reach a high degree of self-sufficiency in rice. These characteristics indicate that to engage in the cultivation of pepper is a risky activity, and that only households with many resources can afford it. More characteristics of pepper cultivators will be discussed later.

Cultivation of pepper brings with it individualism in a village. The cash incomes some skilled cultivators make increase inequality in a village and consequently feelings of jealousy. Also the cultivation in itself means that households act independently. The constant attention pepper needs make it unsuitable to practise exchange of labour on a scale as is usual with paddy. Not all persons who would turn up in an exchange group are skilled in the cultivation of pepper, and their large number would facilitate the spread of diseases. If necessary some skilled and diligent persons are hired during peak periods, especially the harvest. Whenever possible pepper plantations are tended by household members and a few good friends only.

Concluding it can be said that most Bidayuh learn to grow pepper by trial and error. They themselves too refer to their plantings as 'just trials'. Some of them are able to save enough from the harvest of these trials to invest in proper plantations later. Labour and dedication are the essential aspects in this process. However, an attack of a disease can destroy the work of years, forcing the unfortunate household to start from scratch again.

11.2.5 Poultry, livestock and fish ponds

The majority of Bidayuh households have some chicken and other fowls. However, the size of a brood is generally less than ten. The eggs and meat are mainly for home consumption. Incidentally, when some cash is needed urgently a man may take one or two birds and walk all the way to his trader in the bazar to sell them at a cheap rate. Fewer households rear pigs; especially in villages with a pig fencing regulation their number is small. Originally pigs would search for their own food by scavenging, but in sties they have to be fed twice a day. Cultivation and preparation of starchy crops takes time, while protein food has to be bought. Hardly any household seems to be able to raise more than one fenced pig. Their diet gives the meat of Dayak pigs a special taste, in demand by the Chinese. However, sales occur only incidentally, when the owner needs money. Prices are around M$1.00 per kati liveweight. These sales are mainly to the regular traders in the bazar. The home slaughtering of pigs is generally reserved for big occasions like a religious festival or a wedding.

The number of Bidayuh in the District that rear fowls or pigs on a commercial scale is probably less than ten. The livestock schemes of the Department of Agriculture have until now not resulted in a sharp increase of this number.

People are becoming more interested in the rearing of cattle. Groups of people in two villages participate in the cattle scheme administered by the Department of Agriculture. In a few other villages near the Agricultural Research Station of Tarat individual persons have bought animals for themselves. At present it is impossible to assess the prospects of this activity.

Goats are another recent innovation, and are already present in a large number of villages. Most often the acquaintance with the rearing of goats was obtained through contacts with Malays. The SDA mission too has stimulated the rearing of goats as a substitute for pigs. Goats and cattle are penned and graze in between the houses in a village. Sale and consumption of these animals is similar to those of pigs.

Fresh fish is obtained from the rivers. But ponds for fish production are often created from a valley by blocking a small stream. This type of pond can be drained at will, after which the bigger fish can easily be collected. An alternative use of such a valley is as wet paddy field. On flat land sometimes ponds are dug, but these are generally not larger than a few hundred square yards. The Department of Agriculture has a scheme under which implements, fertilizers and fish fry of *Tilapia* and other species are issued. If these are properly used, a fish pond can be a very lucrative enterprise. Fry of M$1.00 per tail can grow to fish worth M$13.00 in one year and a half. Still very few Bidayuh participate in this scheme. Seven per cent of the households in the sample had received fish fry one or more times, while only two per cent had received all the items under the scheme. Only one had ever marketed (a part of) the harvest. This owner of a six acre fish pond stated that the income per acre from the pond was much higher than could be earned in wet paddy.

Assistance is also given to communal ponds, owned by a village, the school or a Women's Institute. These organizations either share the harvest among the participants, or use the proceeds of a sale for their fund.

In non-assisted ponds the fishes already present in that part of the blocked stream are expected to put on weight. Because generally no rice bran, human or animal waste are added, few katis of fish are derived from these ponds.

11.2.6 Other crops and collecting activities

Besides the crops and livestock mentioned under the previous headings the Bidayuh are engaged in a considerable number of other activities, the products of which help them to survive periods of rice shortage, add to a balanced diet, and by itself prevent their lives from becoming monotonous. Few of these activities, however, enter any statistics. Time spent on them can hardly be recorded separately from the major crops, because never a full day, or even half a day is devoted to it.

It has already been mentioned that maize is interplanted with hill paddy. It ripens a few months before the paddy, which makes it quite important in overcoming a period of rice shortage prior to the paddy harvest. Other starchy crops are cassava, sago and sweet potatoes. Cassava is grown on parts of the hill paddy fields after these have been harvested. Sago palms grow more or less wild, while sweet potatoes are often interplanted with immature pepper vines. These three crops are not highly ranked by the Bidayuh and are not regarded as proper human food. It was expressed by one informant: 'I don't have enough to eat, I have to eat sago and cassava'.

Interplanted with hill paddy are also various types of vegetables like cucumber, pumpkin and beans. Often a few tree trunks are left standing in a hill paddy farm to support the tendrils of these crops. Job's tears and sugarcane, can also be found in or near a hill paddy farm. The first is used in making a Bidayuh alcoholic beverage, the second is eaten fresh by any household member who likes it. A few households still produce their own sugar from it. Wet paddy fields are only used for

the production of paddy. The Department of Agriculture tries to encourage the growing of maize and soya beans as off-seasons crops. At present its efforts are mainly directed at areas under the Assistance to Padi Planters Scheme. Few households have a real vegetable garden as the Bidayah think there is little need to establish one. Vegetables can be obtained from the hill paddy farm, young cassava leaves can serve as such, and nearly everybody has some cankok manis (*Sauropus androgynus*) growing in his pepper plantation. Besides the jungle and river are full of products which can be eaten along with rice and therefore are referred to as 'vegetables', e.g. bamboo shoots, fern leaves, shellfish and mushrooms.

Nearly all households are fully or partly entitled to the produce of some fruit trees such as durian (*Durio zibethinus*), rambutan (*Nephelium lappaceum*), langsat (*Lansium domesticum*) and coconut, which have been planted more or less accidentally somewhere within the village territory. Some households own banana and papaya plants. Until now the fruit tree subsidy scheme, under which small orchards of improved varieties are established, has reached few farmers. However, many have acquired one or more budded seedlings and planted these in the traditional way. Nearly all these fruits are home consumed, and form an addition to the standard diet of rice and other starchy crops. Sometimes a few durians of a superfluous harvest are sold at M$0.30 or more each to obtain necessary cash. But because of its great nutrition value, because the harvest falls at the end of the year before paddy can be harvested, and because durian flesh can be preserved, durian too is primarily a subsistence crop.

Some households possess a few coffee trees. The beans are used for home consumption, or sold for petty amounts of cash.

Illipenut trees (*Isoptera seminis*), either wild or planted, yield once in every few years at irregular unpredictable intervals. The nuts contain edible oil which can be extracted at home. But usually they are sold for export to chocolate manufacturing countries.

The collection of edible birdsnests is a source of income for those households who have rights to caves.

For their animal protein the Bidayuh depend to a large extent on hunting and collecting. Nearly all the animals acquired in this way are rather small. A flying fox may be hooked in a fruit tree, a fish trapped in the river, or a snake killed on the way to the farm. Bee larvae are collected along with honey from high trees, and old women make themselves useful by searching for shellfish. Game such as wild boar and deer is nearly extinct. When such an animal is killed many people will rush to the place to claim part of it.

All these minor and irregular sources of food add to the variety in the diet of the Bidayuh, and enable them to survive lean periods, when paddy harvests fail or there is no demand for cash crops. The Japanese occupation is an example of such a period. 'Then we really lived like animals, eating only things we found in the jungle', according to one older informant.

11.3 Farm management

The length of the production cycle of a crop influences the period of adjustment to price fluctuations. The size of paddy fields and the combination of hill and wet paddy has to be decided upon every year. Once rubber has been planted it needs little attention. Mature rubber can be taken into production almost immediately after a price rise has made it profitable to do so. Without severe damage it can also be left alone for a long period, when prices are not an incentive to tapping. On the other hand pepper needs constant attention during its whole life-cycle. A short period of neglect causes incurable damage to this crop and is a waste of labour and money invested.

Decisions about the size of paddy fields to be used in a certain year are merely based on long-time experience, and not on exact calculations. Rights to swamp areas are more or less individual, but hill paddy fields have to be divided among the members of a descent group each year anew. The head of a household will look what fields he can claim. Records of previous harvests and the size of the regrowth, trunks as thick as an arm, a child's or a man's thigh, give a rough indication of the yield to be expected from it. The size of the household, the number of workers, and other activities such as the extension of pepper plantations are also taken into consideration. If the yield of the first selected field is estimated to be insufficient for the needs of the household more fields will be taken into production. Because of the increasing shortage of land and the decreasing fertility of the hills, some households do not cultivate any hill paddy in a certain season (both in 1971/72 and 1972/73 30% of the sample). Some of them positively state that they never will do so in the future years because they have realized its low profitability. However, the majority is likely to be engaged in this activity again when a suitable field becomes available.

The absence of exact knowledge of output per work day in the different types of crops is well illustrated by the almost identical examples of a teacher and a labourer in the Public Works Department who cultivated hill paddy on an extraordinarily large scale for one season. Both expected to make a handsome profit by employing labourers for a daily payment. Not until the harvest did they realize that the value of the paddy obtained was less than the amount paid as wages. This finding, however, has not deterred other wage earners to employ on a smaller scale co-villagers on hill paddy fields to reach self-sufficiency in rice. Though no calculations are made about the profitability of crops, and incidentally severe mistakes may be made, generally the households concentrate on activities with the highest output per work day. Earlier in this chapter it was calculated that in wet paddy the equivalent of M$1.50–2.00 per work day could be produced. In the field it was observed that as soon as the rubber price in the village had reached M$0.40 per kati, rubber was taken into production. At that level the same income can be earned as with wet paddy. At first glance hill paddy does not fit in with the Bidayuh's aim to earn at least M$2.00 per work day, because the output per work day is generally less than M$1.00. However when the importance of crops such as maize and vegetables interplanted with it, and the relatively easy cultivation of cassava in a subsequent year, are taken into consideration in an economically accurate way, it could well be that on the smaller hill paddy fields the value produced per work day is equivalent to that obtained from the other major crops. On large hill paddy fields the importance of the additional crops is minimal, because a household needs these in small quantities, and they can not be marketed easily.

Once pepper has reached maturity its output per work day at M$3.10 compares favourably with the other crops. It is therefore no surprise that the present plantations are extended rapidly and that the number of cultivators is still increasing. The sample showed more households with immature vines than with mature vines (266 vs 210). Generally the number of young vines tended by a household is larger than the number of fruit-bearing vines they possess, see Table 16. It normally takes three years before a vine comes into production, after which it can be productive for as long as ten years. However, the chance of pepper diseases will counteract the rapid increase in pepper cultivation by Bidayuh.

Because the new plantations are still unproductive the actual return per work day of all labour spent on pepper is much lower than that obtained from mature pepper only. With an equal number of young and mature vines net cash returns per work day are about M$2.00 (no cash investments in the new plantations have been reckoned with, as these are generally very small). In other words, the labour investments in pepper are of such a size that the actual productivity has reached a level equal to that in wet paddy, or in rubber if the price at farm level is at least M$0.40 per kati. Certain-

Table 16. Bidayuh households distributed according to their number of mature and immature pepper vines. n = 400.

Mature vines	Immature vines				total
	none	1–200	201–600	601 or more	
None	79	73	37	1	190
1–200	45	66	33	0	144
201–600	10	23	30	1	64
601 or more	0	3	7	2	12
Total	134	165	97	4	400

ly the Bidayuh has a minimum that he thinks a proper return for a day's work.

Another indication of the equivalence of swamp paddy and pepper was shown by cross-tabulating the presence of these two crops with the households in the sample. Those households growing wet paddy had significantly smaller pepper plantations.

An extreme example of this situation can be found in the rather isolated village Mapu Mawang near the Indonesian border. There knowledge of the cultivation of pepper is limited, and its production is severely hampered by difficult transport of fertilizer and produce. No swamp land can be found in the mountainous border range. Enterprising families have invested their labour in the construction of terraced irrigated paddy fields (sawahs), some only a few feet wide, on those hill slopes to which water could be diverted from small mountain springs. These sawahs, similar to the ones well-known from other places in the Malay archipelago, are probably unique in Sarawak. Because of the isolation of the village, and the fact that the sawahs have been constructed without any Government assistance until now, they are hardly known outside the village. But thanks to these sawahs the people of Mapu have been able to survive a period of depressed rubber prices.

Are some Bidayuh more capable farmers than others, and what are their characteristics? Cross-tabulation based on the information from the survey revealed the following.

High production per gallon seed in hill and wet paddy coincide, which suggest that skills and interest in paddy planting are divided unequally. A high production per input in paddy does not correspond with a high production per peppervine. However, households with sufficient paddy for home consumption possess the larger pepper plantations. Diligence could well be the cause of both. The Bidayuh which reach a high level of self-sufficiency in paddy differ little in other aspects from their co-villagers. However, as already indicated, those with large pepper plantations are to be found among the village-leaders, in traditional as well as in new functions. Christians, and also people with some formal education are over-represented among them. Besides they have integrated new urban practices in their style of living, have contacts outside their village through which they have obtained advice on agricultural methods, sometimes in printed form, and subsidy schemes. Their interest and participation in village affairs is not significantly different from the other villagers. However, very remarkably those pepper cultivators with the highest yield per vine are less interested in the administration and well-being of their village. People self-sufficient in food crops, and with a cash income from pepper say that they are happy and lucky comparatively often.

Are those people who obviously have success in agriculture called upon for advice? To be self-sufficient in paddy does not result in being considered a source of knowledge by others; this is different with pepper. The people who have established a large pepper plantation report that they

have advised others occasionally on agricultural matters. However, the number of people who admit that they have ever asked a co-villager for advice about an agricultural subject is less than 10%. The number of those who have turned to informants outside their village is equally low.

The effects of the different subsidy schemes and the number of participants in these have been mentioned. What type of people are most likely to receive assistance under these subsidy schemes? Generally those who come to the fore in a village, understand the ways and intentions of others, and have reached a certain prosperity obtain subsidies. From the survey significant relations could be observed between assistance in subsidy schemes, and the indexes of participation in and agreement with village affairs, empathy, newly established position, pepper plantations, socio-economic status, luck and happiness. The contacts the participants in the subsidy schemes have with the staff of the Department of Agriculture have made these participants transmitters of agricultural knowledge to others in their village, though there is still much scope for improvement.

An increasing number of rural youth receive a training of three months in one of the Farmer's Training Centres. In 7% of the households in the sample there was a person who had attended a course. The farm management and the productivity of the different agricultural enterprises of these households did not (yet?) differ from those who lacked the experience.

11.4 Income and expenditure

The first concern of every Bidayuh household is to be self-sufficient in rice. As has been calculated the productivity of paddy is generally not less than that of cash crops. Besides, steep fluctuations in the prices of pepper and rubber as well as rice have taught the Bidayuh not to rely on these crops to such an extent that most of the rice has to be bought. That households with large pepper plantations, or with a member who derives a steady income from employment outside the village, are among those with enough rice for a whole year, indicates the great importance attached to self-sufficiency in food. However, many households are unable to produce enough rice for their own use, see Table 17. It is clear that only a minority of households is able to keep the so much favoured diet of rice, three times a day all year round. Sago and root crops are consumed as substitutes, but also part of the small cash income is used for the purchase of rice.

At present the major source of cash income for about half the number of households is pepper. With the expansion of pepper cultivation among the Bidayuh this portion is increasing rapidly. Those who do not possess pepper vines of fruit-bearing age are still dependent on the sale of small

Table 17. By Bidayuh households achieved level of self-sufficiency in rice, in % of households. n = 400.

Enough rice for	Percentage of households
1–3 months	23
4–6 months	25
7–9 months	17
10–12 months	28
No paddy cultivated or don't know	7
Total	100

quantities of fowls, pigs, fruits, maize and rootcrops. This practice is left and the produce used for home consumption as soon as pepper can be harvested.

The amounts of black pepper marketed by each household and the proceeds of it are small, see Table 18. The sales of white pepper are negligibly small. The price at farm level for black pepper is roughly M$1.00 per kati. About 20% of the proceeds of pepper are used for the acquisition of fertilizer.

Table 18. By Bidayuh households marketed quantities of black pepper, in % of households. n = 400.

Quantity marketed (kati)	Percentage of households
Nothing	53
1–100	6
101–200	13
201–300	9
301–500	8
502 or more	11
Total	100

Annual cash incomes per household are at best a few hundred dollars. In times when rubber can be tapped profitably these might be one or two hundred dollars higher.

Because of the Bidayuh's low cash income the Rubber Planting Scheme became very popular. Under it, cash subsidies were issued for five years of M$120.00, 120.00, 90.00, 60.00 and 60.00 per three acre unit ((SGK—Dep. Agric.) Handbook Dev. Plan 1970). Especially during the four years of maintenance, this was a handsome payment for the number of days that had to be worked in the new plantation. This subsidy scheme certainly provided many a household with the little amount of cash it really needed, and could well have delayed the point in time at which they started to cultivate pepper. Out of the cash income first the costs of making up a possible food energy deficit have to be met by the purchase of rice, sugar, dried and canned fish. Other essential expenditure is the door tax and perhaps a gun or radio license, and clothing. The free distribution of used clothing by the missions always finds a warm reception! Though treatment by the staff of the Medical Department is free of charge, the cost of transport to obtain it has to be met by the people themselves.

Most households deal with one particular trader in the bazar only, who buys from them whatever they offer, and sells whatever they may need. These relationships are stable and characterized by mutual familiarity between the Chinese trader and the Bidayuh. Often all households in one village deal with one trader. This can be of advantage to the village, the trader willing to contribute to community activities to foster goodwill for his commerce. At times when pepper is harvested, durians are collected, or rubber is tapped, traders will visit the village, where possible with their landrovers, to buy all the produce present. During other periods the Bidayuh have to walk all the way to the bazar, carrying whatever they want to exchange. Incidentally a trader is willing to sell small quantities of consumption goods on credit and to give small loans when his client experiences times of hardship not due to his own fault. These facilities only provided to trusted customers ensure that every trader has a certain fixed clientele. Only those persons who

have proved themselves as diligent and skilled pepper growers are provided with fertilizer on credit, the debts are deducted from the sale of the harvest.

Since local entrepreneurs opened shops within the villages, much of the petty trade stays within the village, though their terms of trade are less favourable to the client. These village shops hardly compete with the traders in the bazar, because normally the latter act as retailers as well, at slightly reduced prices.

The few visits per year to the bazar remain highlights for a Bidayuh. By taking long intervals between their few purchases in the same shop they can spend a whole day shopping.

Notwithstanding the small cash incomes some households possess a little capital. This was accumulated in years of high prices for cash crops, sometimes as far back as the Korea crisis. The money may be stored in the house, where it is unsafe because the head of the household, his spouse, children and other relatives have the constant desire to spend it. An example of this desire is shown by the teenage girl who ran away from home telling her father she would not return before he had spent part of his money on a gold necklace for her. Gossip that the girl would be lured into prosititution made the father comply with the wishes of his daughter. An alternative from storing money oneself is to ask a trusted person to keep it in his house. Wealthy persons, who themselves have proven to be able to save, are a favourite choice. Savings come out in the open when a photographer visits the village. These artisans provide big, coloured portraits which are not always very like the subject, for a fee which can amount to M$30.00, to be paid in advance. These portraits are regarded as potential heirlooms, gradually replacing porcelain jars, gongs and other brassware. Traders also compete for the savings of their customers to be deposited with them. A monthly interest of 3% to be paid in goods is the standard rate[1]. However the Bidayuh find it difficult and often impossible to recover the principal they had trusted to the trader.

The most common allocation of any surplus income is to spend it on durable goods. Housing materials are bought in small quantities and used in combination with components collected from the jungle. Whenever a new windfall occurs the house will be improved or extended.

11.5 Village shops and rice mills

A growing number of Bidayuh are becoming aware of the possibility to obtain an income from activities outside the traditional field of agriculture. A village shop or rice mill are enterprises which at the moment are likely to provide the owner with a small profit. The licensing policy of the District Council is hardly a block to anyone who wants to engage in business as it allows the ratio of shops to houses in a village to be as high as one in ten.

Some of the shopkeepers have learned their trade while working with a Chinese trader from the bazar. If such a period of employment lasts for years the Bidayuh might learn how to do business in the rural areas. Learning the Chinese dialect of the region and the use of the abacus are stimulated by the employers. If such an energetic and dedicated shop-assistant finally wants to return to his village to establish his own shop the trader is nearly always willing to help him by giving advice and supplying part of the stock on credit. The mere wish to act as retailer for a number of village shops is not sufficient inducement to the Chinese trader to establish a credit relationship with anyone opening a business. Those shopkeepers-to-be who are not familiar with a trader from the

1 This may seem high, but an interest of 10% per month is not uncommon when these traders provide loans in cash.

bazar and are not trusted by him have to continuously reinvest, similar to those who establish a first pepper garden. The starting capital may be as low as a few hundred dollars, accumulated from sources such as the cash subsidies under the Rubber Planting Scheme, the sale of a herd of pigs, and the windfall profit from durians or illipenuts. A family member with a job, carrying a salary above the immediate level of living, also offers a good start.

The first stock is displayed in a part of the house fitted with racks, or a building especially constructed for the purpose. During evening hours when most people are present in the village the customers are awaited. An older family member who is unfit for work in the fields may open the shop during the day as well. Goods are bought from a trader at prices a little under the level at which the trader sells them to the public in the bazar. As an example: a small tin of mackerel, or sardine as all canned fish is called, which is sold in the bazar for M$0.30, costs M$0.28 wholesale. In the village the customers have to pay M$0.35 or 0.40, depending on the distance over which it had to be transported and the competition from others. Some shopkeepers in the bazar have rules as 'get twelve, pay eleven' for their wholesale dealings.

At first the stock comprises the most essential items and a few luxurious articles such as kerosene, dried fish, sugar, rice, tobacco, sweets and carbonated drinks. Turnover in these shops is often less than M$25.00 a week. If the shop is successful the range of goods will widen to include more sophisticated foodstuffs, dry-cell batteries, kitchen utensils and simple clothing. Hours of opening are also likely to be extended. When such a stage has been reached the merchant will show more enthusiasm, delivering the goods by his own transport, and not always insisting on cash payment but willing to wait until the next round of supply. In the next stage the village shopkeeper will start to buy agricultural produce in the village which is resold to the regular trader in the bazar. Though the village shops offer prices lower than in the bazar, they have the advantage of being present all the time, and they buy very small quantities of produce. Besides, a pepper grower who sells only a few pikuls (1 pikul = 100 kati = 60 kg = 133 lb) of pepper in the bazar will mostly not be able to obtain fertilizer for the next season on credit. The same amount sold in the village nearly always validates his claim for credit, because of the local shopkeeper's anxiety to win a customer, and because of the stricter supervision possible within the village.

Granting credit is a potential danger for most village shops. With no capital they can not replace their stocks. Once a shop is closed, it has little chance to recover the debts.

The larger the shop the more often the Chinese distributor from the bazar can be seen in it, delivering new supplies, but sometimes packing them onto racks, stocktaking, and selling an odd article to a customer. The latter activities create a good deal of confusion about the real nature of the relationship between the Bidayuh shopkeeper and his Chinese wholesale dealer. Is the latter only a rack jobber, regularly visiting one of his principle outlets? Or is the village shopman fully dependent on this merchant who pays him a salary as shop assistant, and compensation for use of the licence and the building, probably with a share in the profit? Because Chinese can not obtain licenses for shops in Bidayuh villages it is often thought that they hire a Bidayuh to act as figurehead. Some marry a Bidayuh girl and do business in her name. How often this happens, and what variation exists in the deals between trader and licensee is difficult to assess. However, in all cases the arrangement must be sufficient beneficiary to the Bidayuh, because otherwise, the license being in his name, he can simply order the trader to leave and try to negotiate a more profitable arrangement with another dealer.

The success of the village shops differs. Most of them do not reach beyond the phase of a tuck shop, providing their owners with some additional income. Some have to close after a short period. A few other shops expand rapidly, and their owners become engaged in other enterprises as well,

like pepper growing, raising broilers and pigs, and rice milling. The acquisition of a lorry or van, or where applicable an outboard engine, enables them to by-pass the traders in the nearest bazar and do the buying and selling where prices are most favourable.

Rice mills are simple machines powered by a small diesel engine. One can be found in nearly all villages to where the necessary fuel can easily be transported. The initial expenditure for a mill is about one thousand Malaysian dollars, accumulated in a similar way as the starting capital for a village shop. The mills, placed in a simple shed, offer a highly valued alternative for dehusking paddy by hand pounding. The service charge is normally in kind. The common rate is one chupak rice for a pasu paddy (1 pasu contains 8 gallons, 1 gallon contains 4 chupak). Because milling reduces the total volume of the grains offered by roughly fifty percent, this corresponds to one sixteenth of the original amount. If most of the paddy in a village is brought to the mill, the owner acquires 5% of the total production in a village. Most of this is sold to traders from outside, along with the rice bran to which the miller is also entitled.

For a Bidayuh it is not easy to be an entrepreneur among his own people. Customers easily make accusations of exploitation against shopkeepers who are their relatives and friends. On the same ground of familiarity they expect to be helped with loans and grants during times of hardship. The entrepreneurs can not afford to respond to all these requests, but again and again they stress that their enterprises relieve the village of inconveniences such as pounding paddy by hand, and the absence of shopping facilities in the immediate surroundings. Incomes are referred to as minimal, 'I am just trying to help my people' is a common statement. None of both parties is yet able to admit openly that also the professional services rendered by Bidayuh should bear a fair price.

Dealings with non-Bidayuh are far more easily conducted. No special grounds exist on which favourite treatment can be expected. Also it is generally accepted that the Chinese traders know and pay fair prices, which reduces the amount of bargaining.

The efficient way in which Chinese arrange their dealings is illustrated by the following case. One informant told me that if he needed piglets he used to ask his Chinese trader to buy some for him. Thus he saved a lot of trouble and the price which included the fee of the Chinese trader was not necessarily higher than he himself would have paid. Under such conditions it is difficult to establish the role of trader only, not influenced by other roles.

Besides the shopkeepers and rice millers more Bidayuh would like to engage in business. However their scarce resources and limited demand prevent them from doing so. They seize the opportunity offered by a school sports day or similar occasion when many people visit their village. Small stalls are set up where hard boiled eggs, slices of water melon, orange squash, and other snacks are sold.

12 Village organization

12.1 The headman

The people who nominally guide the inhabitants of a village and represent the village in dealings with outsiders are the headman and his deputy(ies). In former days the headman was known by the title of Orang Kaya (rich man), and assisted by a Pengarah, the supervisor and executor of communal activities, and a Penglima, originally the title of the chief warrior. These titles clearly indicate Malay (Brunei) influence, and I was unable to trace whether real Bidayuh equivalents of these positions and titles ever existed. Most probably the Orang Kaya and his assistants had little or no formal authority and acted as primus inter pares (Roberts, 1949). The establishment of European rule resulted in a village leader who acted as intermediary between Government and population as well. Thereupon headmen were Government appointed, after some consultation with the village population. It is doubtful whether at first those who were selected to become headman carried the greatest prestige and authority among the villagers. There is much reason to believe that often marginal men were appointed. Selected by the people not because of their dominating personality, but because of their capabilities to entertain official visitors, squeeze out of them as much assistance as possible, and to evade regulations and interferences that had not been requested. The headman's title was also changed, into Tua Kampong (village elder) or simply TK, and he received a uniform free of charge. The latter regulation was revoked under Colonial rule. When Independence came in 1963 the dual character of the position of TK emerged even more clearly. The British administrators feared the Sarawak United People's Party, which they thought to be influenced by communists. Therefore they advised the headmen to support the Alliance party (Leigh, 1971). This advice is still followed by many of them, though the constituent parties of the Alliance have changed since then. Not all Bidayuh appreciate the choice made by their leaders and conflicts have arisen, the headmen turning to officials from parties in the Government for moral support.

With the introduction of a political Government anxious to show the people their concern for rural development, for instance by granting minor rural development projects, the type of person appointed as headman again is changing. During Colonial times persons who could deal with administrators were the favourite choice. Since the formation of Malaysia, people who know how to deal with political leaders are more likely to be selected.

Still the actual selection is not an easy affair. Any adult man can be a candidate, but relatives of the previous headman, if liked by his people, have slight advantages. According to the Bidayuh the ideal candidate is honest, has patience, will never criticize his followers and preferably be rich to afford the expenses of his office, because at present a TK is not entitled to any official allowance. Because of the expenses involved many capable persons do not wish to be headman and try 'to pass the buck' if their name is proposed. Some villages have a fund from which costs of representation are met. In other places the headman is recompensed by his followers who contribute labour to his fields. No fixed rules exist about the recompensation, and it happens only once in a few years.

Before an appointment is made, the District Officer will seek the opinion of the villagers. Names can be brought up in a meeting, and if necessary the villagers can cast a secret vote by whispering the name of their favourite candidate to a Government official. Sometimes even persons elected in such a way try to refuse an appointment, excusing themselves for having little knowledge of the customs (adat), for the absence of sons who can take care of their fields when they are on duty, etc. Strong moral pressure is necessary to make them accept against the wish of themselves and of their household members.

I observed an example of the opposition by household members when a man finally accepted his appointment after long persuading by Government officials. In the middle of the village meeting his teenage daughter arose crying, hit her father on the back and reproached him saying that he should not have given in. The girl realized that for her household a period had started in which its head would not be able to devote all his time to earning an income, but instead would need money to carry out his official duties. Also, and probably more important to her, as daughter of a headman she would have to show exemplary behaviour, and be the object of the animosity that exists in Bidayuh villages around people who are not fully equal with the others.

Social control restrains headmen from behaving in a conspicuous way. Often a headman only reluctantly comes to the fore when a visiting official asks for him. Once a man outrightly denied that he was deputy headman, though I knew he was. Later on his children explained he thought it not right to show any pride in the title, because it might provoke others to harm him.

In his role, a headman acts rather passively towards his people. He knows that initiatives from his side which require him to guide and direct the others are not welcomed, even when it would be for the common good. Instead everybody thinks it more appropriate to obtain assistance from the Government for the improvement of the village. However, with no power at all in the bureaucracy a headman can only wait for the turn of his village to be granted a development project. Resentment grows around headmen who fail to obtain Government projects for their village. Because it is very difficult to find a replacement for the disappointing headman the villagers refrain from proposing new elections to the District Officer. The initial period of appointment for five years of nearly all headmen is quietly extended until their death or resignation because of old age, upon which a 'Long Service' medal is a common token of appreciation from the Government.

Besides a headman, one or more deputies are appointed. They replace the headman during absence, sickness or after his sudden death. Generally the runners up in an election are appointed as deputy, locally known as Committee.

Offices of Native Chief at levels higher than the village were established during the Brooke period (see Chapter 2). They mainly have served as a court of appeal against decisions of the village courts, in such a way freeing the District Officers from much work. Nowadays they are also expected to explain the Government's intention and policies. These chiefs draw a small salary in accordance with the number of people under their jurisdiction.

12.2 Informal leaders

Sometimes, besides the headman, the religious leaders, and the men regarded as specialists in the customary law, there are other men in a village who would like to be publicly recognized. Political parties and elections have provided them with a way to become important people. They try to establish a relationship with a politician and exploit it as a 'free-lance liaison officer' between villagers and the politician. During election time they campaign on behalf of the latter for a small salary, and

establish a party branch in their village. Except from fostering a common political identity among the villagers these branches have few functions. As representatives of their branches the political innovators visit party meetings at higher levels which offer the opportunity to improve the relation with State politicians. Public donations of a small sum to charities on behalf of their co-villagers is another method used to attract attention from the top level. The 'free-lance liaison officers' receive little respect from their fellow villagers, nevertheless the latter make use of their services whenever they think fit. An example is the village where people felt uneasy about the implementation of a project (case no 7 in Appendix IX). A man from a neighbouring village, living at the outer edge of its territory, and generally considered to be a boaster, advised them to seek the interference from a Cabinet member. At the village's expense he accompanied the headman and another representative to the State capital because of his claim to be familiar with the Minister.

Because of their eagerness to occupy official positions an increasing number of the 'free-lance liaison officers' enter the ranks of the village headmen. They are certainly effective in their dealings with the Government. It is doubtful, however, whether they will reach the same grade of perfection in their management of pure internal village affairs. The introduction of organizations like the Women's Institute, 4H clubs, cooperatives and irrigation schemes has created more positions of leadership than ever existed before in a Bidayuh village. Holding their position these new leaders face the same difficulties as headmen and religious leaders. Illustrations can be obtained from the cases of development projects and new organizations presented in Appendix IX.

12.3 The village court

Among the Bidayuh the village meeting is the legislature as well as the executive in internal matters. The judicature is with the village court consisting of the headman, his deputy and some other old and wise men with a profound knowledge of the customary law, like a previous headman. Though these men have to give their judgement after hearing the case, every adult man is free to attend the sessions and to make what remark he seems fit. The extent to which this right is exercised differs from village to village. In some places it is regarded as improper to enjoy oneself by listening to other people's quarrels. In case of a dispute, those who think they have been injured inform the headman about their complaints and ask him to arbitrate. If this interference is without success, a court session is organized. Though the accused party is informed beforehand, he does not always turn up at the time and place arranged. Messengers with more than average verbal skills are sent in such cases in order to persuade him. The party that refrains from attending does not automatically lose its case. Normally the session will be postponed for an indefinite period. Sessions of the village court are largely unconducted, the style being similar to that of village meetings. Talking continues as long as new facts of some relevance emerge. Part of the audience acts as witnesses, others as advocates. Both parties stress their point of view, sometimes half-way during a session a plaintiff has to assume the role of defendant. Finally the court gives its ruling with some reference to jurisprudence. Fines imposed are generally small, a few dollars, bowls or fowls to be paid to the one put in the right. Part of the fine is given to the headman who shares it with the other court members. Amounts of M$0.10–0.20 per person are not uncommon. I have the strong impression that fines larger than M$10.00 are never fully paid and therefore seldom imposed. The last installments are delayed till future periods of extreme prosperity and thus forgotten. The main function of a fine is to show publicly that someone did wrong, not to recompense fully the one who is entitled to it. When the court cannot rule because of lack of evidence both parties may be submitted to an ordeal to establish which one is in the right. A common type of ordeal is a diving competition between both par-

ties or their paid representatives. According to the traditional belief the water-spirits will do justice by enabling the man in the right to stay under water longest. In some Christian villages the headman prays to God for the correct outcome.

When a party is not satisfied with the ruling of a village court, he can appeal to a higher authority. The first step is the Orang Kaya Pemancha (OKP) under whose jurisdiction the village comes. Next steps are the Native Chief Court chaired by the District Chief; and the District Officer. New arguments may be added, but generally with little success. No appeals can be made after an ordeal which is regarded as final. Most cases brought before the village courts are private ones, regarding rights on land, petty theft, adultery, divorce, maltreatment of stepchildren, slander, and assessment of paternity. Public cases are rare. Once I noticed a few boys being convicted for spoiling the village's good reputation by their misbehaviour towards some visitors. In public they were knocked on their head by one of the men concerned with their moral well-being. Also they had to recompense the injured visitors, and pay a small fine to the church fund. Convictions of people not taking part in communal activities are unheard of.

The village court regulates the life of a Bidayuh only to a very limited extent. It is certainly not a deterrent and people are not really threatened by its rulings. The court's decisions depend on the way the case is presented, and if fines turn out to be heavy they are often ignored. Social control in the way of gossip is of much greater influence on people's behaviour. Still thick-skinned persons manage to persist in deviant behaviour without being barred from participation in community life. Examples are the kleptomaniac, the village champion in adultery, and the man who 'lost' an important part of the village fund. Sometimes they are even elected as members of the school committee or the irrigation scheme committee. The same attitude applies to girls who earn an income by soliciting members of the armed forces. The large majority of the Bidayuh regard it as improper conduct, and some will even tell them so outrightly. When such an advice is without effect the situation is left as it is. 'We have told them to change their life, but they don't want to listen. What else can be done?', is the only indication of regret. Women engaged in the oldest profession are by no means treated as outcasts.

12.4 Village meetings

Decisions on matters important to the village as a whole, or sub-groups such as the Women's Institute, 4H club, church, have to be taken by plenary meetings. Village meetings are held whenever the headman thinks there are topics to be discussed. He will inform some persons and by word of mouth the news spreads quickly. In ancient times the fear that beating a gong invites spirits was strong. Nowadays it is often done to call people together.

Generally meetings start late, no one wants to be the first to be present and have to wait for the others to turn up. This custom is not altered when Government servants visiting the village have expressed their desire to discuss certain subjects in a meeting. Regularly they are kept waiting for hours. Only adult men are present at village meetings, but the next day every interested person of both sexes knows most details of the discussion held the previous night. The meeting place is either part of the longhouse gallery or a communal building. Attendance varies, depending on the subject and the weather. Village meetings do not follow an agenda and are hardly directed by the headman, who is seldom seated in a central place. When most of the people have arrived he may introduce the subject to be discussed with a few words, summarizing the situation at present and sharing the information he has gained since the previous meeting. After that everbody is free to speak, and most

of the attendants will do so, not necessarily taking turns. The opinions of some persons carry greater weight than those of others, but the latter are hardly hampered by it. A few persons might have discussed the subject of the evening informally beforehand, but this hardly ever results in lobbies at the meeting itself. People ventilate their opinions rather timidly, softvoiced and always prepared to withdraw them if no one indicates to be of the same opinion. Sometimes an appeal is heard that everybody should state clearly what is in one's mind, because without any engagement no decision can be reached. The role of the headman in the discussions is that of a counsellor, helping the people to reach a decision. This is done by indicating new points of view, by reflecting over what has been said and by summarizing. If in the end opinions converge he will wind up by formulating the final decision. This is only done if the headman is assured that not only agreement is reached about a principle or future activity, but that also the actual implementation will have the active support of everybody. It is considered better not to make a final decision than make one which will create problems in future because not everybody sticks to it.

If in a meeting Government servants want the people to accept new organizations and regulations still alien to the village culture, they meet problems. They lack knowledge about positions and personal sentiments in the village. Secondly they allow their clients little time to become familiar with all details of the proposals. Thirdly the schemes and projects they offer can often not be altered to comply with the particular situation and wishes of each village. For example if it is stated that nothing can be done unless nearly everybody in a village is prepared to take part, successful implementation becomes unlikely, because there are always people who will not be benefitted by the new measures and therefore do not promise to take part. Often the Bidayuh themselves will stress unanimity, fearing social frictions between different camps, caused by increasing inequality. Especially the possibility that some might reap benefits from other people's efforts frustrates many proposals.

Under pressure of the situation, and the promise of many advantages, outside instigated plans might be accepted. However when it comes to the people playing their active part, difficulties arise and accusations of backwardness and uncooperativeness are easily made from the side of the change agents.

To illustrate this description of meetings conducted by Bidayuh, shortened translated recordings of two sessions are presented in Appendix XI. At the first adult men discussed the construction of a balai[1] which is the subject of the case presented in the last part of this chapter. At the second meeting, staff of the Department of Agriculture tried to motivate adolescent boys and girls to revive the 4H club in their village after a few years of dormancy.

12.5 Communal activities

Bidayuh are often said to be uncooperative amongst themselves, which in fact is unfair. They are willing to work together, but no one wants to make investments out of his very scarce resources until he is satisfied that he will be personally benefitted by it. Within the village there is no force, not even majority rule, which can make a man work for or contribute to a purpose which he does not share. The construction and repair of foot tracks are an example of the way Bidayuh interpret

1 Balai, also called baluh, are one of the few traditional communal properties. In English they are named headhouse because the skulls of enemies slain in previous days are stored in it. The name is somewhat misleading, these buildings were never erected for that purpose only.

cooperation. A group of people with fields in the same part of the village territory may start to improve the track leading in that direction. Every member of the group leaves it as soon as his field has been reached. The same principle applies to the residential area, only those using a path leading to the bathing place, for instance are responsible for its maintenance. Once I noticed a man complaining in the village meeting, that he alone had improved the path in front of his house, but now it was used by many villagers going to the chapel on Sunday morning.

Activities which would benefit most of all people in a village, but to a different extent, are difficult to organize. It would be unfair to ask an equal contribution from every inhabitant. But the villagers are not familiar with a situation in which contributions are levied according to the future benefits. A common example is the repair of project roads damaged by the four wheel drive vehicles of traders and other visitors. Villagers who have not yet entered the cash economy to such an extent that they will reap large benefits from dealing directly with outside traders reason that road maintenance is the responsibility of those who use it. But a local shopkeeper will argue that good accessibility enables him to offer a wide range of goods at moderate prices, which in turn benefits his customers. Sometimes a satisfactory solution is reached when at the end of a day working on the road communally the shopkeeper offers the workers a good meal. The same problem of unequal benefits exists with organizations such as a Women's Institute or 4H club. People interested in becoming a member after productive enterprises have been established are restrained by high entrance fees. Sometimes late converts to Christianity face the payment of a lump sum to the church fund. The Bidayuh regard such regulations as fair and do not question them. In one village I found parents reluctant to send their children to school in the neighbouring village, because they had not contributed their labour at the time of construction!

Because of the principle of reciprocity cooperation in groups is difficult. It becomes more complicated by the egalitarian attitude which contradicts the open guidance by leaders. The Bidayuh have leaders, but they receive little recognition and can not exert much influence. As a consequence the leaders never make proposals which will not receive full support of those concerned, and even when a certain activity is commonly agreed upon it is still difficult to select a day convenient to all participants. To allow people to work on different days creates problems of registration. If finally work has started there is no proper division of tasks, and lack of an overall plan means that activities are not fully adjusted to each other. The following case of a communal activity might clarify the conditions under which these occur.

In one village the balai (traditional community hall, annex sleeping place for bachelors), has not been in use for several years because it had become very ramshackle. A newly elected headman proposed to rebuild the balai on a somewhat smaller scale so most of the materials could be obtained from the dilapidated structure. The future size will certainly have contributed to the willingness with which the people received the proposal. In a meeting it was decided not to ask assistance from the Government because, as it was said, that would delay the construction by months, if not years. A place was agreed upon and one day representatives from most of the households turned up to assist in dismantling the old building and clearing the new site. A few weeks later a smaller group started to erect the posts. However, another part of the villagers working the next day decided that the posts were too high, and the whole building would take more wood than the village could afford to buy. The posts were pulled out, cut and replaced. To overcome the problems met in working with many people on one object it was proposed to have the construction completed by a small number of men with more than average skills as carpenters. The other households would contribute labour to their fields in return. Though the proposal was generally addressed as the 'wise plan' it was never followed, because of the disagreement of a few

persons with no special function or authority whatever. Probably the administration of the exchange of skilled for unskilled labour would have created more problems than would have been solved on the working place.

At first the village fund was used for acquiring materials. Roofing material was bought and placed on the erected framework. However, it was decided that the costs of more materials could not be met from the same source, which had been formed to meet the village's share of the costs in the construction of a waterpipe. For more than a year nothing happened because some people said they were too occupied with their own business. The circumstance that contributions in cash would be necessary for completion might have been the real motive. Activities on the balai were resumed when through mediation of the Mission, the village got permission to dismantle an old cinema in the District centre and to use the planks. A member of the State Cabinet who visited the village during a school sports day was pressed to intercede on their behalf for a grant from the Government to meet the costs of materials such as cement and windows. Finally, about four years after work had been started, the community hall was completed.

Other projects to be constructed in a similar way are a chapel, the forge to be used by every villager, improvements to a bathing place, a sport field, a fish pond, and a shed in which the travelling dresser can treat his patients. The repair and maintenance of communal properties is even more difficult to organize than their construction. If only a few persons are needed the selection of those expected to work on that particular day is problematic. Taking turns is a solution often proposed, but its proper administration is difficult to realize. Generally maintenance is undertaken by those who suffer most directly from a continuing situation of disrepair.

The description of communal activities does not imply that Bidayuh cannot cooperate quickly and spontaneously. There are occasions when no exact cost-benefit calculations are made like the vigilance installed under pressure of the regularly returning scare of head hunters, and groups of people searching for someone who did not return from the jungle. Other examples are the preparations for a festival, studying traditional dances, singing in a church choir or hunting groups. None of these activities, however, have a permanent character and they are not engaged upon because of the economic advantages to be derived from them.

In Appendix IX nine cases are presented of cooperative development projects and schemes and the organizations around these. The cases were recorded in the different villages that have been studied under this research project. They provide additional information about the establishment of relations between the Government and Bidayuh villages, the introduction and implementation of cooperative development projects, and the position of these projects in day to day village life.

13 Socio-economic structure of Bidayuh villages

In the previous chapters different aspects of Bidayuh villages like the kinship system, religious system, agricultural system, order and authority, land tenure and land use, have been dealt with separately. In this chapter I will show the interrelationships between these systems, and present an integrated overall picture.

13.1 Similarities and differences

The preceding chapters show that most inhabitants of a village are equals. Differences in origin, descendence, occupation, authority, possession of economic resources, are small. Often they are ignored and denied. The household is the basic unit of which a village is composed. Relations between households are fluid. Balanced reciprocity is the principle adhered to, no dependencies exist. Traditionally a person's success depended on his paddy harvests. Cumulation of wealth and its transfer to heirs were difficult. This explains the absence of economic stratification.

Geddes (1954a, pages 33 and 55) has commented on the structure of Bidayuh villages with the following phrases: 'There is democracy, but poor leadership. There is a large measure of equality of opportunity, but much personal insecurity resulting from the self-dependence to which persons, or at least households, are forced amid all the mischances of fate. There is a comparative freedom of factions, but poor cooperation.' Further on he continued 'The community is of value to all its members because of what it gives them. It is a social club, a land league, a reservoir of labour, a defensive alliance, and something of a Church. It is a society of democrats, self-ruling, with some of the vices of anarchy and the virtues of an absence of rank or class. It is only in some ways a mutual aid society, and it has a minimum of public utilities. It is not primitive communism, and could be a paradise of free enterprise if only the enterprise were as marked as freedom.' At present these features can still be recognized. However, in the last twenty years there have been alterations. Through contacts outside the village, individuals had the opportunity to acquire new ideas, knowledge and skills in the form of education, Christianity, cash crops, employment etc. Not everybody seized the opportunities offered at the same moment and to the same extent. Nowadays the traditional system of shifting cultivation does not provide sufficient food for the people's needs because of the increase in the number of people. The inhabitants adapt their agricultural methods but at a different pace. Consequently the equality among inhabitants of a village has ceased to exist, especially with regard to their economic position. The Bidayuh are not ready to admit that some of them are less equal than others. The traditional attitude to ignore differences still prevails. When the success of some persons becomes so obvious it cannot be ignored it is generally ascribed to luck. By pointing at a nonhuman force the egalitarian ideology is not much affected. No effective means of social control are available. There is much gossip about inhabitants who are able to increase their prosperity. But because relations between individuals and households are established and broken at the whim of those involved jealous remarks and actions can be evaded. The innovators

retreat to their own positions and lose interest in affairs and activities beyond the household level. Inequality in economic positions has an atomizing effect on the Bidayuh villages. Illustrations are: the decreasing interest in the exchange of labour, many households prefer to work with their own members only; unwillingness to work communally on the upkeep and improvement of the village; resentment towards shopkeepers. No new types of relationships based on this inequality, like the dyad between patron and client, have emerged yet.

The new Christian religion is generally not a strong integrating force, counteracting the economic differentiation. Often people chose Christianity because they expected it would free them from economic obligations connected with their traditional religion. Secondly the new religious leaders are unable to unite and guide their people. Much experience and wisdom are needed to help a group of Bidayuh to reach consensus, and to take actions in accordance with agreements made. The catechists and church elders are young people who lack these skills.

At present different categories of people can be recognized in a Bidayuh village. First I will describe the 'traditionals'. They are the older people, uneducated, generally adherent of the traditional religion. Their style of life bears little external influences, and they have not acquired many modern prestige goods. The 'traditionals' are mainly occupied with the production of hill paddy and participate in the exchange of labour. However, they do not always succeed in producing sufficient rice for home consumption. Their participation in village meetings and other communal activities is not different from that of others. Contacts outside the village are few. Empathy with other people, especially with those who rule their area and country is low. Finally the 'traditionals' look at their own position with pessimism. They consider themselves to be unlucky people, with little chance to escape fate. Headmen and religious functionaries belong to this category. However, they are different in the following aspects: they own relatively large pepper plantations and possess modern prestige goods. They also participate more actively in the village, playing an important role in the dissemination of knowledge by advising others.

The 'modernists', the second category of people, are in most aspects the opposite of the 'traditionals'. They are young, educated, Christians, and have accepted advice on the improvement of hygiene and nutrition. They spend much time in their pepper plantations and try to reach self-sufficiency in rice by concentrating on the cultivation of swamp paddy. Empathy is high. Also they have visited places outside their immediate surroundings. The 'modernists' consider themselves to be happy and lucky people. Leaders of new organizations like the cooperative society, paddy scheme, and school committee, are recruited from this category. However, the 'modernists' do not show a profound interest in their community, not even the leaders of the new organizations Also there are no intensive contacts between the members of the category of 'modernists'. Within the village they are a collection of individuals, not a subgroup. (The information obtained from the survey of households supports this categorization. For more details see Appendixes II–VI).

One of the rare occasions I saw a group of 'modernists' was at a party in my honour. A group of villagers had organized a farewell dinner. One of them mentioned they could afford it. A short written portrait of the men present, they were not accompanied by their wives, gives an impression of the similarities and dissimilarities in this elite group.

1. The principal organizer, son of the previous headman, the leading catechist, and the brains behind the shop of his family. He is a teacher in another village;

2, 3 and 4. His two brothers and one half-brother. Energetic men with sharp tongues. The half-brother had worked with a contractor in Kuching until he was hurt in an accident;

5. The present headman, owner of the rice mill and successful pepper plantations. He is a quiet personality, esteemed by his co-villagers;

6. Brother of the headman, also a quiet and diligent person. He has taken a loan to establish a properly laid out and good yielding pepper plantation;

7. The former deputy headman, the oldest person present. Was one of the first persons in the village who planted rubber extensively. Nowadays he tries his luck in the cultivation of pepper;

8. Another catechist, who has been active in the 4H club as well in Adult Education. He has worked as labourer in a nearby stone quarry;

9. The most successful pepper cultivator in the village, who established his plantations entirely on his own. The son of a spirit medium. Unlike the others present he has never bothered to become a Christian, but has become a 'free thinker';

10 and 11. Permanent labourers with the Public Works Department;

12. A young Chinese, working as a shop assistant for no 1, son of the wholesale dealer. Later he married the daughter of the present headman, and became the manager of a new shop, registered in the name of his father-in-law.

13.2 Dissemination of knowledge

At first sight a Bidayuh village seems to be an ideal communication system. Because of the labour exchange, the type of houses and the absence of stratification people meet each other frequently. Thus everything considered to be 'news' spreads quickly through the village. This situation is well realized by everyone and to preserve personal independence and not to become the object of public attention, people are very secretive about their intentions and ambitions, and refrain from making controversial statements. The few who have a superior knowledge about economic enterprises, of which pepper cultivation is the most common example, are reluctant to share this with others. The fear that neighbours might be able to improve their position more rapidly than they themselves is the reason behind it. However, not only those who possess information hamper its dissemination. Differences in knowledge like differences in wealth are purposely ignored by those who lack it. To turn to co-villagers for advice would enhance their public esteem, which is not wanted because of jealousy. Counsel given when it has not been asked for is seldom thought well of. It too disturbs the ideology of equality. Thus observation of others is the only way open to obtain information about their practices and knowledge.

In the survey of households I asked to whom people turned for advice about agriculture, trade, health, religion, politics and customary law. Also it was asked if knowledge about these subjects was shared with others. Less than one quarter of those interviewed admitted ever asking for advice on these six subjects. The number of people that said they had shared their knowledge was even smaller[1]. Except about customary law the majority of those who had asked for advice had turned to outsiders such as agricultural staff, dressers and missionaries. An important part of the people who themselves had sought for information had shared it with others. They also score high on the indexes of participation in village affairs, empathy and urban influences in style of living. Several of them belong to the traditional leaders. Leaders of the newly introduced organizations do not occupy key positions in the transmission of knowledge. Those who themselves had looked for advice were significantly younger, educated and had travelled outside their villages. The people who had communicated their knowledge to others possessed pepper and rubber plantations, scored high on the index of socio-economic status and had received assistance from the Government for their agricultural enterprises.

1 There certainly was underreport to these questions, which indicates that transmission of knowledge is not institutionalized and mainly happens unnoticed.

14 Survey results

14.1 Concepts, indicators and indexes

In the first chapter hypotheses were presented about what features of a village and what circumstances would influence the establishment of cooperative development projects. A thorough knowledge of the society in which the hypotheses would be put to a test was necessary to operationalize the concepts used in the hypotheses in indicators and items suitable for quantitative methods of research. The preceding chapters are a report of my familiarization with the culture and social structure of the Land Dayak, in particular the Bidayuh of the Upper Sadong District. They also describe the increasing efforts of the Governments of Sarawak and Malaysia to improve the welfare in the rural areas.

From personal investigations in the field, as well as from written sources, potential indicators of the different concepts used in the hypotheses were derived. A questionnaire was based on these indicators, and used to collect the data necessary to test the hypotheses. As described in Section 1.2, Research chronicle, in each village some inhabitants selected as representatives were interviewed. Afterwards the answers by the representatives of each village were compared, and a final answer for the whole village was compiled for each of the questions in the questionnaire. If the individual answers were not consistent a 'don't know' was scored. The number of categories of answers per question was standardized to three, where necessary by reduction of the original number of categories. If there was a continuum, two cutting points were selected so that three categories were created into which roughly equal numbers of villages were classified. When answers to the original question were dichotomous, the middle category was used for the answers 'uncertain', 'don't know' and 'not relevant'. The answers thus processed were called 'item'.

In the following ways the reliability and validity of the indicators was checked. The frequency with which 'don't know' was answered was used to check the reliability of the indicators. It was assumed that if the question for a certain indicator is clear and unambiguous, few respondents will have to answer with 'don't know'. Also the consistency will be high in the answers obtained from different respondents from one village, questioned about matters relating to their village. With the large majority of questions (about 90%) the frequency of answers in the category of answers 'don't know' was well below 5%, and it never exceeded 17%. In the additive indexes constructed finally six items remained according to which more than 5% of the villages included in the survey had been classified as 'don't know'. None of the indexes contained more than one of these items. Thus the result of the operationalization is fairly reliable.

The validity of the indicators was checked in two ways, substantively and structurally. To check the substantive validity the following method was used. Preliminary indexes were constructed from the answers obtained. For each of these indexes the villages that had been included in the survey were classified into three categories: high, medium and low, according to their score on these. Ungraded lists of the three groups of villages were given to sixteen people who knew the area well.

The judges[1] were asked to classify the groups of villages as high, medium or low, according to the concept that I had tried to operationalize[2]. Kendall's coefficient of concordance (Siegel, 1956) was applied to the classifications thus obtained from 16 judges. Concordance was significant at the 0.01 level for preliminary indexes: 'differentiation', 'orderliness', 'relative centrality', 'entrepreneurs', 'short-term projects', and 'long-term projects'. No concordance existed between the judges' opinions on the preliminary indexes 'homogeneity', 'integration', and 'strong village headman'. The structural tests used gave similar results with regard to the validity of the indexes. The last three preliminary indexes have been altered a great deal, as will be shown.

Structural tests on validity are based on the assumption that the majority of the indicators of a concept selected are adequate and conjunctive, and thus high correlations will exist between these. The indicators which do not associate very strongly with the majority are eliminated. However the empirical fact covered by the majority of the indicators does not become clear. No direct link is made between concept and indicators (Boesjes-Hommes, 1970).

For a first structural test on validity I calculated Kendall's rank correlation coefficient (τ) (Siegel, 1956) between the items based on the information obtained for the indicators of the same concept and the correlation between the score on each item and the total score on these groups of items. Where necessary the correlation coefficients were used for further testing with the methods of cluster analysis and principal component analysis[3]. In the selection of items according to their loadings on the different components the following rule of thumb has been used: items with a loading of 0.40 or higher on one component and 0.30 or lower on the other components are indicative of a (sub)concept[4]. However, this rule has not always been strictly adhered to.

In the process of checking on validity it was not only found that some of the indicators did not meet the standards set. Principal component analysis revealed that the groups of indicators of several concepts were far from homogeneous, probably due to ambiguity of the concepts used originally. New variables were formed from the clusters of items showing high consistency. Deviations of the original set-up of the research project have affected its character to a large extent. Because several concepts had to be modified after the checks on validity, the hypotheses concerned could not be tested in their original form. Instead the new subconcepts were substituted for the pluriform and general ones used at first. In this way the original hypotheses provided a structure for the analysis of the data. Other relationships between indicators of concepts, not specified in hypotheses, were also looked into. Some new concepts were added during fieldwork, like 'interlocks', 'assistance to individual households', and 'relative centrality'. The relationships between their indicators and those of the other concepts have been investigated as well.

Because the original research set-up had been altered and extended, the research project evolved from testing a theory by a ready set of hypotheses to the exploration of relationships between a

1 The group of judges consisted of missionaries, district agricultural staff, and primary school teachers. Some government staff were reluctant to act as a judge, because of a limited sojourn in the area concerned.

2 The idea to use this type of test was derived from Benvenuti (1961, page 81). He, however, had the group of judges (called key-persons) just describe in an all-round way two groups of extreme scores, without informing them about the scope of his research. In order to simplify and facilitate the contribution by the judges I asked for a ranking on a continuum provided.

3 The latter step is not fully justified if measurement does not reach the interval level. Still it can produce valuable results (Van den Ende, 1971, page 148).

4 In factor and principal component analysis loadings of 0·40 or more are considered to be high (Brand-Koolen, 1972).

number of social phenomena. Also the additional village studies enhanced the explorative character of the research project.

Now the different concepts, together with their indicators, as they were used initially and their subsequent modification will be discussed. Additive indexes corresponding to the concepts were constructed. In these indexes each item was given the same weight.

Much attention was paid to the operationalization of the concept 'integration' because it concerned the major hypothesis of the study. As discussed in Chapter 1 indicators of integration were differentiated in three categories. One comprises those indicative of actual integration, coordination of actions based on shared knowledge, sentiments and action tendency in relevant matters. The second category consists of preconditions to integration, homogeneity in matters of relevance. The last category contains the effects of integration, the results of previous coordination in activities. This differentiation of three categories is arbitrary and artificial to some extent. For instance it is possible that effects of integration in turn serve as preconditions. However, it proved to be of great use in the practice of processing and interpreting the information collected. Ten possible indicators (see Table 19) were found for the concept 'preconditions to integration', which could be investigated by the survey technique. They concern the ethnical, political, economical, religious and moral homogeneity of the inhabitants of a village. These different aspects of human life were all found to be matters of relevance to the population of small villages. Similarity in positions and convictions is essential to reach coordination in interactions, indicative of the concept 'actual integration'. The results of principal component analysis of the information collected about the possible indicators of 'preconditions to integration' are shown in Table 19. Items 1, 2, 4 and 7 had high

Table 19. Principal component analysis over ten items of indicators of 'preconditions to integration'. Three components.

'Preconditions to integration'	Components			Communality (%)
	I	II	III	
Absence of people of different ethnic groups married with a Bidayuh (13)[1]	0.56	0.33	−0.29	51
Absence of people of different ethnic groups not married with a Bidayuh (16)	0.58	−0.28	0.28	50
Religious homogeneity (51)	0.15	0.25	0.75	65
Political homogeneity (62)	0.59	−0.24	0.19	44
Absence of landless people (72)	0.21	0.36	−0.58	51
No divorce (227)	−0.16	0.67	0.32	57
Absence of people with a permanent occupation (237)	0.72	0.12	0.05	54
Absence of youngsters with secondary education (238)	0.43	0.39	−0.17	36
No theft (240)	−0.16	0.57	0.02	36
No prostitution (241)	−0.08	0.56	0.14	34
Eigenvalue	1.82	1.69	1.25	4.76
Variance accounted for	18%	17%	13%	48%

1. The numbers in brackets refer to the numbers of the questions in the questionnaire. See Appendix I.

loadings on the first component and comparatively low ones on the others. They reflect aspects of secular homogeneity and were therefore used for the construction of an index with that name. The same procedure was applied to the second component. Items 6, 9 and 10 have extreme loadings. These were combined to an index 'moral homogeneity'. Item 3, 'religious homogeneity' was selected for a single item index, even though a reversed version of item 5 'absence of landless people' has similar loadings. Religious homogeneity or heterogeneity in a village is such a dominating aspect that I preferred to work with this single indicator and not to use it together with another of less importance.

Modifications of the original concept 'preconditions to integration' resulted in three additive indexes:

– *Index 'secular homogeneity'*
items:

1. absence of people of different ethnic groups, married with a Bidayuh
2. absence of people of different ethnic groups, not married with a Bidayuh
4. political homogeneity
7. absence of people with a permanent occupation

– *Index 'moral homogeneity'*
items:

8. no divorce
9. no theft
10. no prostitution

– *Index 'religious homogeneity'*
item:

3. religious homogeneity

Indicators of the concept 'actual integration' should be related to the coordination in interactions between the inhabitants of a village. These interactions are essential to perpetuate the existence of the village as a unit, or contribute to the quality of community life.

Again principal component analysis was used as a structural test on the validity of the nineteen indicators selected for index construction. The results are shown in Table 20. A large number of the items (2, 5, 6, 7, 8, 10, 14 and 15) with extreme loadings on the first component reflect an ability of the village inhabitants to live with few conflicts, and to solve these quickly. The negative loadings of item 13 'penned pigs' is not in contradiction. Pigs left free to scavenge in a residential area indicate that inhabitants are not offended by the presence of each other's animals. Furthermore the group of items mentioned above together represent a type of integration prevalent in villages which have not been influenced from outside. The fact that regulations to fence pigs are often imposed from outside the village also explains why this item associates inversely with the others. Items 2, 5, 6, 7, 8, 10, 14 and 15 have been combined to an additive index labelled 'law and order'. Items 4 'high village meeting attendancy', 18 'goodwill village shop' and 19 'goodwill village rice mill', most pronounced in the second component, indicate an inclination to participation in village affairs and cooperation between inhabitants. They were grouped in a second index called 'goodwill and participation'.

No common identity could be established for items with their extreme loadings on the third component. The two constructed indexes are:

Table 20. Principal component analysis over 19 items of indicators of 'actual integration'. Three components.

'Actual integration'	Components			Communality
	I	II	III	(%)
Attending festivals of other religious group in village (52)[1]	0.06	−0.17	0.49	27
Village meeting about sites of new farms (70)	0.55	−0.09	0.48	54
No disputes about paddy fields (71)	0.30	0.33	0.09	21
High village meeting attendancy (73)	0.17	0.54	−0.49	56
Low frequency village meetings (74)	0.42	−0.03	0.10	19
Low attendancy at court sessions (75)	0.52	−0.28	0.22	39
Low frequency of court sessions (76)	0.36	0.10	−0.30	23
Ordeals practised (77)	0.40	−0.02	−0.08	17
No court cases referred to Native Chief (78)	0.32	0.34	−0.58	55
No court cases referred to District Officer (79)	0.51	0.05	0.32	37
Village fishpond (182)	0.13	−0.33	−0.19	17
Common trader (202)	0.30	−0.45	−0.35	41
Penned pigs (205)	−0.55	−0.13	0.09	33
No village fund (210)	0.48	0.15	0.26	32
No check on participation in communal activities (215, 216)	0.62	−0.04	−0.06	39
Assistance to the needy (229)	−0.16	−0.21	−0.36	20
Festive work parties (232)	−0.25	0.26	0.40	29
Goodwill village shop (262)	0.13	0.82	0.03	68
Goodwill village rice mill (263)	−0.31	0.49	0.35	46
Eigenvalue	2.76	2.01	1.95	6.72
Variance accounted for	15%	10%	10%	35%

1. The numbers in brackets refer to the numbers of the questions in the questionnaire. See Appendix I.

– *Index 'law and order'*
items:

2. village meeting about selection of new farm sites
5. low frequency village meetings
6. low attendancy at court sessions
7. low frequency sessions village court
8. ordeals practised
10. no court cases referred to District Officer
14. no village fund
15. no check on participation in communal activities.

– *Index 'goodwill and participation'*
items:

4. high number of attendants at village meetings
18. goodwill village shop
19. goodwill village rice mill

For the effects of integration, the third aspect of the concept, nine possible indicators were found. All are visible and relatively stable effects of concerted action between inhabitants of a village, either to safeguard the village from disruptions, or to improve the quality of life by extending the number of facilities.

As with the two other aspects of integration, preconditions, and actual integration, that have been dealt with, the indicators of effects of integration could not be brought together into one additive index. Principal component analysis showed the following clusters, see Table 21. Items 3, 4 and 9 with extreme loadings on the first component were brought together to form an index named 'unchanged village'. Items 5, 6 and 7, with extreme loadings on the second component formed the index 'communal properties'. Item 2 'offshoot(s) not recognized as an independent village' had similar loadings on the three components as the items included in the index 'communal properties'.

Table 21. Principal component analysis over 9 items of indicators of 'recent integration'. Three components.

'Recent integration'	Components			Communality
	I	II	III	(%)
No daughter villages have been formed recently (6)[1]	0.06	−0.06	−0.33	12
Offshoot(s) not recognized as independent village(s) (8)	0.03	0.55	−0.22	35
No alienation of land to Chinese agriculturalists (18)	−0.78	−0.07	−0.19	64
People of different religions not living separately (53)	−0.57	−0.19	0.27	43
Sport field (150)	0.01	0.54	−0.57	62
Building for religious purposes (57, 88)	−0.21	0.69	0.37	65
Communal forge (219)	−0.46	0.56	0.03	52
Other communal properties (221)	0.16	0.24	0.70	57
Few detached houses (observation 12)	−0.69	−0.26	−0.04	55
Eigenvalue	1.70	1.54	1.23	4.47
Variance accounted for	19%	17%	14%	50%

1. The numbers in brackets refer to the numbers of the questions in the questionnaire. See Appendix I.

However comparison of the Kendall rank correlation between the index and item, and the partial rank correlation coefficient when controlled on size of the village, shows that the association is mainly spurious (0.18 and 0.08). The larger villages in which communal properties are constructed are also liable to fission.

The additive indexes that have been developed are:

– *Index 'communal properties'*
items:

5. sportfield
6. building for religious purposes
7. communal forge

– *Index 'unchanged village'*
items:

3. no alienation of land to Chinese agriculturalists
4. people of different religions not living separately
9. few detached houses

At this stage it can be asked why principal component analysis has been done over the items of indicators of 'preconditions to integration', 'actual integration', and 'effects of integration' separately, and not over the 38 items together. The answer is that the differentiation was regarded as too valuable to be abandoned. Another, very practical reason was that the computer programme available could not process more than 30 items at a time, and loadings of each item on three components only would be produced.

The concept 'dynamic and accepted headman' was operationalized in the following way. Eleven indicators were selected, all indicative of the way the present headman was elected, and the extent to which he is still followed and cherished by the villagers. Again principal component analysis was used to reveal whether homogeneity existed among the eleven possible indicators. The results are shown in Table 22.

Two different types of village headman emerged. The first is the type of headman who assumed his role ten or more years ago, does not like his work (anymore), and whom the people want to get rid of. This type is indicated by items 4, 5, 7 and 9 that were grouped under an index 'tired leader' (the first three items had to be reversed).

Table 22. Principal component analysis over 11 items of indicators of an 'accepted and dynamic village headman'. Three components.

'Accepted and dynamic village headman'	Components			Communality (%)
	I	II	III	
Post not vacant at present (22)[1]	0.01	0.37	–0.30	22
Few election rounds (25)	0.33	0.49	–0.39	50
No refusals by elected persons (26)	0.48	0.55	0.33	65
Appreciation by present functionary (27)	–0.39	0.34	0.10	28
No ideas to dismiss present functionary (28)	–0.69	0.49	0.10	72
Many followers (30)	–0.54	0.56	0.27	67
Good chance to be re-elected (31)	–0.61	0.17	0.30	50
Few headmen since 1945 (36)	0.61	0,43	0.04	56
Few headmen since 1963 (37)	0.63	0.43	0.13	59
Reimbursement of travel expenses when on duty (38)	0.21	–0.26	0.70	60
Labour contributed to headman's fields by all villagers (39)	0.29	–0.11	0.54	39
Eigenvalue	2.52	1.83	1.34	5.69
Variance accounted for	23%	17%	12%	52%

1. The numbers in brackets refer to the numbers of the questions in the questionnaire. See Appendix I.

The second type is the headman elected without much trouble, and followed by the villagers. Indicators are items 2, 3 and 6. An index comprising of these items was called 'popular headman'.

Two items, 10 'reimbursement of travel expenses when on duty' and 11 'labour contributed to headman's fields by all villagers' had high loadings on the third component. Both items might give ground to a third index: recompensated representative. But because the first is likely to occur in villages where cash is used regularly, and the second is typical for isolated traditional villages, an index like the one mentioned will not be of practical use.

Item 1 'post not vacant at present' did not fit into the indexes constructed, and item 8 'few headmen since 1945' is superflous.

The two indexes are thus:

– *Index 'tired leader'*
items:

4. no appreciation of his function by present functionary
5. dismissal is discussed
7. no chance to be re-elected
9. in function since or already before 1963

– *Index 'popular headman'*
items:

2. only one election round
3. no other had refused the post before
6. high number of followers

Differentiation, or the diversity of meaning sectors in a village was measured by six indicators about the extent to which new ideas, practices and artifacts had been accepted in the village. Correlation coefficients between the six indicators of differentiation, and between each indicator and the sum of the indicators are shown in Table 23, which was used to investigate the validity of the indicators. According to this structural test on the validity of the indicators none of the items

Table 23. Kendall's rank correlation coefficients between scores on items of six indicators of 'differentiation', and between each item and the total score.

	1	2	3	4	5	6
1 Christianity (51)[1]						
2 Literacy (127)	0.10					
3 Family planning (145)	0.22	0.21				
4 Group trips to Kuching (172)	0.11	0.11	0.32			
5 Detached houses (observation 12)	0.22	0.09	0.39	0.29		
6 Vegetable gardens (observation 20)	0.14	0.03	0.09	0.22	0.18	
Sum of indicators	0.48	0.30	0.62	0.49	0.54	0.42

1. The numbers in brackets refer to the numbers of the questions in the questionnaire. See Appendix I.

had to be rejected. The additive index 'differentiation' thus consists of the following items:

– *Index 'differentiation'*
items:
1. substantial part of households adhere to Christianity
2. heads of households are literate
3. family planning practised in the village
4. group of villagers has made a trip to Kuching
5. substantial part of households living in detached houses
6. vegetable gardens in the village

The reverse of item 5, 'detached houses', was also used in the index 'unchanged village'. Hence the correlation coefficient between these two indexes is artificially high. However I did not make any hypothesis about this relationship.

Accessibility has been operationalized by four indicators. These indicators have been combined to an additive index at their face value. None of the usual structural tests on validity were done because the indicators developed did not necessarily have to associate, e.g. nearness of a bus stop, and a low expenditure on bus fare to the District Centre are independent of each other, but both facilitate a trip to the centre.
– *Index 'accessibility'*
items:
1. road into the village
2. distance to bus stop
3. bus fare to the nearest bazar
4. bus fare to District Centre

A single indicator, the number of households residing in a village, was used to operationalize the concept '*village size*'.
– *Index 'village size'*
item:
1. number of households

At their face value the four indicators of orderliness, all observations to be made by the interviewers, were combined under an additive index.

– *Index 'orderliness'*
items:
1. proper layout of the village
2. good condition of paths and bridges
3. central area in village
4. fresh and clean outlook of village

In the qualitative phase of the research it was found that the concept 'cooperative development projects' covered too wide a range of phenomena. It was thought that its operational value could be increased, if two more specific forms were derived from it. A division was made between cooperative development projects (and similar activities instigated from outside) which need only temporary active involvement of the villagers, and those which require active contributions over a

prolonged period.

Development activities to which the people have to contribute for a limited period only are mainly the construction of infrastructural facilities, like water supply, levelling of residential area, community hall etc. Exceptions are a farmers' tour organized by the Department of Agriculture, and a film show provided by the Malaysia Information Service. The results of principal component analysis of thirteen indicators are shown in Table 24. Items 1, 4, 7, 8, 9 and 10 have their highest loadings on the first component. They have been combined to an additive index called 'short-term projects'. Item 3 'school building' has an extremely high loading (0.80) on the second component compared with other items. Therefore it was decided to turn it into a single item index.

Table 24. Principal component analysis over 13 items of indicators of 'cooperative development projects', which need only temporary active involvement of the villagers. Three components.

'Cooperative development projects (short-term)'	Components			Communality
	I	II	III	(%)
Assistance in chapel construction (59)[1]	0.44	0.14	0.09	22
Community hall (91)	0.43	0.13	−0.53	49
School Building (118)	0.17	0.80	0.16	70
Water supply (132, 137)	0.46	0.14	0.13	25
Mother and child health clinic (141)	−0.01	−0.45	−0.56	51
Dispensary (142)	0.43	0.27	−0.62	64
Latrines (149)	0.55	−0.07	0.04	31
Levelling (151, 153)	0.54	−0.49	−0.19	57
Rubber processing centre (166)	0.50	−0.14	0.30	37
Farmers' tour (169)	0.57	−0.23	0.33	48
Film show by Malaysian Information Service (176)	0.26	0.30	−0.11	17
Assistance in construction village fish pond (179)	0.41	−0.11	0.35	30
Other projects (187)	0.06	0.39	−0.20	20
Eigenvalue	2.20	1.55	1.45	5.20
Variance accounted for	17%	12%	11%	40%

1. The numbers in brackets refer to the numbers of the questions in the questionnaire. See Appendix I.

Differences between the loadings on three components of the other items were not large enough to use these items for index construction. The two indexes developed are:

– *Index 'short-term projects'*
items:

1. assistance in chapel construction
4. water supply
7. latrines
8. levelling
9. rubber processing centre
10. farmers' tour

– *Index 'school building'*
item:

3. school building

Principal component analysis was helpful in checking the identity of the indicators of cooperative development projects and other activities instigated from outside, which require the active involvement of the villagers over a prolonged period. The results are shown in Table 25.

Table 25. Principal component analysis over items of indicators of 'cooperative development projects', which need the active involvement of villagers for a long period. Three components.

'Cooperative development projects (long-term)'	Components			Communality
	I	II	III	(%)
Party branch, with leaders (65)[1]	0.46	–0.29	0.28	33
Visitors to meetings of Bidayuh Association (69)	0.33	–0.27	–0.25	24
Supervised cooperative society (98)	0.04	–0.28	–0.56	39
Youth club (107)	0.44	0.21	0.23	29
Women's Institute with projects (109)	0.62	0.06	0.32	49
4H club with projects (109)	0.09	0.63	–0.31	50
Active school committee (126)	–0.12	0.30	0.14	12
Adult education (128, 130)	0.25	0.23	–0.51	37
Latrines (149)	0.67	–0.24	0.09	52
Assistance to Padi Planters Scheme (157)	0.34	0.44	0.45	52
Home economics course (165)	0.29	0.64	–0.34	62
Penned pigs (205)	0.64	–0.26	–0.41	64
Eigenvalue	2.00	1.55	1.48	5.04
Variance accounted for	17%	13%	12%	42%

1. The numbers in brackets refer to the numbers of the questions in the questionnaire. See Appendix I.

Three groups of items could be differentiated. The first consists of those with high loadings on the first component. Among it are the branches of voluntary organizations, which have been combined under an additive index. Two other items 'latrines' and 'penned pigs' have been omitted. The first was thought to be more appropriate under the index 'short-term projects'. Items with an extreme loading on the second component are related to activities by the Department of Agriculture. The items, 'supervised cooperative society' and 'adult education' have high loadings on the third component. Though their number is only two, they were not considered to be meaningless for this study, because both cover the original concept very adequately. One item, school committee, could not be classified.

The following three indexes have been formed according to the groups of items.

– *Index 'voluntary organizations'*
items:
1. branch of a political party
2. interest in the Bidayuh Association
3. youth club
4. Women's Institute

– *Index 'activities instigated by the Department of Agriculture'*
items:
1. 4H club
2. Assistance to Paddy Planters Scheme
3. course in home economics

– *Index 'long-term projects'*
items:
1. cooperative society
2. adult education class

With regard to the presence of Chinese in the village five indicators were selected. No structural test on their validity was used because the indicators are not necessarily interdependent.

– *Index 'presence of Chinese'*
items:
1. Chinese farmers married with a Bidayuh
2. Chinese farmers not married with a Bidayuh
3. land from the village territory alienated to Chinese agriculturalists
4. length of presence of Chinese in the village
5. non farming Chinese living in the village

Because item 3 is also used in the index 'unchanged village', no attention can be paid to the association between the two indexes in which it is included.

Another aspect of Bidayuh villages to be operationalized was the extent to which entrepreneurs had emerged. At their face value the items of five indicators have been combined to form an additive index.

– *Index 'entrepreneurial activities'*
items:
1. large scale pepper grower(s)
2. loan(s) from a statutory body
3. shop keeper(s)
4. rice miller(s)
5. owner(s) of productive means of transport

Up to here I have discussed the concepts used in the hypotheses presented in Section 1.1.6 and their indicators. However during the first qualitative part of the research project I realized that to add a few concepts about aspects of social reality as it was observed, would contribute to the understanding of the processes that occur in a village when the frequency of contacts with the larger society increases. They follow hereafter, with a description of the way they were operationalized.

The concept relative centrality was measured by the extent to which a village is recognized by

the State. Fifteen possible indicators were found, though several of these can also be indicative of other aspects of a village. Principal component analysis was used to establish the identity of the indicators, see Table 26.

Table 26. Principal component analysis over 15 items of indicators of 'relative centrality'. Three components.

'Relative centrality'	Components			Communality (%)
	I	II	III	
Inhabitant of the village is a political representative or Native Chief (50)[1]	0.39	0.47	0.20	41
Visit by missionary (51, 56)	0.39	–0.04	–0.17	18
No ordeals practised (77)	–0.45	0.39	0.12	37
Court cases referred to District Officer (79)	0.39	0.00	–0.03	16
Land adjudication (proposed) (80, 82)	0.36	–0.46	0.43	53
Film show by Malaysian Information Service (176)	0.08	0.61	0.38	52
Requests for development assistance (190)	0.73	0.23	0.09	60
Requests refused (190)	0.04	0.17	0.66	47
Influential person to promote requests (195, 197)	0.11	0.48	–0.39	39
Visit by District Officer (200)	0.47	0.47	0.14	46
Visit by representative of Local Authority (200)	–0.30	0.49	–0.05	34
Visit by staff of Department of Agriculture (200)	0.64	0.10	0.11	43
Visit by staff of Medical Department (200)	0.25	0.18	–0.51	35
Visit by Minister or high-ranking Government Officer (200)	0.32	0.08	0.13	12
Persons with permanent occupation (237)	0.57	–0.54	–0.16	64
Eigenvalue	2.56	2.07	1.34	5.97
Variance accounted for	17%	14%	9%	40%

1. The numbers in brackets refer to the numbers of the questions in the questionnaire. See Appendix I.

– *Index 'relative centrality'*
items:

2. visits of a missionary
7. number of requests for development assistance put forward
12. visits by staff of the Department of Agriculture
14. visits by high-ranking Government officers and members of the State Cabinet

The four items above remained after principal component analysis, all four have high loadings

on the first component. Items 15 'permanent occupations' and 4 'village court cases referred to the District Officer' were not included, because they were used in other indexes 'secular homogeneity' and 'law and order' respectively. Other items were excluded because of high loadings on another component besides or instead of the first. No common identity of the latter, as item 11 'visit by representative of Local Authority' or item 6 'film show by the Malaysian Information Service' could be assessed.

The following index was constructed for assistance to individual households, provided by (semi) official agencies.

– *Index 'assistance schemes for individual households'*

items:

1. assistance by the District Benevolent Committee to (an) inhabitant(s) of the village
2. high number of participants in the Rubber Planting Scheme
3. ex-trainee(s) from a Farmer's Training Centre

The extent to which inhabitants of a village hold positions in different spheres or organizations at the village level has been expressed in a number of interlocks (see Appendix VIII). These interlocks were: between traditional existing positions, and positions in newly established organizations (Ion); between traditional existing positions, and the group of entrepreneurs (Ioe); between positions in newly established organizations, and the group of entrepreneurs (Ine); between traditional existing positions, positions in newly established organizations, and the group of entrepreneurs in a village (Ione). The value of these interlocks that had been calculated for each of the villages have been used in the analysis of relationships between aspects of villages.

Now the theoretical concepts have been operationalized in items and indexes the time has come to investigate what kind of relationships exist between these variables.

14.2 Analysis of relationships

At first Kendall's rank correlation coefficients between all concepts operationalized were computed, and brought together in a matrix (see Appendix XII). During the construction of indexes very interesting discoveries were made about the concept 'integration'. I originally thought it could be operationalized by differentiating three aspects, preconditions to, actual, and effects of integration. However seven indexes finally emerged. For each aspect two indexes of different identity (in one case three) could be constructed. This contributed to the idea that possibly different types of integration exist. To investigate this possibility the seven indexes were analysed for clusters according to the method of McQuitty (Swanborn, 1971), see Table 27, and Figure 2. This analysis revealed a structure between the seven indexes, consisting of two loosely connected clusters of three indexes each, and one single index.

Two types of integration in villages are emerging. One is a situation where everything goes along traditionally satisfactory patterns. The second is based on deliberate decisions and actions of the inhabitants of the village. However it is still uncertain to which type the index 'communal properties' belongs. For more understanding of the two types of integration, and the identification of the nature of the index 'communal properties', the association between the seven indexes of aspects of integration and the indexes 'accessibility', 'differentiation' and 'orderliness' were considered, see Table 28. These three indexes were chosen because they are indicative of the contacts between a village and the wider society, and hence could help to differentiate between different types of in-

Table 27. Kendall's rank correlation coefficients between seven indexes of aspects of integration.

	1	2	3	4	5	6	7
1 Secular homogeneity	—	−0.06	0.09	0.34	0.21	0.33	0.05
2 Moral homogeneity	−0.06	—	0.17	−0.02	0.17	0.02	0.01
3 Religious homogeneity	0.09	0.17	—	−0.02	0.18	−0.02	0.01
4 Law and order	0.34	−0.02	−0.02	—	0.00	0.33	−0.11
5 Goodwill and participation	0.21	0.17	0.18	0.00	—	0.17	0.02
6 Unchanged village	0.33	0.02	−0.02	0.33	0.17	—	−0.02
7 Communal properties	0.05	0.01	0.01	−0.11	0.02	−0.02	—

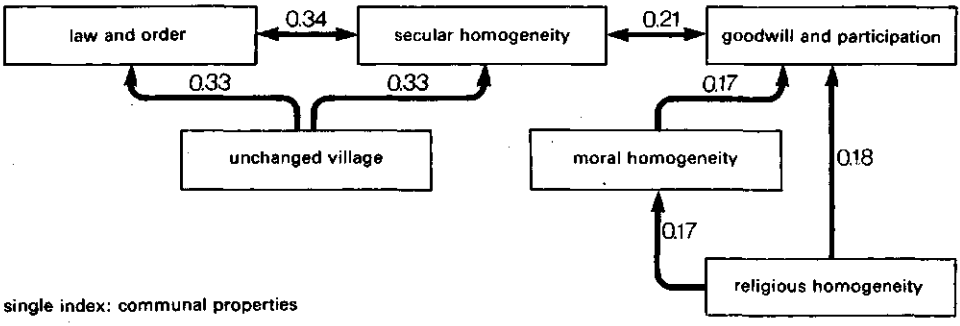


Fig. 2

tegration. From these correlation coefficients it becomes clear that the type of integration expressed in the indexes of Cluster I is incompatible with outside influences on the village, all coefficients are strongly negative. The alternative type of integration, as expressed in the indexes of Cluster II is comparatively less vulnerable to outside influences. Finally, the effects of integration as reflected by the single index 'communal properties', in contrast with the types of integration as covered by the two clusters, seems to thrive in villages subject to influences from outside.

Table 28. Kendall's rank correlation coefficients between seven indexes of aspects of integration, and the indexes 'accessibility', 'differentiation' and 'orderliness'.

Cluster I	*Accessibility*	*Differentiation*	Orderliness
secular homogeneity	−0.33	−0.24	−0.08
law and order	−0.34	−0.36	−0.18
unchanged village	−0.48	−0.42	−0.10
Cluster II			
moral homogeneity	−0.17	−0.05	−0.04
religious homogeneity	−0.05	−0.06	0.03
goodwill and participation	−0.29	−0.19	0.08
Single index: communal properties	−0.10	0.36	0.26

What can be said about these different types of integration and the relationships between them? The following tentative conclusions which supplement each other are presented. In Chapter 15 these are further elaborated on.

First, two different types of integration exist, as revealed by the existence of two clusters and the difference in association with three other variables, 'accessibility', 'differentiation' and 'orderliness'. The first type of integration, to be called 'habitual integration', ceases to exist as soon as a village becomes subject to outside influences. The other type, to be referred to as 'action-oriented integration', exists among villagers who try together to adjust to changing circumstances. The link between the indexes 'secular homogeneity' and 'goodwill and participation' in Figure 2 shows that 'action-oriented integration' has only a chance in villages with a homogeneous population.

Second, 'action-oriented integration' hardly ever exists for a long period. Increasing influences from outside the village diminishes it, as reflected by the associations in Table 28, which do not differ much from zero.

Finally, 'communal properties' are constructed during a period of 'action-oriented integration'. Because, as stated in the second tentative conclusion, 'action-oriented integration' is a very temporary situation, and the artifacts remain present for a long period, this conclusion can not be drawn from the correlation coefficients available.

The concept of integration has been sufficiently modified and broken down into subconcepts. Now we shall study its relationships with other variables. Further analysis of the data collected was mainly guided by the hypotheses that had been developed in Chapter 1. The original concept 'integration' was replaced by the derived concepts 'habitual integration' and 'action-oriented integration'. The index 'communal properties' was added to the latter group, because of the supposed similarity. The concept 'cooperative development projects' was operationalized by the five indexes constructed. Because the presence of cooperative development projects in a village reflects to a large extent its relative centrality (degree to which it is recognized by the larger system), the index of that name is presented together with the indexes of cooperative development projects in the different tables.

Besides Kendall's rank correlation coefficients between the different variables, the partial rank correlation coefficients derived from these have been calculated. In the tables they are presented between brackets[1]. The rank correlation coefficients should exceed ± 0.12 if it is to be concluded that a relationship exists between the variables, at a level of significance $\alpha = 0.05$[2]. No method has been developed yet to test the significance of Kendall's partial rank correlation coefficient.

1 In the calculation of the partial rank correlation coefficients it was controlled on the following variables: accessibility, presence of Chinese, differentiation, secular homogeneity, law and order, unchanged village, moral homogeneity, religious homogeneity, good will and participation, communal properties, tired leader, popular headman, interlock old positions/entrepreneurs, village size, and orderliness.

2

$$\tau = 1{\cdot}64 \left[\frac{2(2N+5)}{9N(N-1)} \right], N = 96$$

see Siegel (1956, page 221)

The first hypothesis was: in villages with a high degree of integration more cooperative development projects are implemented than in disintegrated villages. The associations presented in Tables 29 and 30 were investigated.

Table 29 shows that the hypothesized relationship between the type of integration, labelled 'habitual integration', and the presence of the different types of cooperative development projects is falsified. The table indicates that disintegrated villages have many cooperative development projects. The hypothesis was also falsified for 'action-oriented integration', the other type of integration that has been operationalized, and for the single index 'communal properties'. Most of the correlation coefficients in Table 30 differ too little from zero to conclude to a positive or negative relationship at the time the investigations were made.

Table 29. Kendall's rank correlation coefficients between indexes of 'habitual integration' and 'relative centrality' and 'cooperative development projects'. In brackets partial rank correlation coefficients.

	Habitual integration		
	secular homogeneity	law and order	unchanged village
Relative centrality	−0.30 (−0.09)	−0.37 (−0.20)	−0.34 (−0.08)
Cooperative development projects:			
short-term projects	−0.29 (−0.03)	−0.33 (−0.18)	−0.35 (−0.17)
school building	−0.06 (0.01)	−0.24 (−0.13)	−0.10 (−0.20)
voluntary organizations	−0.10 (0.10)	−0.29 (−0.14)	−0.32 (−0.13)
activities Dept of Agriculture	−0.26 (−0.22)	−0.09 (0.00)	−0.07 (0.03)
long-term projects	−0.05 (−0.10)	−0.10 (−0.09)	−0.05 (−0.10)

Table 30. Kendall's rank correlation coefficients between indexes of 'action-oriented integration' and 'relative centrality' and 'cooperative development projects'. In brackets partial rank correlation coefficients.

	Action-oriented integration			
	moral homogeneity	religious homogeneity	goodwill and participation	Communal properties
Relative centrality	−0.15 (−0.09)	−0.11 (−0.09)	0.00 (0.30)	0.11 (−0.13)
Cooperative development projects:				
short-term projects	−0.17 (−0.15)	−0.04 (−0.04)	−0.07 (0.08)	−0.17 (−0.32)
school building	−0.02 (0.00)	0.06 (0.09)	0.05 (0.03)	0.48 (0.25)
voluntary organizations	−0.11 (−0.02)	0.09 (0.17)	−0.08 (−0.03)	0.22 (0.06)
activities Dept of Agriculture	−0.16 (−0.14)	0.01 (0.04)	−0.04 (0.09)	−0.17 (−0.20)
long-term projects	−0.07 (−0.06)	0.07 (0.10)	0.08 (0.06)	0.12 (−0.06)

The second hypothesis was: in villages with an effective and accepted headman more cooperative development projects are implemented than in villages which lack such leadership.

Correlation coefficients between the index 'popular headman' and five variables of cooperative

development projects plus the variable 'relative centrality' are presented in Table 31. The index 'tired leader', and the interlock between traditional existing positions and the group of entrepreneurs in a village (Ioe), have been added as independent variables to compare the different types of leadership by their effects on the implementation of development projects. The figures shown in Table 31 indicate that no particular relationship exists between any index of cooperative development projects and the type of village headman at the time of the survey. Neither the index 'popular headman' which comes closest to the original concept used in the hypothesis (dynamic and accepted headman), nor the two other types of leadership that have been operationalized, show a significant association with cooperative development projects. It is likely that with the Bidayuh a headman is popular when he does not show too much initiative which will demand contributions by the villagers. A headman without initiative does not ask much from his people, neither will he foster the implementation of projects.

Table 31. Kendall's rank correlation coefficients between indexes of 'popular headman', 'tired leader' and 'interlock between old positions and entrepreneurs (Ioe)' and 'relative centrality' and 'cooperative development projects'. In brackets partial rank correlation coefficients.

	Popular headman	Tired leader	Ioe
Relative centrality	−0.10 (0.09)	−0.13 (−0.30)	0.21 (0.18)
Cooperative development projects:			
short-term projects	−0.13 (−0.08)	0.07 (0.11)	−0.01 (−0.11)
school building	−0.12 (−0.06)	0.08 (0.20)	0.04 (−0.22)
voluntary organizations	−0.11 (−0.05)	0.04 (0.10)	0.16 (0.03)
activities of Dept of Agriculture	0.03 (0.09)	0.09 (0.00)	0.06 (0.12)
long-term projects	−0.04 (0.09)	−0.13 (−0.11)	0.06 (−0.12)

The third hypothesis was: in villages with a high level of differentiation more cooperative development projects are implemented than in undifferentiated villages. Correlation coefficients between the index 'differentiation' and the five indexes of cooperative development projects, are presented in Table 32. This hypothesis is falisfied by the survey results for two indexes of cooperative development projects, 'activities instigated by the Department of Agriculture' and

Table 32. Kendall's rank correlation coefficients between indexes of 'differentiation' and 'relative centrality' and 'cooperative development project'. In brackets partial rank correlation coefficients.

	Differentiation
Relative centrality	0.41 (0.30)
Cooperative development projects:	
short-term projects	0.23 (0.06)
school building	0.30 (0.15)
voluntary organizations	0.38 (0.06)
activities Dept of Agriculture	0.03 (0.01)
long-term projects	0.09 (0.12)

'long-term projects'. For the other three indexes 'short-term projects', 'school building' and 'voluntary organizations', there is some confirmation for the investigated population of Bidayuh villages.

The fourth hypothesis was: in large villages more cooperative development projects are implemented than in small villages. The correlation coefficients to test this hypothesis are presented in Table 33. Hypothesis four is not falsified by the survey results, though the correlation coefficients between the variable village size and some indexes of cooperative development projects are very low.

Table 33. Kendall's rank correlation coefficients between indexes of 'village size' and 'relative centrality' and 'cooperative development projects'. In brackets partial rank correlation coefficients.

	Village size
Relative centrality	0.25 (0.15)
Cooperative development projects:	
short-term projects	0.12 (0.13)
school building	0.34 (0.25)
voluntary organizations	0.26 (0.18)
activities Dept of Agriculture	0.10 (0.13)
long-term projects	0.13 (0.13)

The fifth hypothesis was: in well accessible villages more cooperative development projects are implemented than in isolated villages. Correlation coefficients between the index 'accessibility', and the variables of the different types of cooperative development projects, plus the index 'relative centrality', are shown in Table 34. The short-term projects and voluntary organizations are clearly postively correlated with the accessibility of a village. The correlation coefficient between the indexes 'school building' and 'accessibility' is negative because villages close to bazars normally have to depend on these for schooling facilities. The survey results indicate that activities instigated by the Department of Agriculture and long-term projects are fairly independent of the accessibility of villages. Only with regard to short-term projects and voluntary organizations is there some confirmation for the investigated population of Bidayuh villages.

Table 34. Kendall's rank correlation coefficients between indexes of 'accessibility' and 'relative centrality' and 'cooperative development projects'. In brackets partial rank correlation coefficients.

	Accessibility
Relative centrality	0.37 (0.11)
Cooperative development projects:	
short-term projects	0.37 (0.08)
school building	−0.03 (−0.27)
voluntary organizations	0.32 (0.17)
activities Dept of Agriculture	0.13 (−0.07)
long-term projects	−0.03 (−0.12)

The sixth hypothesis was: the degree of integration of a village, and the presence of a dynamic and accepted headman, are reflected in the outlook of the village. To test this hypothesis the index 'orderliness' has been correlated with the seven indexes of aspects of integration, and the index 'popular headman'. For reasons of comparison with the latter, two variables have been added the index 'tired leader' and the interlock between the old positions in the village and the group of entrepreneurs (Ioe). The correlation coefficients are presented in Table 35. It is clear from the survey results that the two different types of integration, habitual and action oriented integration, have little relation with the outlook of the village. Neither have the two different types of headman, the popular headman and the tired leader. Thus the hypothesis is falsified. Remarkable is the positive association of orderliness with the interlock between old positions and the group of entrepreneurs in the village. A tentative conclusion is that if functionaries like headman and religious leader are capable to enter new economic enterprises, they are also concerned about the outlook of their village and manage to do something about it. The comparatively high association between the indexes 'orderliness' and 'communal properties' indicates that both reflect concern of the leaders and other inhabitants for the quality of their village.

Table 35. Kendall's rank correlation coefficients between indexes of 'orderliness' and integration and leadership.

	Orderliness
Habitual integration	
secular homogeneity	−0.08
law and order	−0.18
unchanged village	−0.10
Action-oriented integration	
moral homogeneity	−0.04
religious homogeneity	0.03
goodwill and participation	0.08
Communal properties	0.26
Popular headman	−0.18
Tired leader	−0.23
Interlock old functions/ entrepreneurs (Ioe)	0.27

The last hypothesis was: in villages where businessmen and market oriented agriculturalists of the Chinese population group in Sarawak can be easily met and observed, more Bidayuh entrepreneurs are present than in villages which lack such contacts. The index 'presence of Chinese', was correlated with the index 'entrepreneurial activities'. The Kendall rank correlation coefficient was only 0.03. This value is surprisingly low for a relationship which is commonly believed to exist. The reason could be that if the Chinese traders are very close, their competition is too strong for the Bidayuh. As a check the item 'large-scale pepper growers' from the index 'entrepreneurial activities' was correlated with the index 'presence of Chinese', because no direct competition exists between pepper cultivators. The Kendall rank correlation coefficient was 0.19, the partial correlation coefficient when the index 'accessibility' was kept constant, was 0.15. Hence, even for this activity, the popular belief as expressed in the hypothesis is hardly confirmed by the results from the survey.

Now the hypotheses have been put to a test, it is interesting to see to what extent the independent variables (indexes with regard to qualities, aspects and cimcumstances of the project receiving village) together explain the variance in the dependent variables (indexes with regard to the presence of cooperative development projects). Multiple correlation is a technique generally used to gain this understanding. In this case the group of independent variables numbered fifteen. In Table 36 it is shown how much of the variance in the seven dependent variables they account for.

Table 36. Multiple correlation between 'cooperative development projects', 'relative centrality', 'assistance for individual households', and fifteen independent variables.

	Short-term projects	School building	Voluntary organizations	Activities Dept Agriculture	Long-term projects	Relative centrality	Assistance schemes for individual households
Variance accounted for by 15 variables (%)	48	46	45	25	20	59	14
Variance accounted for by a reduced number of variables after backward elimination (%)	44	43	43	18	11	56	7
Reduced number of variables	5	8	7	3	1	8	1
Sign of regression coefficient of the variables remaining after backward elimination							
accessibility		−	+				
presence of Chinese						+	
differentiation		+	+			+	−
habitual integration							
secular homogeneity			+	−			
law and order	−		−			−	
unchanged village	−	−					
action-oriented integration							
moral homogeneity				−			
religious homogeneity			+				
goodwill and participation						+	
communal properties	−	+		−		−	
tired leader		+				−	
popular headman							
Ioe[1]		−				+	
village size	+	+	+			+	
orderliness	+	+	+		+		

1. Ioe = interlock between old positions and entrepreneurs.

Comparison between the columns in this table indicates for which types of cooperative development projects the set of independent variables used in this study was adequate. The indexes 'short-term projects', 'school building', and 'voluntary organizations' are fairly well covered, nearly half of their variance is accounted for. However, the forces behind the granting and implementation of the two other types of projects, 'activities instigated by the Department of Agriculture', and 'long-term projects' are still not clear. It could be that they are dependent on variables which have been overlooked in the first qualtiative phase of this study. But it is also possible that these two types of projects are more dependent on variables like integration which are difficult to measure by a one-time survey, because they are likely to change over time. More will be said about this topic in Chapter 15.

The two other indexes, 'relative centrality' and 'assistance schemes for individual households' give different results in the multiple correlation. The first is well covered with 59%, the second hardly (14%) by the independent variables. The difference in variance accounted for between the index 'assistance schemes for individual households' and the other dependent variables shows clearly that for the Bidayuh community projects can not be regarded to be similar to activities of the Government to develop the rural areas by means of stimulating individual households.

The calculation of the multiple correlation coefficients was followed by backward elimination of independent variables, with the aim to explain as much as possible of the variance in the dependent variables by a smaller number of the independent variables than was originally used. In each step of the elimination procedure the variable with the smallest t value (Student) of its regression coefficient was removed from the set of independent variables. The procedure stopped when each of the t values of the remaining variables exceeded 1.65 (corresponding with the 5% point in the standard normal distribution). In Table 36 it is shown that for the indexes 'relative centrality', 'short-term projects', 'school building' and 'voluntary organizations' the original number of fifteen independent variables could be reduced to eight, five, eight and seven respectively, without much loss in the percentage accounted for. The remaining variables have been marked according to the sign of their regression coefficients. An unmarked variable does not necessarily have low associations with the dependent variables. It is possible that it is so closely associated with one or more of the other independent variables that it has been suppressed by these. Thus the presence of different signs in a column requires more attention than the absence of a sign. Different signs indicate that a variable does not associate with each member of the group of the dependent variables in the same direction, it is a positive condition for one, a negative condition for another.

Keeping in mind the limits of multiple correlation I conclude the following about the results of this research project as shown in Table 36. The variance of the indexes 'short-term projects', 'voluntary organizations', 'school building' and 'relative centrality' is to a fair extent accounted for by the independent variables. Of these the indexes 'differentiation', 'law and order', 'unchanged village', 'village size' and 'orderliness' correlate with the dependent variables in a consistent way, and therefore are of general importance.

The extent to which integration in a village is a favourable condition to new communal activities is the core theme of this study. It is clear from the survey results that the type of integration operationalized as 'habitual integration' is incompatible with the presence of cooperative development projects. The role of the other type of integration, 'action-oriented integration', is more obscure. The data do not show any clear relationship with the cooperative development projects.

It has already been pointed at that a single survey does not give much scope for dynamic analysis, necessary to study aspects subject to change like integration. The limitation of this

research method is probably a reason why so little of the variance in the indexes 'activities instigated by the Department of Agriculture', and 'long-term projects', was accounted for by the independent variables. One is inclined to expect that especially for this type of projects, which require the active support and participation of the village population over an extended period, action-oriented integration among the inhabitants is a conditio sine qua non.

In the next chapter I will try to give a dynamic analysis of the different ways integration and cooperative development projects can mutually influence each other. This analysis is based on eight case studies besides the survey results.

15 Discussion and conclusion

15.1 Patterns of change

In this chapter I will analyse the patterns of change in the social structure of Bidayuh villages. Especially the role of integration and cooperative development projects will be assessed. The outcomes of the survey of villages provide a static picture of the situation that prevailed at the time of investigation. However in combination with the case studies of eight villages it is possible to present a more dynamic analysis. The villages studied intensively represented different phases in a process from habitual integration to disintegration.

15.1.1 From habitual integration to an amorphous structure

First *habitual integration* will be elaborated on, its occurrence, major characteristics, and the circumstances that cause its disappearance. The anthropological study by Geddes (1954a) shows an example of a village in habitual integration. Habitual integration still exists in a number of isolated Bidayuh villages. This type of integration does not imply that inhabitants of a village show a maximum of altruistic behaviour, or even that they cooperate frequently. Coordination in the actions of the villagers means little more than as much personal freedom as possible, while at the same time the positive aspects of living in company with other people are enjoyed. A good example is the system of labour exchange. Strictly balanced reciprocity guarantees every participating household the full use of the labour of its members. The work groups also offer sociability and security, and prevents life from becoming too monotonous.

Until recently resources of Bidayuh households were rather equal. Land was comparatively abundant, capital nearly absent, labour limited to the members of the household, and the traditional knowledge about the cultivation of paddy varied little from household to household. One of the consequences of the labour exchange was that roughly the same standard of cultivation was applied to the fields of the different households. Households which still managed to do things a little bit better than the rest, and acquired some prestige goods were regarded with jealousy. However, effective levelling mechansism were absent. A successful man could only be asked incidentally for assistance by another villager. These requests could easily be turned down, the excuse did not necessarily have to be valid. Generally the attitude prevailed that no one should be alienated from the village community, as this would create troubles. Traditionally all households contributed equally to communal activities. A refusal by some households to do so often frustrated these activities. Households which were in favour of a communal activity did not want the uncooperative members of their community to benefit from their sacrifices in resources. Jealousy of successful inhabitants in the economic sphere is not contradictory to the principle of personal freedom. Economic inequality which can not be traced to mere accident and luck is felt as an encroachment upon the dignity of those who have not yet been able to improve their economic posi-

tion. Earlier in this book I mentioned the preference for shopkeepers who belong to different communities. A possible increase in the welfare of outsiders can be ignored and considered to be of no relevance, but not that of neighbours and relatives.

Under habitual integration there are certain minimum conditions for the survival of a rural community. The prevention of, and rapid elimination of internal conflicts; protection of the community against anti-social behaviour of individuals such as theft and breach of communal taboos; and the erection and maintenance of a few public properties like the traditional community hall.

A Bidayuh village in habitual integration is a closed society, comprising individual households, living their independent, but rather uniform life. Life under the conditions of habitual integration follows a certain pattern and there is little need for consultation between the inhabitants because mostly everything is 'as usual'. It is a loosely structured, but integrated society, in accordance with the characteristics of a segmentary tribe as mentioned by Sahlins (1968), in particular those of forest agriculturalists in contact with a market which provides prestige goods.

The information obtained from the survey shows clearly that habitual integration is incompatible with external relationships, between individuals, or the village as an entirety, and persons or organizations outside the village. The last few decades the number of these relationships has increased manifold. Examples of external contacts are the penetration by the Christian Missions, education, elections and their campaigns, and the different development programmes aimed at the household and the village as a unit. Extensive programmes for the improvement of communication facilitated the opening up of the rural areas. Most of the different types of activities aimed at bringing change to the rural areas. But they also had consequences for the level and type of integration in the villages.

At the start of the period of intensified contacts with the larger society came the Korean crisis with in its wake extremely high prices for rubber and pepper. This circumstance has strongly influenced the changes in the pattern of life of the Bidayuh. The few Bidayuh who at that time possessed some productive rubber trees or pepper vines, often planted as mere trials, could satisfy their limited wants overnight. One kati of rubber was equivalent to ten katis of sugar. Even a spoonful of pepper could be marketed! More and more Bidayuh, the lucky few as well as those who were not benefitted by this windfall, became convinced that if they wanted to get a share in the welfare of the country, they would have to change their style of life. The existing feelings of inferiority to Europeans, Chinese, Malays and Iban had prepared them for this convinction. An indiscriminate drive for modernization started when the cultivation of cash crops became the best way to increased welfare. But also education, Christianity, detached houses etc. were seen as means to and reflectances of a better life. However, the high level of prices did not last for ever, nor were all experiments with cash crops successful. Quite a few households slid back into subsistence farming when the prices of rubber and pepper dropped. Only those with more than average diligence, skills and perseverence continued and reaped alternatingly small and larger profits. Inequality of a permanent character had been introduced to the Bidayuh villages. Then envy became permanently directed towards a limited number of people. The lack of effective levelling mechanisms permits a nearly unrestricted growth of the inequality, though the implied jealousy deteriorates friendly relations in the village. The still poor moan that though they too have become Christians, have sent their children to school, but for some unfortunate reason could not establish flourishing plantations of cash crops, they have not been able to improve their material welfare. The successful innovators try to keep apart from their discontended co-villagers. To be the object of envy, even when it is rather covert, is an unpleasant thing. They give little guidance to the other inhabitants. Besides, any active stimulation would be hardly appreciated and easily rebuked. It can not be said that Bidayuh villages

become strongly factionalized, because the innovators do not maintain close associations within their own category. The result is that the original structure of which equality was the essential feature, has changed for an amorphous situation.

The nature of the innovations also contributes to the decrease in contacts between the inhabitants of a village. With the cultivation of crops like rubber and pepper there is little scope for the formation of large work groups. If not all inhabitants of a village adhere to the same religion, festivals and ceremonies can not be celebrated on a village scale. The occupation of detached houses gives people less opportunity to meet each other frequently and accidentally compared with the longhouse gallery. Also new houses are often situated outside the original residential area, in plantations or alongside a nearby road. Men working as labourers with employers such as the Public Works Department have little time to devote to their villages, which become for them mere places to rest and to sleep.

The decreased interest in the village, and lack of participation in its activities by a number of capable men, and the fact that social control has proved to be ineffective in the economic sphere, has weakened the moral authority of the village community. The result is an increase in the number of deviations, generally considered to be amoral or anti-social, without the deviants being called to order.

Because of the opportunitities to increase ones welfare, possible by the higher extent of incorporation of the village in the wider society, the level of integration is less than before, and frequently there are signs of disintegration. Village life has ceased to follow smoothly the established patterns. There are fewer activities for which the villagers coordinate their actions. But also the mutual sympathy, and the desire to coordinate decline. Differences of opinion emerge which lead to discussion and sometimes conflict when a minority is not prepared to give in. It can be disputed whether the change in the social structure of the villages, and the loss of cosiness are to be regretted. The disappearance of habitual integration does not necessarily imply that villagers have lost the capacity to engage in communal activities. They still are able to cooperate, provided the proposed activities are in their common interest. If the advantages of and the contributions to a new activity to be embarked upon jointly are not traditionally known these will have to be discussed. This discussion can take a considerable time. In line with the traditional principle of equality among the inhabitants of a village the potential participants will try to reach a situation of similarity in cost benefit ratio to each of them. Often because this condition is not met the proposal does not become reality.

The process described, habitually integrated villages becoming increasingly disorganized under external influences, applies to all villages in the area studied. At present it is impossible to say whether this low level of integration will continue. But most probably a future higher level of integration will be characterized by inequality in positions.

15.1.2 A phase of action-oriented integration

A number of villages follows this course of the process described very closely. Other villages follow a different course; they experience an extra phase, intermediate to habitual integration and disintegration. Indications about this additional phase came from the cluster analysis over the seven indexes of integration, in which action-oriented integration emerged as a separate type of village integration. From the test of the first hypothesis, the assumed relationship between integration and cooperative development projects, it is known that presence of cooperative development projects is compatible with action-oriented integration. However the latter does not seem to be a condition for these projects. In a further exploration of the identity of the two clusters, it was con-

cluded that each represents a different type of integration. The correlation coefficients between the indexes 'accessibility', 'differentiation', 'orderliness' indicative of external contacts and the indexes comprising the cluster 'habitual integration' are clearly negative. But with action-oriented integration no particular relationship seems to exist, most of the correlation coefficients being close to zero (see Table 28). What indicates the difference in association?Here an interpretation is given which to a substantial extent is based on the case studies.

The two types of integration are not contradictory. Cluster analysis has shown that the indexes 'secular homogeneity' and 'goodwill and participation' formed the link between them. In Chapter 14 it has been tentatively concluded that action-oriented integration can only exist in villages where secular homogeneity is still present. Besides habitual integration contains some of the features of action-oriented integration, all inhabitants adhere to one religion (the traditional), and they participate together to safeguard the continued existence of their village. Both types of integration disappear when members of the village community start to enlarge their own personal welfare by making use of resources offered or activated by new external relations.

However, there are some villages where these two types of integration disappear at different rates. There habitual integration has ceased to exist, but action-oriented integration is flourishing, determining processes in the village. This situation occurs when people do not like or are unable, to adapt themselves *individually* to changing circumstances. They prefer to reach a concensus among at least a part of the inhabitants of a village before effectuating any major change. This attitude is very clear in the process of accepting Christianity. By conversion to the new externally introduced religion, individuals try to incorporate themselves into the larger society, in the hope to get admission to a higher standard of welfare than prevalent in their village. For an individual it may be difficult to breach the religious and ceremonial unity of its village, and to start a lone adventure, so he prefers to wait for allies and supporters. At the start of the process of change and adaptation to the external society, in the village of a spirit prevails like: 'we together will acquire our legitimate part of the good things of this earth'. This spirit is reflected in an urge to start communal activities such as construction of a chapel, a sportfield, improvement of the access track to the village etc. Also the outlook of the village is likely to change, longhouses being replaced by detached dwellings with neat tracks leading from one to another. Because of the spirit and the communal activities I think the adjective 'action-oriented' is proper for this type of integration.

However, the first rush of enthusiasm of the first hours does not last. In villages where the inhabitants together have made the first steps on the road to modernity, inequality emerges. Connected with the inequality between households are envy of the richer, and the disinterest of these for the village. Finally the village is in a similar situation of inequality and disintegration as described at the end of Section 15.1.1. Only the communal properties constructed remain as witnesses of a period that has passed by. Because the initial ideas of the villagers about the future were too optimistic, they experience feelings of discontent. They thought that they would improve their personal and communal welfare. However, the mere facts of being Christians, the presence of a school, sport field and new houses did not bring substantial material progress.

Neither did the novelty of cash crops bring fortunes to their owners. Seldom are the harvests of a good standard. Besides the prices for these products are low and show little inclination to rise, compared with those of foodstuffs and other essential commodities that have to be obtained for cash. Frustrations are high and can be read from the irritation towards the villagers who are slightly better off. People are very sensitive to the guidance given by village leaders, they regard it as criticism and tutelage. At the same time the leaders are often blamed for having done nothing for the development of the village, either by themselves or in cooperation with the Government.

15.1.3 Action-oriented integration reinforced by the Government

Not infrequently a village which is changing and adapting itself because of the information and possibilities offered externally, gets support from the Government in its endeavour toward modernization in the form of development projects and schemes. These villages follow a *third* pattern in the process of change in their social structure. The activities by the Government reinforce the enthusiasm already present. The first move towards a situation of action-oriented integration may even come from the Government. The first development worker, either a (Junior) Agricultural Assistant, Rural Health Supervisor, Home Demonstrator or else, to work in a village, has a great chance to be spontaneously regarded as the leader and guide of the village on its way to modernity, especially when he is interested in, and has a good understanding of the people he is dealing with. The attraction of something new, and the promise of Government aid, are important incentives for the villagers to implement communal projects proposed by the development worker. After completion these projects are generally opened officially by a VIP, with a standard eulogy on the traditional spirit of cooperation (gotong royong) and recommendations to continue in this way. But also in the villages where inhabitants and Government are together actively engaged, inequality and disintegration emerge after some course of time.

Why do the activities that initially are so flourishing come to an end? First implementing a project with Government aid has ceased to be a new thing. The participants know how much labour and other resources these projects require, and the benefits they can reap from them. The one time high expectations about development have been reduced to more realistic proportions. A road, community hall, bridge, water supply system or any other project does not improve the quality of life very much if it is not accompanied by a range of other activities. In the future the villagers will calculate more sharply the contributions they are required to make against the benefits they expect individually. Their decision to participate in the scheme will depend on this calculation. Not everybody profits from a road, has children of schooling age, needs piped water, or thinks the 4H club a useful organization. The same limitations as apply to internal communal activities are going to be felt; if not everybody is in favour of something, it is not likely that it will be implemented.

Another reason why villages which have received Government projects can be in the doldrums is withdrawal of Government attention. The range of projects to be granted becomes exhausted. Besides no village is likely to receive all types of project; other communities are also entitled to a share in the limited amounts of money and manpower available. But the transfer of the development worker—and Government staff is frequently transferred—often means the end of communal efforts to improve the village. When the first person who has induced and guided the villagers, and who has prevented serious disputes by his authority is absent, further attempts to engage in communal activities fail. Most of his tasks are now on the shoulders of committees of newly created organizations consisting of villagers which cannot handle these adequately. Especially the lack of somebody to assist them and protect them against criticism from other villagers is a serious handicap. Follow-up visits by another development worker have little effect in alleviating these difficulties. The time actually spent in the village is too short to go into detail and to offer real assistance. Furthermore because he has not accompanied the village right from the start his motivation will be low. Rather than trying the impossible, to revive the initial enthusiasm, he will turn to a still unaffected village.

Information about and assistance for the cultivation of cash crops will have reached the village at the same time as the projects. Opportunities for small-scale enterprises may have emerged, some

energetic men may have found a job outside the village. Inequality and disintegration will thwart communal activities, if all villagers are expected to contribute equally to these. So also at the end of the third pattern each person goes his own way.

15.1.4 Influence of a village leader cum entrepreneur

Why do some villages experience an additional phase of action-oriented integration in the process from habitual integration toward inequality and disintegration? In this phase the villagers work enthusiastically together on the development of their village. The existence of different patterns of change is not only indicated by the data of this research, but is also the experience of one of the missionaries. During his long stay in the area he noticed that in some villages the first people to show interest in the Christian religion experienced strong opposition from the other villagers, while in other places they were left in peace. But it was those communities where initial problems were the most severe whose inhabitants all became active and dedicated Christians (p.c. Father A. Mak). In these villages religion is an important element in the life of the inhabitants, around which they want to coordinate their actions. It can also be asked why in some places individuals enjoy great personal freedom, and in other villages much is done to control innovators until it becomes clear that they can not be suppressed and the other inhabitants join them. Or, from the point of view of the individual villager, why does he take the feelings and actions of his co-villagers into consideration, or not? It seems as if some villages in habitual integration have a conditional factor that keeps the villagers united.

Some of the case studies indicated that the presence of a *leader* with a certain type of personality could be the decisive factor. He is the type of man with capacities and resources which enable him to be among the first to grasp new opportunities for himself, but also with a strong responsibility for his village. He generally does not belong to the limited group of innovators, but to the group of early adopters, according to a classification of people by an adoption curve. Potentially these leaders are fit for the role of patron in patronage relationships. However, the strong egalitarian ideology that still exists prevents major developments in that direction.

The survey data support this view with regard to the role of some leaders. Table 37 gives the correlation coefficients between different types of leadership and the indexes of integration, together with the indexes 'differentiation', 'orderliness' and 'relative centrality'. The latter indexes are indicative of changes in the social structure in a village. In the analysis of this table it should be kept in mind that the score of a village on some indexes (e.g. 'law and order') can change almost overnight, while those on other indexes will be stable for a period of years. Correlation coefficients between the two types of variables will therefore be hard to interpret, often they differ little from zero.

Neither the tired headman, nor the popular headman seem to have much effect upon their villages, except in villages under a popular headman where morality and law and order are slightly stronger.

The interlocks which comprise the traditionally existing positions as well as the entrepreneurs (Ione, Ioe) show more extreme correlation coefficients, especially with the indexes indicative of communal activities and external relations. Thus people in traditionally accepted positions, with a keen eye for the possibilities to improve their own welfare, have a uniting and stimulating effect on their village. However, the case studies showed that this effect is only temporary. The more successful the capable people are in their economic enterprises, the more the animosity towards them will increase and the less effective they will be in guiding and stimulating the other villagers. At first the outward oriented leaders have a certain advantage over the other villagers

Table 37. Kendall's rank correlation coefficients between indexes of leadership and integration, 'differentiation', 'orderliness' and 'relative centrality'.

	Tired headman	Popular headman	Ione[1]	Ion[1]	Ioe[1]	Ine[1]
Habitual integration						
secular homogeneity	−0.04	−0.01	0.00	0.02	0.09	0.03
law and order	−0.08	0.12	−0.11	0.06	−0.04	−0.10
unchanged village	−0.01	0.03	0.04	0.07	0.09	0.01
Action-oriented integration						
moral homogeneity	0.04	0.21	−0.19	−0.10	−0.09	−0.20
religious homogeneity	0.09	0.05	0.15	0.07	0.08	0.12
participation and goodwill	0.04	−0.05	0.04	−0.05	0.09	0.08
communal properties	−0.10	−0.01	0.23	−0.04	0.24	0.23
Differentiation	−0.02	−0.06	0.20	0.02	0.17	0.21
Orderliness	−0.23	−0.18	0.15	0.03	0.27	0.06
Relative centrality	−0.13	−0.10	0.15	0.04	0.21	0.18

1. I = interlock; o = old functions; n = new functions; e = entrepreneurs.

because of their superior knowledge of and acquintance with the larger society. Gradually, when more people develop external contacts, the prestige inherent to the position of intermediary and informant disappears. Also leaders have less chance to manipulate because they lose their monopoly in information. The rather rapid shift from action-oriented integration into disintegration is reflected in the correlation coefficients in Table 36. Those between the interlock of traditional existing positions and entrepreneurs (Ioe) and the indexes 'communal properties', and 'orderliness', both products of past activities, are clearly positive. Correlation coefficients with 'religious homogeneity' and 'goodwill and participation' do not differ much from zero, the one with the third index of action-oriented integration, 'moral homogeneity', is already negative. An analysis by Fals Borda (1971, page 87) of some cooperative organizations in Latin America also shows the important role of 'pivotal men' during the period of initiation.

On the surface the pivotal man resembles his followers in background and physical appearance. But he differs from them because of his acquaintance with the outside world, range of reading and receptivity to mass media, proneness toward innovation and risk taking, and certain charismatic traits and talents suited to his leadership role. In course of time also the Latin American pivotal men become alienated from their followers. Fals Borda did not mention resentment and jealousy of the followers as causes of alienation. He mainly blamed the standards for measurement of success that prevail in the cultural setting of Latin America. These are exclusively personal, based on wealth and exploitation, and cause the pivotal men to become increasingly concerned with self-promotion, profit-making, and the establishment of patron–client relationships.

The importance of village leaders in the process of change and development in collaboration with the Government, was also noticed by Leighton et al. (1962) when they visited a number of Nigerian villages.

'Although limited to a few hours, these surveys allowed an opportunity for seeing many aspects

of a village. One of the most significant was the effectiveness, at least in this situation, of the formal political and social authority vested in the headman and his elders. There were marked differences among the communities, for instance, in the extent to which they had prepared themselves for this formal presentation to outsiders, although they had all been notified the previous day of our coming. Some communities moreover, had definite plans of action to suggest for health improvement and social welfare; some councils and headmen were excellent spokesmen for village interests; some had mobilized most of the population to be present for the visit and made formal gifts of appreciation for our coming. Other places, however, reacted with indifference or with obvious lack of leadership and authority on the part of the headman, and some with suspicion and caution in regard to strangers.'

Probably a phase of action-oriented integration starts with the presence of a headman, or another leader, with a clear understanding of the opportunities that external relations offer to the village as a whole as well as to him personally. However with this conclusion the number of research topics has not been reduced. The original question: Why do some habitually integrated villages experience a phase of action-oriented integration before they disintegrate, has been replaced by: why in a period of change have some village leaders with uniting capabilities? Is it just a matter of chance, or do some villages foster people with these capabilities and elect them to representative and leading positions. These questions can not be answered from the information

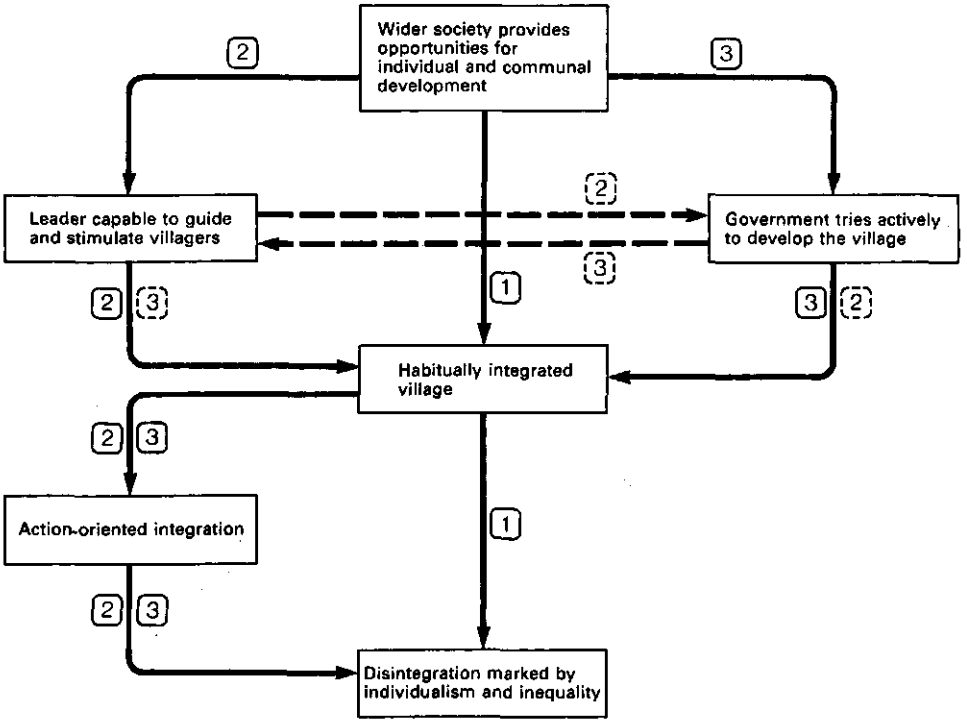


Fig. 3

available at present. Additional research is necessary to discover the true causes, which again are likely to be a matter of integration. Possibly these further investigations will also reveal the conditions which lead to engagement in the cooperative development projects on which the indexes 'long-term projects', and 'activities instigated by the Department of Agriculture' are based. The three different patterns of change that have been recognized, and the influence on these from people in which qualities of a leader and entrepreneur are combined, are given in a diagram, see Figure 3.

15.1.5 Case studies

During this research project case studies of eight villages were made. Summaries of the reports of three of them are presented as illustrations of the three different patterns in the process from habitual integration to disintegration.

Case I, illustration of the first pattern

The village Retuh, situated on the upper reaches of the Kayan river, is one of the few villages that is still completely dependent on transport by water. Originally all inhabitants lived along a small tributary to the Kayan river, where a traditional community hall on immense hardwood posts, and the remnants of longhouses are reminders of the glorious past. Acceptance of the Christian religion was the cause of fission. First a number of households who followed a youngster educated at a SDA mission-school were ousted by a fierce old headman. They built houses at the edges of the village territory. Regularly a paid mission worker comes to live with them and to guide them in religious and secular affairs. Not long afterwards, a RC missionary prayed for a boy who had seen his fate in a dream. Another group started to follow the RC principles. These Christians were also ordered to leave the old village. They built themselves detached dwellings and some small longhouses near the school built for the village by the Local Council at the confluence of two principal rivers. Among the first Roman Catholics were several of the present important men in the village, two shopkeepers, one of them the father of the headmaster, and the deputy headman. Also the villager that had been appointed as Orang Kaya Pemancha, Native Chief over his own and some neighbouring villages joined the RC denomination. Since the headman who ousted the Christians has died relations between the different groups have improved; some of the Christians returned to the old village, one of them to open a shop. It took a long time to elect a new headman. Finally one man living in the new part of the village was persuaded to accept the position. He is comparatively rich because of a pepper plantation that was established by a Chinese son-in-law, who however has left the village. The presence of the Native Chief frustrates the headman in his work. The Native Chief refuses to give his opinion until the headman declares a court case beyond his capabilities. At the same time he criticises the headman for not knowing the customary laws.

The economic base of the village is weak. Due to exhaustion of the soil the yields of hill paddy have decreased considerably. There is little land suitable for the cultivation of wet paddy. The Government has started work on a large irrigation scheme on land to which the village together with another is lawfully entitled. However, the area is difficult to reach, so that nobody is interested in the scheme. The villagers either have to take a long walk through the jungle, or use a boat followed by a bus trip. For an important part of the year the villagers have to rely on rice bought from the shops. The investments by the headman in a rice mill have not brought him much profit. A few households, those of the Native Chief, headman and shopkeepers, have flourishing pepper plantations. The 'trials' of the other inhabitants produce little income. Though many households own rubber plantations they are not inclined to tap these. Tapping rubber when prices are not at least

M$0.60 to 0.70 a kati (at the time of this study it was M$0.35) is regarded as shameful, something done only by very poor people. It is possible to earn some cash by working as a boatman with Chinese traders who transport goods upriver, and have little godowns in the village. Generally there are more applicants than can be employed, and consequently there is competition, but very covertly, for these jobs.

From time to time the village is visited by staff of the Department of Agriculture, two Home Demonstrators (HD) and a Junior Agricultural Assistant (JAA). The HDs teach the women to grow vegetables, new methods of cooking, hygienic measures etc. The JAA guides the men in the construction of a fish pond. The villagers respond well to these activities, but show little initiative. When heavy rain destroyed the dam in the stream for the fish pond everybody waited for the JAA to decide how it should be repaired. At the request of the JAA the men in the Catholic part of the village have built two boats. However, they can not decide what to do with the lump sum of money they were paid. Some of the richer men proposed to buy brass gongs for it, in order to enable the village to celebrate the harvest festival and Christmas in the proper Bidayuh style. The others prefer to have it divided among the workers.

The population of Retuh is adapting itself to a changing world, but not in a confident way. Not even the Christian religion, which has caused serious problems and fission of the village, is regarded as something positive which can bring a new spirit to the community. Instead Christianity is treated as something inevitable, to which one has to give in, sooner or later, in order to survive admist modernisms such as District Officers, election campaigns, outboard engines, and cash crops. But the majority of the population, Christians and followers of the traditional religion, would prefer to return to the idealized quiet peaceful times of before, when everybody was living in the longhouse, paddy was plentiful and the ceremonies properly observed.

Case II, illustration of the second pattern

The village Empaneg was founded about two decades ago by a group of Christians expelled from the village Koran. The residential area of the now forty households is rather isolated. Because it is not situated along a stream, it experiences grave difficulties with its water supply. The village has a chapel, a traditional community hall, and a bamboo pipe which brings water to the village centre during the wet season. The daily pattern of life in Empaneg is not much different from the one the people followed before they accepted Christianity. Paddy is the principal crop. The people began to cultivate cash crops only recently, and on a limited scale.

The village Empaneg is a cosy community, where every opportunity for a party or gathering is welcomed. The centre of village life is the community hall, close to the shop and the end of the bamboo water pipe. This central area in the village is regularly cleaned by the youngsters. The community hall is used for meetings about religious matters, the school and other village affairs. It is also the place for informal contacts when daily work is over. The bachelors use the attic as a dormitory. After the completion of their permanent houses and the few communal properties, the villagers seem to have lost their energy. They know that their standard of living, individually and collectively, could be improved, but the comparative isolation of the village enables them to ignore this fact. Besides they are always ready with arguments such as lack of knowledge, capital, suitable land, and markets. Until now the Government has paid little attention to Empaneg. A large primary school is situated near the mother village Koran, and the inhabitants of Empaneg are expected to share in this, and other facilities. It is difficult to trace what type of leaders the village had during the first period after its foundation. The present headman and his deputy have no authority. There have been plans to dismiss both functionaries. The katechist, and an ex-primary

school teacher, who acts as secretary of the village give some guidance to the villagers. One person does not share in the general apathy. He is the owner of a well-stocked shop, has extensive pepper plantations, and makes use of an outboard engine to reach the bazar over the nearest river. Initiative and diligence are at the basis of his wealth. The shopkeeper assists his co-villagers in various ways, by advising them, allowing them to buy certain goods like fertilizer on credit and by providing them with employment when they are short of cash. He also plays an important role in village activities, like the organization of a festival, or the cleaning of the residential area. He coordinates the actions of the different participants and takes care that the necessary implements are available in time. He is very careful never to boast about his wealth so that he is able to remain an influential informal leader.

It is doubtful whether the close-knit community of Empaneg can continue to exist as it is at present. There is not much inequality in the village as yet. The majority of the inhabitants regard development positively but wait passively for it to come. A slowly increasing number of households have begun to devote more time to the cultivation of pepper and therefore live in huts in their plantations for prolonged periods. Absentism of this type can have effects on the level of integration.

Case III, illustration of the third pattern

Construction of the feeder road to the sub-District Centre Tebakang just before World War II improved the accessibility of the village Daso. Since then the villagers have constantly improved the one mile long track to the feeder road, so that finally it could be managed by four wheel drive vehicles. After the war children and also older people of Daso started to attend classes in the different temporary primary schools erected along the feeder road. The first real moves to change in the village came from a number of young men who had returned from the upper primary school in the Mission Centre. At first opposition to their proposals, and especially the Christian religion, was stiff. But after some years one of them was able to convince his father, the headman and one of the leading religious functionaries, about the advantages of the new religion. Within a short time most inhabitants had followed their lead.

During the period of religious change, the village was visited by a male and female staff member of the Department of Agriculture. They introduced the Rubber Planting Scheme, and taught the villagers a large number of subjects, which were all enthusiastically received. The original development worker who was transferred many years ago is still remembered as the best the villagers had ever met. He in turn told me he had considerable backing from the headman who continuously motivated and stimulated his villagers to accept the new methods propagated. The population actively took part in the improvement of the village. The existing twenty acre communal fishpond was improved; an attempt was made to construct a wet paddy scheme, which failed due to difficulties in the terrain; latrines were constructed. Also new organizations were formed, like a 4H club, a Women's Institute and an adult education class, under continuous stimulation of the headman and his son. In the meantime the latter had become the principal catechist in the village and organized the construction of a chapel for Sunday church services. After a number of years the initial enthusiasm cooled down. The people became tired of repeatedly being called upon for communal projects. Also the frequent unwelcome advice, about improvement of the individual standard of living, to which the headman's sons with their shop and pepper plantations served as a nearby example, became hard to tolerate. When the headman resigned because of old age, a successor was selected with more than average wealth, derived from a rice mill and pepper plantations, but without the sharp tongue characteristic for the family of the outgoing headman. Expectations are high that the new headman will be able to obtain support from the Government for some long awaited projects,

levelling of the residential area and piped water. Though the new headman is popular with his people some internal activities proposed by him, like repair of the road leading to the village, and reconstruction of the community hall, have not been outright successes because not everybody thought it necessary to cooperate. There is a similar lack of interest for village meetings, where sometimes only a minor part of the seventy households is represented.

15.2 Comparison with other societies

The present socio-economic structure of most Bidayuh villages is not unique. Van de Belt (1972) compared a large number of monographies of peasant societies, nearly all situated in the Indonesian archipelago. He stated that communities of shifting cultivators disintegrate almost automatically when the inhabitants have the opportunity to generate a surplus that can be traded for cash (Long, 1968; Cooley, 1967; Cunningham, 1967; Goethals, 1967; Hudson & Hudson, 1967; Singarimbun, 1967; Oosterwal, 1967). A contrast is shown by villages where irrigated paddy is the major crop. The amount of land is limited, but evenly divided among the inhabitants (Boedhisantoso, 1967; Bachtiar, 1967; Koentjaraningat, 1967b; Geertz, 1967; Palmer, 1967). In these the innovators meet stiff opposition from the other inhabitants. Under pressure the innovators form a group within the village, with a 'sub-culture of innovators'. According to Van de Belt the difference between the villages of shifting cultivators and of cultivators of irrigated paddy is due to their means of social control. With shifting cultivators these are immaterial (gossip, social isolation, mockery, vengeance by the spirits). However, in villages where land is a limited resource sanctions on deviation are also directed at the production capacity of the individual. For instance the threat to be cut off from irrigation water is a major force to restrict upstarts.

Van de Belt's conclusion that the system of social control mainly determines the change in social structure, is in agreement with my findings. The pattern of change in a Bidayuh village depends on the strength of the wish (or necessity) of villagers to keep in line with the other inhabitants. Moral control by a traditional leader with entrepreneurial qualities can activate the villagers as a group.

15.3 Theoretical relevance of the research project

Can habitually integrated rural communities change into societies with a complex type of integration spontaneously and within a short period? From the results of my study among the Bidayuh this question must be answered negatively. This conclusion is in agreement with the findings of Wolf (1966) who wrote that multistranded corporate communities have to be broken open. Bailey has similar views according to his statement 'it is only when people have been shaken out of the net of community relationships, that they begin to perceive the possibilities of forming associations' (1971b, page 298). The results of my research confirm Young's (1966, 1970) hypothesis about subsystems with a low degree of differentiation (see Chapter 1). If the relative centrality of these subsystems is increased, they become less solidaric. On a smaller scale the villages who pass through the intermediary phase of action-oriented integration confirm one of his other hypotheses: a solidarity movement develops in subsystems of which the relative centrality lags behind the level of differentiation.

In Bidayuh villages solidarity movements never last. The lag between the degree of differentiation and relative centrality is not large. A little attention from the side of the Government can restore the balance or even tip the scales in the other direction. When the level of differentiation in a village increases the villagers start to feel relatively deprived of amenities other citizens already

have. In Sarawak, as in other parts of Malaysia, there is a whole bureaucratic organization where requests can be filed for a share in the welfare the Government is distributing. A first request from a village is likely to be granted, and when implemented the balance between differentiation and relative centrality is restored. The period of solidarity in the village, in which the formulation of a request for assistance was one of the few activities, comes to an end.

The conclusion from this analysis is that incorporating systems never can make continual use of solidarity movements in their activities to develop the subsystems. As soon as development organizations have established a relationship with a village the internal solidarity fades away.

As has already been indicated in the first chapter, the findings of this research project correspond with the ideas of Galjart (1973) about the different types of solidarity a cooperative organization needs during the various phases of its existence. In Bidayuh villages the dual character of a cooperative organization becomes pronounced. At first mechanic solidarity is necessary. The sacrifice of resources for a common purpose, is based on the awareness of similarity in positions. The members decide and work together. Afterwards when a bureaucracy has been established which operates with certain routines the organization works for its members rather independently. The influence of the members on its activities and decisions is reduced considerably. Only when called upon are they required to participate in certain prescribed ways, like attending the annual meeting, payment of membership fees etc. The complexity of the organization and the society in which it operates has increased. The members who once actively contributed to the establishment of their organization are now required not to interfere in its day to day activities and not to feel resentment about their decreased influence. They should show organic solidarity, the sacrifice of satisfaction because of the continuation of the joint social system.

In rather primitive societies it may be easy to show the people their similarity in position, especially under the pressure of absolute or relative deprivation. Initial enthusiasm for a cooperative organization is the result. However, unacquaintedness with division of labour and responsibilities is an obstacle to the continuation of their support to the organization once it has become bureaucratized. A way to circumvent this obstacle is a topic in the following and last chapter.

16 Practical relevance of this research project

In what way can those who plan and implement policies for the development of tribal rural communities make use of the results of this study? Some general lines will be indicated. Matters of detail, only relevant to the situation in Sarawak have been dealt with in an earlier report (Grijpstra, unpublished, 1972).

The inhabitants of a tribal village, used to a situation of balanced reciprocity, experience difficulties with new communal activities whose benefits are not necessarily in relation to individual contributions. It is of no use for development workers to make appeals to the public to show altruistic behaviour, by sacrificing part of their resources for the welfare of the neighbours. When complexity increases balanced reciprocity gives way to negative reciprocity but does not regress to general reciprocity (see Section 1.1). It is much better to design flexible projects which allow for contributions to vary according to the benefits a participant is likely to receive. Development workers should also be aware of allowing too great inequality to develop suddenly in a village, because the distrust connected with it negatively affects the willingness to cooperate in communal activities. Inequality could be counteracted by paying special attention to those inhabitants of a village who for one or another reason are unable to effect certain desirable changes in their agricultural system.

It can be expected that in the future the villager's extreme concern about equality in benefits will lessen. The advantages for each individual will remain as the sole criterion in the decision to participate or not. In order to work towards this desirable situation it is recommended that all cooperative development projects offered by the Government are of clearly distinguishable and substantial advantage to the participants. Individual profit and improvement in the personal standard of living, must become the driving forces towards cooperation.

A second point for discussion concerns the period of action-oriented integration which appears in a number of villages. This type of integration positively affects the implementation of a first village development project. However, there have been no deliberate attempts by the development organizations to maintain this type of integration by close and constant supervision and to transfer it to the associations propagated. If in the future there is the intention to accomplish such a transfer it is necessary to have an organization of development agencies different from the one at present in Sarawak (see Chapter 3 and Appendix VIII). Essential is an increase in the level of coordination, preferably an integration, between the different organizations charged with rural development, so that they can operate at the village level as one consistent unit. By further coordination and integration the continuity in the supervision of the villages can be improved considerably. Usually when a development worker, from one of the Departments charged with rural development, deals with a village, his major, and often only, concern is to construct a project. He acts in a rather ad hoc style, and does not try to teach the local participants how to establish a permanent village organization which could be used for other development activities. After implementation the village is left to itself until the next project is implemented in a similar style by the same or another development

worker. In this way there is little interdependence between the development projects, and the villagers are not stimulated to organize themselves and to think about the development of their village as a whole and to act on their own. The rather haphazard way in which projects are granted and implemented, with little concern for the people's wishes and needs has resulted in apathy in the villages. After a generally enthusiastic start the inhabitants are not able to continue on their own in Village Development Committees or the like. Not only because they lack financial assistance from the Government, but probably even more because they have no internal organization for the planning and implementation of development activities. Their only alternative is to wait until the 'Great Giver of Gifts' is again willing to give some incidental assistance. The present organization of the development administration in Sarawak, where coordination at the village level is one of the many tasks of the District Officer, cannot guarantee the continuous close and integrated supervision of the villages in a District. To improve the situation it is necessary to appoint well qualified and trained community development workers, directly under the District Officer, who have as their sole task 'to help the people to help themselves'. The position of such a community development worker would be similar to the one of Administrative Officer Planning and Development at Divisional level. Each of them should be responsible for a limited number of villages. Their task should be to help the people to ascertain their needs, find ways to satisfy them together, and stimulate them to reach their ends. Within the development administration the community development worker should have sufficient authority to call upon specialists of any Department at the District level to render assistance for a particular village at the moment he seems fit, by the construction of small infrastructural works, providing agricultural extension, the formation of a cooperative society, etc. Then it would not be necessary to get the approval from the highest levels for every single activity and project. Unnecessary red tape frustrates the work of the community development worker.

The community development worker's continuous contact with the developing villages would ensure that he was in the right position to guide them in their structural changes. He would have the time to learn what different positions, personalities and wishes are present in a village, and how they interact. He would be able to foresee clashes of opinions between the villagers, and to try to avoid them; the development worker would have to act like a counsellor. In community meetings and individual contacts he should try to get the people to air their views and state their problems, and discuss these in such a way that reconciliation and concensus are reached. Then old customs and regulations could be replaced collectively by new ones, with a minimum of opposition and grudging. Much attention should be paid to the difficult position of leaders in an egalitarian society. The community development worker should encourage the leaders to perform their duties and not to resign at the first criticism from the villagers. To the latter he should explain the difficulties inherent to the role of a leader, but also stress the advantages for a community when it has motivated and hard-working leaders.

In the recruitment of community development workers it is necessary to select them on the social skills they have acquired by trial and error. A training in human relations is essential in the education for this position. Because a community development worker would have to spend a large part of his time in motivating and reconciling people, his financial rewards and promotions should never depend on the number of development projects implemented in his area. This would force him to neglect the important human aspects of his work. Only in this way is it possible to reach an approach of integrated development, which can become a sustained process[1].

1 During a visit to Sarawak in 1975 I found that 'integrated rural development' was widely spoken about. However, my stay was too short to inquire into the extent the structure and procedures of development organizations had changed compared with the description in Chapter 3 and Appendix VIII.

Generally it will be best to start the development of a village by elimination of the most urgent problems, as the improvement of its accessibility and its water supply, visits by a dresser etc. Then the inhabitants must be assisted in the planting of new crops, or better varieties of crops already grown to increase their individual incomes. In this phase it is also necessary to increase the general level of knowledge, by agricultural extension and adult education. When the new crops reach their productive period marketing could be improved. This sequence of activities is similar to the one envisaged by the Malaysian Government which stated the phases of development to be:

Phase I: Government to shoulder its own responsibilities first.

Phase II: Part to be played by the people.

Phase III: The setting up of better marketing facilities.

Phase IV: Rectifying the imbalance between the rural and urban economy of the country ((MGKL)—Min. Nat. Rur. Dev.) Techniques for developing, 1965).

However, what has been lacking in many situations is continuity between the phases, and explanation of these at the village level. Because the population was hardly involved during the first phase they developed a waiting attitude, which was not a good start for the second phase when they were expected to play an important part on their own.

Up to now the formation of Farmers' Organizations by the Department of Agriculture of Sarawak has been successful in integrating extension, credit, production and marketing facilities at the village level. However, their number is still limited, because of the cost in manpower and money, and because of the period of preparation this approach requires.

Recommendations have been made about the possibility to utilize the enthusiasm and cohesion during the period of action-oriented integration, which is experienced by a number of villages. This however does not imply that the proposed improvement in supervision and integration of the different development activities at the village level is of no use in communities which at present are not, or have ceased to be in that phase of internal cohesion. The integrated approach to rural development has the universal advantage over a piecemeal and haphazard one, that the different projects can be implemented at the most opportune moment, with regard to the needs and capabilities of the people, and with regard to the other projects available. This universal advantage is of extreme importance, even if it could be empirically proved that under close supervision new associations can not directly be grafted on the structure of an integrated tribal village.

If an integrated rural development programme is to be linked with a phase of action-oriented integration it is necessary to recognize villages in such a phase of integration. The earlier formulated hypotheses that the level of integration in a village, as well as the type and acceptance of the headman can be recognized in an orderly outlook of the village, was not confirmed by the survey data, as mentioned in Chapter 14. Most probably the reason why this hypothesis has remained unconfirmed is that action-oriented integration is a temporary phase shading off into individualism, while the village keeps its ordered outlook dating back to that period. Therefore if one wants to recognize integrated villages where the population as a whole is in the mood to improve their style of life to reach a higher standard of living, it is necessary to ascertain at what time they started to work upon the improvement of their village. If at a certain time in a village longhouses are replaced by detached dwellings, the accessibility of the village is under improvement, many inhabitants are joining a new religion at a rapid pace, a chapel is under construction, etc., then one can be almost sure that the village is in a phase of action-oriented integration, worth to use it for the implementation of cooperative development projects. If instead the changes mentioned already took place a couple of years ago, individualization has occurred and it is less opportune to start immediately with the proposed alternative, more integrated approach in these places.

As already stated the recommendations made to further integration and coordination of the rural development programmes do not include anything originally not present in Malaysia's development policy. The lack of means, money and skilled manpower, are the obvious reasons why the implementation has not always been optimum. Since Independence the Malaysian Government has tried to reach the largest possible number of villages and individuals, in order to show the sincerity of its desire to develop the nation, thereby making concessions to the quality of the programme that could be offered. The alternative, to apply programmes of a higher standard to a limited part of the population would have alienated a large part of the country from its leaders, a risk the elected Governments were not willing to take. The tendency to spread development resources evenly was enforced by the circumstance that others, the internal guerilla movement, and Indonesia during the Confrontation period, were also trying to obtain the loyalty of the population. To speak once again in the terms of Young: in order to evade unwanted solidarity movements in the rural villages, the Government has rapidly increased their relative centrality. The tactic chosen has proved to be successful in Sarawak, the guerilla was halted, also the Indonesian forces have not received assistance of any importance from the rural population during the Confrontation period. That the rapid increase in relative centrality of the rural villages could have effects on the internal structure of these, which if considered apart would not be expressively desired, has never been paid much attention to. But now, more than one decade since the Federation of Malaysia gained Independence, the internal and external threats have been removed, the Government can reckon on a firm majority of the population, and has substantial financial reserves at its disposal, everything is set for an intense development of the rural areas.

Summary

The purpose of the research project was to assess in what type of villages cooperative development projects are successful. Politicians and laymen often have the idea that in traditional communities people share their resources and products with each other, and are willing to make sacrifices for the welfare of their community. According to them such a pattern of behaviour provides an ideal basis to start cooperative activities with new goals. Many sociologists, of which Bailey (1971b) is the most outspoken, have their doubts about the cooperative spirit in traditional communities, as well as about the transmutability of traditional into new communal activities. Others, like Dore (1971) and Carroll (1969 and 1971) know the difficulties involved, but still think that under certain conditions a transmission is possible.

A hypothesis was formed to test this topic of theoretical and practical interest: in villages with a high degree of integration more cooperative development projects are implemented than in disintegrated villages. The concepts integration and disintegration were defined in accordance with Leighton et al. (1962): 'Insofar as any socio-cultural system consists of patterned ways of acting among people who share at least some common sentiments, 'disintegration' means the breakdown or disruption of the interrelationship of these patterns, a process which is, to some extent, always occurring in any social system, just as integrative processes are continually in action.' Integration can be observed directly in its actual stage, and indirectly by its preconditions and effects. Preconditions are the knowledge, action tendency and sentiments the people have about matter of common interest and each other. Effects are the results of integrated interaction. Indicators of these aspects of integration had to be found. However, I did not try to assess quantitatively the attitudes people had with regard to each other and their community. The concept cooperative development projects was used for Sarawak's development activities aimed at the village unit, for which a communal contribution by the receivers is required.

Other hypotheses were formed about the influence of leadership, differentiation of meaning sectors, size and accessibility of the village, on the number of cooperative development projects established in a village.

Because the study was made among the Bidayuh, a sub group of the Land Dayak of Sarawak, the essential characteristics of the social structure of tribal societies are discussed. Also the literature about 'loosely structured' societies is reviewed.

A thorough familiarization with the location of the research project was necessary in order to operationalize the concepts used in the hypotheses in a correct way. Chapters 2–13 are a report of this phase in the study. A short description of the State of Sarawak, a constituent state of the Federation of Malaysia, and of the Upper Sadong District is presented in Chapters 2 and 5.

In Chapter 3 the philosophy behind the development policy in the different phases of the history of Sarawak is discussed. Remarkable is the similarity between the different periods. The budgets for recurrent expenditure and development (investments) have always been separate. The latter budget depends on the reserves of the Government. In prosperous years it was even difficult to

spend the funds allocated. The development expenditure is mainly directed at the improvement of the infrastructure. There is little awareness of how the population makes use of these projects.

The relative neglect of the Land Dayak by the authorities is the subject of Chapter 4. Chapters 6–8, 12 and 13 give an analysis of the social structure of the Bidayuh at village level. Characteristics are the disintegration of the longhouses, the household as the single unit of importance, the flexibility of the kinship system, religious disintegration, and little formal authority of village leaders.

The economic structure and resources are dealt with in Chapters 9–11. The agricultural system is subject to many changes. Besides the traditional shifting cultivation of hill paddy, small valleys are taken into continuous use for the cultivation of wet paddy. Rubber and pepper have been planted on an extensive scale as cash crops. The diversification provides the farmer with security, but counteracts economies of scale.

The traditional system of land tenure is ill adapted to the permanent cultivation of land. The exchange of labour, which has an equalizing effect on the households in a village, gradually gives way to work groups of household members only and paid labour.

A survey of all 96 Bidayuh villages was made. The outcomes did not support the hypotheses. However, a single survey is not adequate to analyse an ongoing process. The data were supplemented from eight case studies of villages. The selection of these villages was based on information obtained from the survey.

The interpretation of the results of survey and case studies is that Bidayuh villages quickly disintegrate when they are incorporated in the market economy and political system of Sarawak. The relationships between households weaken, and the responsibility for the welfare of the community decreases. A limited number of villages experience a phase of vitalization when the first contacts with the wider society are made. The cause of such a phase is generally an established leader aware of the possibilities incoporation offers to himself and the village, or a dedicated development worker. However, also in these villages disrupting forces lead to disintegration. Normally cooperative development projects implemented in the villages are not successful. Proper maintenance and continuous use of the projects are exceptional.

The conclusion is that in Bidayuh villages a traditionally integrated pattern of behaviour is not a strong basis for new cooperative activities. In Sarawak there is little coordination in the approach to rural development between the planning and implementing organizations. The effects of piecemeal activities are not substantial. It is recommended that an Administrative Development Officer at District level should provide guidance to developing villages. Government organizations should attach much importance to his opinion about what projects to implement, where and when.

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Appendix I. Questions and answers in the survey of Bidayuh villages, Upper Sadong District

A number of questions that did not prove to be of relevance have been omitted. Answers are given in percentages, N = 96.

INFORMATION ABOUT THE VILLAGE

1. What is the name of this village?

2. Was the village founded before or after the Japanese occupation?

before	77
after	19
don't know	4

3. From where do the people of this village come?

4. And before that?

5. How do they call their dialect?

Bukar	20
Sadong	79

6. Have people from this village founded a new village?

yes	38
no	60
don't know/not relevant	2

7. Which village?

8. When was it founded, before or after the Japanese occupation?

before	21
after	17
don't know/not relevant	62

9. Are there one or more hamlets under the same headman?

yes	27
no	72
don't know	1

11. When formed, before or after Malaysia (1963)?

before	8
after	16
don't know/not relevant	76

STRANGERS

13. How many farmers of different race married with a Bidayuh woman are living in the village area?

In percentage of households in the village

	non-native	native
0%	62	70
1%	9	3
2%	6	7
3%	6	5
4-5%	6	6
6-9%	6	5
10%	4	3

15. Are farmers of a different race not married with a Bidayuh woman living in the village area?

	non-native	native
no	96	96
yes	4	4

17. Is land of this village sold or rented to non-Bidayuh who are living elsewhere for making gardens?

	non-native	native
no	74	96
yes	26	4

19. When was the first time that non-Bidayuh started to farm land of this village, before or after Malaysia (1963)?

before	26
after	18
don't know/ not relevant	56

20. Are non-Bidayuh who are not farmers living in the area of this village?

yes	8
no	91
don't know	1

HEADMAN

22. Has this village a headman?

yes	95
no	5
don't know	0

23. What is his name?		
24. When was he elected or appointed?	One year ago or less	17
	2 - 4 years	16
	5 - 9 years	17
	10 - 14 years	10
	15 - 19 years	8
	20 - 24 years	18
	25 - years	9
	don't know/not relevant	5
25. How many elections or appointments have been necessary that time before the vacancy was filled?	one election	81
	two or more	14
	don't know/not relevant	5
26. During those elections or appointments how many other persons refused the nomination?	nobody	59
	one	20
	two or more persons	16
	don't know/not relevant	5
27. Does the present headman like his task?	no	3
	indifferent	26
	sure	62
	don't know/not relevant	5
28. Is there any idea in the village to ask the government to dismiss the present headman or to dismiss him yourselves?	yes	18
	no	61
	don't know/not relevant	21
30. Can you tell me, how many doors follow and obey the headman?	none	0
	a few doors only	3
	about half the number of doors	12
	nearly all the doors	21
	all the doors	59
	don't know/not relevant	5
31. If there would be an election now, would the people elect the same person as headman?	yes	32
	no	14
	don't know/not relevant	54
32. For what reason is there a vacancy (see question 22)?	the previous headman died	1
	other reasons	4
	don't know/not relevant	95
33. How long has his position been vacant?	23 months or less	1
	two years or more	4
	don't know/not relevant	95
34. Who is now acting as headman?	deputy headman	5
	don't know/not relevant	95
35. What is his name?		
36. How many headmen have served here since the Japanese occupation? (do not include the one in function on the day of the Japanese left)	none	8
	one	43
	two	32
	three or more	13
	don't know/not relevant	4
37. And since Malaysia (1963)? (do not include the one in function on the day Sarawak joined Malaysia)	none	49
	one or more	47
	don't know/not relevant	4
38. Is there any repayment in cash by the villagers for the headman's expenses if he receives official visitors or has to go to Serian or Kuching to see officials?	yes	17
	no	67
	don't know/not relevant	17
39. Do the villagers sometimes give a day's labour to the headman as a reward for his efforts?	yes	26
	no	58
	don't know/not relevant	16
40. When was the last time?	0 - 11 months ago	7
	12 - 23 months ago	4
	24 - 47 months ago	9
	48 - 71 months ago	4
	72 - months ago	5
	don't know/not relevant	70

41. Is there a deputy headman at the moment?

yes	92
no	8
don't know/not relevant	0

42. What is his name?

POLITICIANS AND NATIVE CHIEFS

47. Is (has) somebody originating from this village (been) holding one of the following positions?

yes, member of the Federal and/or State Legislative Assembly	5
yes, member of District Council and/or Native Chief	17
no	78
don't know/not relevant	0

49. What is his name?

RELIGION

51. How many heads of the households in this village profess the following religions?

percentage of households	Bidayuh	Roman Catholic	Anglican (SPG)	Seventh Day Adventists	else or none
0%	37	28	83	77	99
1 - 25%	18	10	5	11	1
26 - 50%	12	17	1	6	0
51 - 75%	12	14	1	2	0
76 -100%	21	31	10	4	0

52. Do people of different religion attend each others festivals and ceremonies?

yes	51
no	3
don't know/not relevant	46

53. Are people of different religion living in different parts of the village?

yes	13
no	30
don't know/not relevant	57

54. Are the following religious functionaries living in this village?

55. Please give their names.

catechist RC	yes	59
	no	41
member RC parish council	yes	28
	no	72
catechist SPG	yes	13
	no	87
member SPG parish council	yes	9
	no	91
church elder SDA	yes	18
	no	82
member SDA parish council	yes	16
	no	84
tukang tabur	yes	53
	no	47
tukang gawai	yes	48
	no	52
tukang barih	yes	45
	no	55

56. How many times has the priest/pastor of the largest Christian group visited this village since last Christmas?

	RC	SPG	SDA
never	8	4	5
once	8	0	1
twice	28	2	1
thrice	15	0	1
four or more	13	11	13
don't know/not relevant	28	83	79

57. Is there a chapel or church in the village?

yes	70
no	30
don't know/not relevant	0

58. Of what denominations?	RC	44
	SPG	8
	SDA	5
	RC and SPG	0
	RC and SDA	8
	SDA and SPG	3
	RC and SDA and SPG	1
	don't know/not relevant	30
59. Was assistance from outside the village received in or for the construction of the church of the largest denomination in the village? From whom?	none	27
	government/army	5
	mission	37
	both	1
	don't know/not relevant	30
60. How much?	part of the expenses	23
	all the expenses	20
	don't know/not relevant	57
61. Who usually gives the sermon in Sunday/ Saturday services?		

POLITICS

62. What party did the majority of the people in this village vote for in the last elections?	SNAP	52
	SUPP	0
	Alliance	13
	no majority	30
	don't know/not relevant	5
63. Is there a branch of a party in this village?	yes	11
	no	85
	don't know/not relevant	4
65. Who is in charge of the branch?		

BIDAYUH ASSOCIATION

66. Is there a branch of the Bidayuh Association in this village?	yes	3
	no	96
	don't know/not relevant	1
67. Who is the leader of the branch?		
68. Did people from this village attend a meeting of the Bidayuh Association in Serian or Kuching?	yes	57
	no	26
	don't know/not relevant	17
69. Who are they?		

PADDY FIELDS

70. Is there a check on who is going to farm what land, at the beginning of a new paddy season? How?	yes, in a meeting	39
	yes, by informing some people only	25
	no	32
	don't know/not relevant	4
71. How many disputes about paddy land were within the village this season?	one or more disputes	17
	none	82
	don't know/not relevant	1
72. How many families in this village do not own land themselves, so they always have to ask for somebody's land to make farms?	one or more families	13
	none	85
	don't know/not relevant	2

VILLAGE MEETING

73. How many households are usually represented at village meetings?	half the number of households or less	11
	nearly all households	45
	all the households	44
	don't know/not relevant	0

74. When was the last meeting?	less than a week ago	28
	8 - 14 days ago	40
	15 - 28 days ago	24
	29 days or more ago	8
	don't know/not relevant	0
DISPUTES		
75. How many households of this village are usually represented at village court sessions?	a few households only	90
	about half the number of households	10
	nearly all or all the households	0
	don't know/not relevant	0
76. How long ago was the last court session?	less than one week	18
	8 - 31 days	22
	32 - 90 days	26
	90 days or more	30
	don't know/not relevant	4
77. Are ordeals practised in this village?	yes	43
	no	43
	don't know/not relevant	14
78. How many times had the Native Chief to come to this village to settle a dispute, from the beginning of the last season until now?	never	51
	once	24
	twice	15
	three or more times	8
	don't know/not relevant	2
79. How many persons of this village reported their conflicts to the District Officer from the beginning of the last season until now?	nobody	70
	one person	12
	two or more persons	12
	don't know/not relevant	6
LAND TITLES		
80. How many Bidayuh in this village have a written title on their land?	nobody	80
	1 - 10 persons	8
	10 or more persons	7
	don't know/not relevant	4
82. How many Bidayuh people in this village have requested a written title on their land, which until now has not been granted?	one or more persons	2
	nobody	93
	don't know/not relevant	5
BALAI (headhouse)		
84. Is there a balai in this village?	one or more balai	53
	none	47
	don't know/not relevant	0
85. Are bachelors sleeping there?	yes	41
	no	11
	don't know/not relevant	48
86. Are visitors sleeping there?	yes	42
	no	9
	don't know/not relevant	49
87. Is it used for meetings?	yes	48
	no	2
	don't know/not relevant	50
88. Is it used for Bidayuh ceremonies?	yes	18
	no	26
	don't know/not relevant	56
89. Was assistance from outside the village received in or for the construction of the balai?	yes	0
	no	51
	don't know/not relevant	49

COMMUNITY HALL

91. Is there a community hall in the village?	yes	8
	no	92
	don't know/not relevant	0
92. Was assistance received from outside the village in or for the construction?	yes	8
	no	0
	don't know/not relevant	92
93. How much?	part of the expenses	1
	all the expenses	7
	don't know/not relevant	92

COOPERATIVE SOCIETY

94. Is there a cooperative society in this village?	yes	21
	no	78
	don't know/not relevant	1
96. How many members has the society?	1 - 25% of the households	1
	26 - 50% of the households	5
	51 - 75% of the households	4
	76 -100% of the households	11
	don't know/not relevant	79
97. Who are the members of the committee?		
98. Is the cooperative society supervised by persons from the department of cooperatives? How often?	yes, at least every two months	8
	no	13
	don't know/not relevant	79
99. Are the cooperative's activities still going on?	yes	21
	no	0
	don't know/not relevant	79
101. Has the cooperative society a building of its own?	yes	19
	no	1
	don't know/not relevant	80
104. Has there been a cooperative society before in this village?	yes	7
	no	66
	don't know/not relevant	27

VOLUNTARY ORGANIZATIONS

106. Is in this village a club (4H club, Young Christian Workers, Bidayuh Youth Club) or a Women's Institute?

	WI	4H	YCW and/or BY
yes	19	12	16
no	81	88	84
don't know/ not relevant	0	0	0

108. How many members? (in percentage of households)

	WI	4H	YCW and/or BY
1 - 25%	2	0	5
26 - 50%	2	4	7
51 - 75%	7	3	1
76 -100%	8	4	3
don't know/ not relevant	81	89	84

109. Do they have projects?	yes	12	12	8
	no	7	0	8
	don't know/ not relevant	81	88	84
110. Do they work on the project?	yes	11	10	8
	never	0	1	2
	don't know/ not relevant	89	89	90
111. Do they get supervision from elsewhere?	yes	13	9	6
	never	6	2	8
	don't know/ not relevant	81	89	86

112. What are the names of the committee members?

113. Is there a clubhouse?

	WI	4H	YCW and/or BY
yes	3	9	10
no	16	2	6
don't know/ not relevant	81	89	84

114. Was assistance received from outside the village in or for the construction?

yes	10
no	10
don't know/not relevant	80

115. How much?

part of the expenses	7
all the expenses	3
don't know/not relevant	90

116. Has there been a club/WI before?

	WI	4H	YCW and/or BY
yes	4	5	0
no	76	83	84
don't know/ not relevant	20	12	16

SCHOOL

118. Is there a school in this village?

yes	40
no	58
don't know/not relevant	2

119. What kind of school?

council school	25
mission school	15
don't know/not relevant	60

120. What kind of mission?

RC	8
SPG	4
SDA	1
SPG and SDA	1
don't know/not relevant	85

121. How many teachers has the school?

one teacher	3
two teachers	22
three teachers	11
four or more teachers	4
don't know/not relevant	60

122. How many teachers from this school live in the village

none	1
half or less	1
more than half	4
all	33
don't know/not relevant	61

123. How many of them are originally from this village?

none	28
half or less	6
more than half	5
all	0
don't know/not relevant	60

124. Have people from this village formed a school committee?

yes	87
no	12
don't know/not relevant	1

125. What are their names?

126. What have they been doing last school year?

something	69
nothing	12
don't know/not relevant	19

ADULT EDUCATION

127. How many heads of households in this village can read and write?

none	8
some	92
don't know/not relevant	0

128. Is there an adult education class in this village?

yes	5
no	94
don't know/not relevant	1

129. Has there been an adult education class in this village?	yes	63
	no	34
	don't know/not relevant	3
130. For how many months have there been lessons for the adults?	1 - 6 months	12
	6 - 11 months	5
	12 - 17 months	23
	18 - 23 months	8
	24 months or more	14
	don't know/not relevant	38
131. What was the reason for termination?	disinterested pupils	52
	other reason	6
	don't know/not relevant	42

WATERSUPPLY

132. Has this village a watersupply system (pipes)?	yes	13
	no	87
	don't know/not relevant	0
133. How much did the villagers pay for it?	some money	6
	nothing	6
	don't know/not relevant	88
134. Is it still functioning?	yes	13
	not always	0
	don't know/not relevant	87
135. Is there a pipe committee?	yes	8
	no	4
	don't know/not relevant	88
136. Who are the members?		
137. Is there in this village a water pump given by the government?	yes	5
	no	91
	don't know/not relevant	4
138. Does it function well?	yes	3
	no	2
	don't know/not relevant	95

ROAD

(The following two questions only if there is a road into the village)

139. Has the government ever improved or repaired the road into this village, since its construction?	yes	21
	no	22
	don't know/not relevant	57
140. Has the government given money to the villagers to repair the road?	yes	10
	no	32
	don't know/not relevant	58

MEDICAL SERVICES

141. Is there a dispensary and/or mother and child health clinic in or very near to the village?	both	0
	dispensary	0
	MCH clinic	10
	none	90
	don't know/not relevant	0
142. How often comes the dresser in this village?	regularly	14
	never	84
	don't know/not relevant	2
144. Do people of the Family Planning Association come to this village?	yes	5
	no	94
	don't know/not relevant	1

145. How many women of child bearing age in this village take birth control pills?	none	41
	a few only	48
	about half or more	10
	don't know/not relevant	1

LATRINES

146. Have the people in this village made latrines with government assistance?	yes	40
	no	58
	don't know/not relevant	2
147. Is the Health Supervisor controlling them?	yes	11
	no	24
	don't know/not relevant	65
149. How many latrines are there now?	none	2
	for a few households only	7
	for half the number of households	7
	for nearly all the households	8
	for all the households	18
	don't know/not relevant	58

SPORTFIELD

150. Is there a sportfield?	yes	43
	no	52
	don't know/not relevant	5
151. Was it made with a bulldozer?	yes	11
	no	32
	don't know/not relevant	57
152. How much did the villagers p r its construction?	some money	5
	nothing	5
	don't know/not relevant	90

LEVELLING

153. Has another public place in this village been levelled mechanically?	yes	6
	no	91
	don't know/not relevant	3
154. What place?		
155. By whom?		
156. How much did the villagers pay for it?	some money	1
	nothing	5
	don't know/not relevant	94

PADDY SCHEME

157. Has this village (a share in) a wet paddy scheme?	yes	17
	no	83
	don't know/not relevant	0
158. How many acres?	1 - 99 acres	8
	100 acres or more	8
	don't know/not relevant	84
159. Do all the households participate in the scheme?	yes	6
	no	10
	don't know/not relevant	84
160. How many households participate?	1 - 25%	1
	26 - 50%	2
	51 - 75%	4
	76 -100%	2
	don't know/not relevant	91
162. Who are the members of the scheme committee?		

163. Has there been an attempt to construct a scheme?	yes	18
	no	54
	don't know/not relevant	28
164. For what reason was it cancelled?	no interest of the villagers and/or quarrels	7
	land not suitable	4
	else	4
	don't know/not relevant	85

HOME ECONOMICS COURSE

165. Has (or is) a course in home economics been organized by a Home Demonstrator in this village?	yes	24
	no	71
	don't know/not relevant	5

MANGLE SHED

166. Is there a shed with rubber mangles, with materials and mangles donated by the government?	yes	8
	no	92
	don't know/not relevant	0
167. Was there one before?	yes	1
	no	91
	don't know/not relevant	8

FARMERS TOUR

169. Was a tour organized for a group of people from this village by the Dept of Agriculture?	yes	34
	no	63
	don't know/not relevant	3
170. When was the last time?	1 - 11 months ago	4
	12 - 35 months ago	12
	36 or more months ago	18
	don't know/not relevant	66

TRIPS

172. Did an organized group of people from this village ever visit Kuching?	yes	23
	no	70
	don't know/not relevant	7
173. When was the last time?	1 - 11 months ago	6
	12 - 23 months ago	11
	24 or more months ago	6
	don't know/not relevant	77

175. Who was the organizer?

FILM SHOW

176. Has there been a film show of the Malaysian Information Service in this village?	yes	66
	no	24
	don't know/not relevant	10

VILLAGE FISH POND

177. Is there a village fish pond?	yes	25
	no	71
	don't know/not relevant	4
178. What is its size?	one acre or less	13
	more than one acre	12
	don't know/not relevant	75
179. Was there any assistance from the Dept of Agriculture in the construction of the pond?	yes	12
	no	9
	don't know/not relevant	79
180. When was the fish pond harvested for the last time?	1 - 18 months ago	20
	18 months or more ago	5
	don't know/not relevant	75

182. Are the fish shared equally after the harvest?	yes	18
	no	4
	don't know/not relevant	78
184. Are there other fish ponds owned by a group of households?	yes	11
	no	82
	don't know/not relevant	7

PROJECTS, GENERAL

187. Has this village received any other scheme or project for all its people? e.g. cattle scheme, river clearance, recreational facilities?	yes	5
	no	94
	don't know/not relevant	1

190. Has ever an official request been made for one of the following schemes or projects?

191. Have these schemes or projects been given, promised or refused?

	Answer to question 191				
	given	promised	refused	no answer yet	not requested/ don't know/ not relevant
balai	0	2	4	3	91
community hall	6	7	7	12	68
school	57	0	6	2	35
adult education	60	3	1	3	33
construction of road	27	16	9	21	27
repair of road	8	2	3	8	78
water pipe	10	10	6	10	64
water pump	5	0	0	0	95
dispensary	0	0	1	1	98
MCH clinic	2	0	3	1	94
latrines	30	4	1	2	63
levelling	5	5	3	8	78
paddy scheme	15	2	2	5	76
cattle scheme	0	3	1	0	96
home economics course	13	0	0	0	87
construction village fish pond	15	1	2	0	82
farmers tour	14	0	1	0	85
4H club	10	0	0	0	90
Bidayuh Youth Club	2	1	0	0	97
Women's Institute	18	0	0	0	82
Young Christian Workers	5	0	0	0	95
church	20	2	1	2	75
cooperative society	12	2	1	1	84
filmshow	52	1	0	1	46
more land	1	1	1	2	95
other scheme or project	6	0	1	2	91

Total number of projects granted	
none	0
one	19
two	19
three	19
four	12
five, six	13
seven, eight, nine	13
10 or more	6

Total number of projects promised, but not implemented	
none	53
one	34
two or more	13

Total number of projects refused	
none	57
one	32
two or more	11

Total number of unanswered requests	
none	49
one	22
two or more	29

192. How are requests usually made?	someone asks in person	58
	in a letter	21
	don't know/not relevant	21
193. By whom are they written?		
194. In what language?	English	16
	Malay	3
	Bidayuh	1
	don't know/not relevant	80

PROMOTORS

195. Do the villagers know an influential person who is willing to promote their requests to the government?	yes	38
	no	44
	don't know/not relevant	18
197. Is there an example of a case in which his influence was successful?	yes	29
	no	10
	don't know/not relevant	61
199. Where are applications for village projects or schemes usually made?	District Office	50
	elsewhere	8
	don't know/not relevant	42

200. From what offices have there been visitors to this village last season?

	District Office	Local Council	Dept of Agriculture	Medical Dept	Resident, Minister, other VIP
yes	28	31	47	47	20
no	72	69	53	53	80
don't know/not relevant	0	0	0	0	0

TOWKAY

202. Is one towkay (trader) specially liked by the people of this village for buying and selling?	yes	61
	no	35
	don't know/not relevant	4
203. How many households trade with this towkay?	about half the number of households	21
	nearly all the households	19
	all the households	20
	don't know/not relevant	40

PIGS

204. How many households in this village rear one or more pigs?	none	12
	a few households only	25
	about half the number of households	16
	all the households	27
	don't know/not relevant	0
205. Have the pigs to be penned in this village?	yes	28
	no	45
	don't know/not relevant	27

CAVES

206. Have villagers the right to collect bird nests from one or more caves?	yes	18
	no	82
	don't know/not relevant	0

VILLAGE FUND

210. Is there a village fund?	yes	10
	no	83
	don't know/not relevant	7

COMMUNITY ACTIVITIES

215. Is there work to be done on a project (e.g. building balai, repairing road) is it checked whether all households have sent a representative?	yes	90
	no	3
	don't know/not relevant	7
216. How?	by keeping the workers names in mind	42
	by writing down the names of those who worked	48
	don't know/not relevant	10

217. Who writes the names down?

BLACKSMITH SHOP

219. Is there a blacksmith shop in this village?	yes	94
	no	5
	don't know/not relevant	1
221. Are there other public properties (like cement bathing place, shed for the dresser) which I have not mentioned yet?	yes	5
	no	92
	don't know/not relevant	3

DIVORCE

227. Give your estimate of the number of living adults in this village that have experienced divorce?	none	28
	a few persons only	70
	about half the number of people or more	2
	don't know/not relevant	0

DISABLED PERSONS

228. Are old people, widows, blind, paralysed or otherwise disabled people living in this village?	yes	63
	no	18
	don't know/not relevant	19
229. Are other households besides their own taking care of them?	yes	5
	no	51
	don't know/not relevant	44
230. Are people from here supported by the government, church or a relief committee?	yes	11
	no	48
	don't know/not relevant	41

FESTIVE WORK PARTIES

232. In this village does a large group of people ever work for somebody and only receive a very good meal at the end of the day as payment?	yes	96
	no	2
	don't know/not relevant	2
233. When was the last time it happened?	less than one month ago	15
	one or two months ago	21
	three, four or five months ago	24
	half a year, but less than a year ago	19
	a year or more ago	17
	don't know/not relavant	4

LABOURERS

236. How many people living here have work outside the village? (in percentage of households)	0%	26
	1%	8
	2%	20
	3%	14
	4%	2
	5%	4
	6 - 10%	9
	11% or more	17
	don't know/not relevant	0

YOUNGSTERS

238. How many educated youngsters (level Form 3 or higher) living in this village are jobless? (do not include the ones who just left school)	(in percentages of households)	
	0%	63
	1%	4
	2%	10
	3%	2
	4%	4
	5%	2
	6 - 10%	8
	11% or more	6
	don't know/not relevant	1

TRADITION

239. How many women in this village wear brass anklets?	none	83
	a few women or more	17
	don't know/not relevant	0

THIEVES

240. Do people in this village steal from their fellow-villagers?	yes	22
	yes, but very seldom	49
	never	25
	don't know/not relevant	4

PROSTITUTES

241. How many girls/women living in this village can be considered to be prostitutes?	some women	22
	none	77
	don't know/not relevant	1

PEPPER

242. How many Bidayuh in this village have 600 or more fruit-bearing pepper vines? (older than two years)	(in percentages of households)	
	0%	49
	1, 2%	7
	3, 4%	10
	5, 6%	5
	7, 8%	10
	9, 10%	6
	11 - 15%	8
	16% or more	5
	don't know/not relevant	0

243. What are their names?

SCHEME RUBBER

244. How many households in this village take part in the rubber planting or rubber replanting scheme?	none	23
	a few households only	23
	about half of the number of households	22
	nearly all households	28
	all households	4
	don't know/not relevant	0

FARMER'S TRAINING CENTRE TRAINEES

246. How many younsters from this village are or have been trained in a FTC?	(in percentages of households)	
	0%	47
	1, 2%	5
	3, 4%	6
	5, 6%	7
	7, 8%	11
	9, 10%	4
	11 - 15%	9
	15% or more	11
	don't know/not relevant	0

LOANS FROM STATUTORY BODIES

247. How many Bidayuh in this village ever received a loan from the government?	some persons	12
	nobody	87
	don't know/not relevant	1
248. What are their names?		

SHOPS

250. How many shops in this village are owned and managed by a Bidayuh?	(in percentages of households)	
	0%	26
	1%	5
	2%	7
	3%	15
	4%	10
	5%	7
	6%	7
	7% or more	23
	don't know/not relevant	0
251. What is the name of the Bidayuh owner?		

RICE MILL

252. How many rice mills owned by Bidayuh are there in this village?	one or more mills	42
	none	57
	don't know/not relevant	1
253. What is the owner's name?		

CARS

254. How many Bidayuh in this village own a landrover or lorry?	one or more persons	13
	none	87
	don't know/not relevant	0
255. What are their names?		
262. (Question to the manager of a shop) How many households in this village don't want to be a regular customer of one of the Bidayuh shops (including cooperative) in this village?	none	47
	a few households only	24
	about half the number of households or more	6
	don't know/not relevant	23
263. (Question to the manager of a rice mill) How many households in this village don't want to bring their paddy to a mill in this village regularly?	none	38
	a few households only	4
	about half the number of households or more	1
	don't know/not relevant	57

OBSERVATIONS

(If there is a road into the village)

1. What is the condition of the road into the village, including its bridges?	jeepable in all seasons	23
	not passable after rain	4
	jeepable in the dry season only	18
	don't know/not relevant	55
2. How far away is the nearest road?	0 - 5 minutes walking	43
	6 - 10 minutes walking	6
	11 - 30 minutes walking	6
	31 - 60 minutes walking	7
	61 -120 minutes walking	13
	121 -180 minutes walking	13
	181 or more minutes walking	7
	don't know/not relevant	5

3.	How far away is the nearest busstop?	0 - 5 minutes walking	14
		6 - 10 minutes walking	6
		11 - 30 minutes walking	18
		31 - 60 minutes walking	17
		61 -120 minutes walking	21
		121 -180 minutes walking	15
		181 or more minutes walking	8
		don't know/not relevant	1
4.	Which is the nearest bazar?		
5.	How much is the bus fare to it?	no busfare	29
		1 - 15 cents	10
		16 - 35 cents	28
		36 - 80 cents	25
		81 cents or more	8
		don't know/not relevant	0
6.	How much is the bus fare to Serian (District Centre)?	0 - 35 cents	18
		36 - 60 cents	16
		61 - 80 cents	18
		81 -100 cents	10
		101 -150 cents	14
		151 -199 cents	15
		200 cents or more	9
		don't know/not relevant	0
7.	How far away is the place where the travelling dispensary comes?	0 - 5 minutes walking	7
		6 - 15 minutes walking	12
		16 - 45 minutes walking	17
		46 - 60 minutes walking	5
		61 - 90 minutes walking	5
		91 -120 minutes walking	6
		120 or more minutes walking	9
		don't know/not relevant	39
8.	How much is the bus fare to the nearest static dispensary?	0 - 20 cents	22
		21 - 40 cents	11
		41 - 60 cents	24
		61 -100 cents	18
		101 -150 cents	16
		151 cents or more	9
		don't know/not relevant	0
9.	What is the age of the (acting) headman?	35 years or less	3
		36 - 40 years	18
		41 - 45 years	11
		46 - 50 years	19
		51 - 55 years	14
		56 - 60 years	17
		61 - 65 years	8
		66 years or more	8
		don't know/not relevant	2
10.	Can the (acting) headman read and write?	yes	7
		a little bit	19
		no	74
		don't know/not relevant	0
11.	What is the prosperity of the people in this village?	poor	14
		neither rich nor poor	84
		rich	2
		don't know/not relevant	0
12.	How many longhouses are there?		
13.	How many apartments has each?	Number of buildings as a percentage of the number of apartments (in longhouses and detached houses)	
		0 - 25%	11
		26 - 35%	14
		36 - 45%	22
		46 - 55%	12
		56 - 70%	15

(Question 13 / continued)	71 - 95%	11
	96 -100%	15
	don't know/not relevant	0
14. How many detached houses are there? What is the total number of apartments?	Number of detached houses as a percentage of the number of apartments (in longhouses and detached houses)	
	0 - 15%	17
	16 - 25%	17
	26 - 35%	18
	36 - 50%	15
	51 - 65%	10
	66 - 90%	9
	91 -100%	14
	don't know/not relevant	0
15. How many houses are mainly made of bamboo?	0 - 25%	30
	26 - 50%	29
	51 - 75%	19
	76 -100%	21
	don't know/not relevant	1
16. Are the buildings orderly arranged?	yes	3
	somewhat	55
	no	42
	don't know/not relevant	0
17. Are the footpaths, including bridges, within the village in a good condition?	yes	8
	somewhat	53
	no	39
	don't know/not relevant	0
18. Is there a kind of central place (padang)?	yes	11
	something like that	32
	no	57
	don't know/not relevant	0
19. Is the village fresh and clean?	yes	15
	somewhat	48
	no	37
	don't know/not relevant	0
20. Are there vegetable gardens in the village?	many	0
	some	29
	few or none	71
	don't know/not relevant	0
21. Were the people cooperative during the interview?		
22. Were the people cooperative in preparing food?		
23. Were the people cooperative in providing a place to sleep?		
24. Any other remark, by the interviewee or yourself, relevant to the research:		

Name of the interviewer:

Date of interview:

Appendix II. Questionnaire used for a survey of households in seven villages

Frequencies of answers are given in percentages, N = 400.

1.	Are you happy or unhappy in your present situation?	happy	21
		unhappy	75
		don't know/not relevant	4
2.	How much hill paddy did you harvest last season? (1 gallon is roughly 5 kati or 3 kilograms).	nothing sown/don't know	31
		sown, but not harvested	2
		1 - 65 gallon	26
		66 - 180 gallon	25
		181 - 960 gallon	16
3.	How many pajak was the land? (1 pajak is roughly 100 square fathom or 0.1 acre).	nothing sown/don't know	47
		0.1 - 10.5 pajak	25
		10.6 - 80.5 pajak	28
4.	How much seed was used for it?	nothing sown/don't know	31
		0.1 - 7.5 gallon	24
		7.6 - 14.5 gallon	28
		14.6 - 32.5 gallon	17
5.	And how much seed for hill paddy was used in planting this year?	nothing sown/don't know	29
		0.1 - 7.5 gallon	21
		7.6 - 14.5 gallon	31
		14.6 - 64.5 gallon	19
6.	Did you use Ammophos last season?	yes	2
		no	65
		don't know/not relevant	33
7.	And the present season?	yes	2
		no	69
		don't know/not relevant	29
8.	How much wet paddy was harvested last season?	nothing sown/don't know	24
		sown, but not harvested	3
		1 - 80 gallon	28
		81 - 250 gallon	24
		251 -1000 gallon	21
9.	How many pajak was the wet paddy land?	nothing sown/don't know	34
		0.1 - 10.5 pajak	40
		10.6 - 40.5 pajak	26
10.	How much seed was used for it?	nothing sown/don't know	25
		0.1 - 7.5 gallon	38
		7.6 - 15.5 gallon	24
		15.6 - 64.5 gallon	13
11.	And how much seed for wet paddy was used in planting this year?	nothing sown/don't know	21
		0.1 - 7.5 gallon	36
		7.6 - 15.5 gallon	27
		15.6 - 64.5 gallon	16
12.	How many acres of it was planted in an APPS?	nothing	84
		one acre or less	2
		1.01 - 1.50 acre	2
		1.51 - 2.00 acre	7
		2.01 acre or more	2
		don't know/not relevant	3
13.	Is the harvested amount of paddy enough for this whole year?	yes	23
		no	70
		don't know/not relevant	7

14.	How many months after the harvest will it be finished?	one, two, three months	22
		four months	9
		five months	10
		six months	6
		seven months	6
		eight months	7
		nine months	3
		10 months or more	5
		don't know/not relevant	32
15.	How many low yielding rubber trees do you have?	none	25
		1 - 200	25
		201 - 400	19
		401 - 600	12
		601 or more	18
		don't know	1
16.	How many fruit-bearing pepper vines do you have?	none	47
		1 - 150	31
		151 - 300	21
		301 or more	11
17.	How many of them have belian (hard wood) posts?	none	21
		1 - 20%	2
		21 - 40%	3
		41 - 60%	3
		61 - 80%	3
		81 - 100%	10
		don't know/not relevant	58
18.	How many non fruit-bearing pepper vines do you have?	none	33
		1 - 150	26
		151 - 300	28
		301 or more	13
19.	How many of your vines have died?		
20.	How many of your vines died because of old age?	none	82
		1 - 150	8
		151 - 300	6
		301 or more	4
21.	How many vines died because of diseases?	none	50
		1 - 150	42
		151 - 300	5
		301 or more	3
22.	Since last Christmas how much money did you spend on:		
	fertilizer	nothing	35
		M$ 1 - 40	24
		M$ 41 - 80	20
		M$ 81 or more	20
		don't know	1
	pesticides/weed killers	nothing	60
		M$ 1 - 10	19
		M$ 11 - 40	16
		M$ 41 or more	5
	labour	nothing	83
		M$ 1 - 60	9
		M$ 61 or more	7
		don't know	1
23.	Did you apply for the pepper subsidy scheme?	yes	61
		no	39
		don't know/not relevant	0
24.	How much black pepper have you produced since last Christmas?	nothing	52
		1 - 200 kati	19
		201 - 500 kati	17
		501 kati or more	11
		don't know	1

24a. How much white pepper have you produced since last Christmas?	nothing		93
	1 - 200 kati		4
	201 or more kati		3
25. Did you receive assistance under the following schemes from the Department of Agriculture?	rubber	yes	61
		no	39
	fruit trees	yes	4
		no	96
	fish fry	yes	7
		no	93
	materials and money for making a fish pond	yes	2
		no	98
	pigs	yes	0
		no	100
	fowls	yes	3
		no	97
	any other things from the Department of Agriculture	yes	1
		no	99
26. Has someone from this household been trained at a Farmer's Training Centre?	somebody		8
	nobody		92
	don't know/not relevant		0
27. Since last Christmas, have you sold the following products to the towkay?	paddy:	yes	14
		no	86
	rubber:	yes	4
		no	96
	maize:	yes	4
		no	96
	fruits:	yes	10
		no	90
	tapioca:	yes	0
		no	100
	groundnuts:	yes	1
		no	99
	pigs:	yes	4
		no	96
	chickens:	yes	15
		no	85
	ducks:	yes	2
		no	98
	fish:	yes	1
		no	99
	other products:	yes	6
		no	94
28. Do you have a vegetable garden?	yes		11
	no		89
	don't know/not relevant		0
29. What is the most economical and profitable way to work in your fields and gardens?	with household members only		43
	labour exchange		40
	employ people paid daily		14
	employ people by contract		3
	don't know/not relevant		0
30. What method do you usually use?	household members only		39
	labour exchange		55
	employ people paid daily		5
	employ people by contract		0
	don't know/not relevant		1

31.	What difficulties in life are people like you facing?	not enough food	58
		not enough money for consumptive purposes	25
		not enough money for productive purposes	3
		not enough money for education	1
		improper house	6
		health problems	20
		family problems	3
		floods, pests, infertile land, inaccessibility etc.	3
		else	5
		no problems	1
		don't know/not relevant	4
32.	What are you doing to improve your situation and to overcome these difficulties?	work hard in general	6
		work hard, plant paddy	10
		work hard, plant cash crops	13
		borrow money for consumptive purposes	3
		borrow money for productive purposes	1
		eat less, and/or inferior food	4
		work as a labourer	16
		keep fit and healthy (prevention)	1
		see the dresser (look for a cure)	6
		no solution possible	3
		government should look into it	7
		don't know/not relevant	39
33.	What problem is your village facing?	implicit reproaches to the Government	30
		school too far away 3	
		no water supply 10	
		inaccessible 10	
		no proper medical facilities nearby 4	
		no community hall 1	
		else 2	
		people don't have enough food	36
		people are poor	13
		health problems	9
		floods, pests, infertile land, etc.	6
		complaints about the community, theft, backward, dirty, etc.	5
		else	3
		no problems	6
		don't know/no answer	24
34.	How can this problem be overcome?	Individual solutions, such as work hard, plant pepper, work as a labourer, etc.	28
		solutions by the village itself as work cooperatively, control morality, lend to each other, etc.	5
		solutions for, but not by the village as request projects and other assistance from Government and Mission	18
		else	1
		no solution	1
		don't know/not relevant	50
35.	What are the problems of the Bidayuh?	not enough to eat	36
		poverty	29
		bad health	9
		backward, no pepper, uneducated, lagging behind the Chinese, undeveloped, etc.	8
		no development projects for them	3
		no luck	3
		unable to organize themselves	2
		else	4
		no problems	1
		don't know/not relevant	26

1. Total higher than 100%, because some interviewees gave more than one answer.

36. What are the problems of the Chinese farmers?	not enough land	22
	no subsistence crop	3
	pepper diseases	2
	heavy debts	1
	work too hard	1
	political problems	2
	else	1
	no problems	12
	don't know/not relevant	58[1]
37. What are the problems of Sarawak?	ratio between prices consumption goods and cash crops disturbed	29
	undeveloped, no roads, etc.	2
	insurgency	26
	unemployment	1
	poor people don't have enough to eat	4
	unable, wrong Government	4
	no problems	3
	don't know/not relevant	38[1]
38. If you were the headman in this village, what would you do?	do the headman's work	21
	develop the village (no further specification)	9
	develop the village by constructing road, school, etc. (Government assistance implicit reckoned on)	6
	ask the Government for assistance	22
	guide, tell and urge my people to live properly and to develop the village	14
	help the Bidayuh	2
	else	1
	do nothing	2
	don't want to be a headman	2
	don't know/not relevant	30[1]
39. If you were the Bidayuh Minister, what would you do?	assist this person, this village	3
	help, advise the Bidayuh	38
	help, develop and guide the people (in general)	28
	help supporters with jobs and scholarships	2
	eradicate discrimination	1
	else	3
	don't want to be a minister	2
	don't know/not relevant	28[1]
39a. If you were the Chief Minister, what would you do?	administrate and develop the country	33
	end the insurgency	4
	give fair treatment to everybody	2
	give favours, lower taxes, free education, assistance to the poor	10
	restore the previous level of prices	2
	assist especially this person, village, the Bidayuh	2
	else	2
	don't want to be Chief minister	2
	don't know/not relevant	50[1]
40. For what reasons are development projects and schemes given to the people?	for our progress, improvement, development, to make us prosper etc.	18
	to help us, to make us happy, to give us an easier life	52
	that is what the Government does, it is their custom	2
	for rural development	16
	else	2
	don't know/not relevant	18[1]

1. Total higher than 100%, because some interviewees gave more than one answer.

41. How does the Government obtain money to finance the projects and schemes?

taxes	34
licences, rents etc.	8
the people	8
the Federal Government	14
foreign aid (Queen Elizabeth)	2
bank	2
company taxes	3
the Government itself	8
else	1
don't know/not relevant	36[1]

42. What do you think about the improvements in the life of the Bidayuh since Independence?

Bidayuh have got development projects	37
Bidayuh are doing better (partly because of the Government's efforts)	8
there is some improvement	6
other places have been improved, but not this one	4
no improvement	9
situation is worse (low price of rubber)	1
don't know/not relevant	35

43. Did you ever ask for advice in the following cases? From whom?

growing of pepper and other crops	
never	80
Department of Agriculture	6
Bidayuh farmer	8
Chinese farmer	4
shopkeeper	1
don't know/not relevant	1
buying and selling of goods	
never	90
Chinese shopkeeper	5
Bidayuh shopkeeper	2
other persons	2
don't know/not relevant	1
sickness and health	
never	68
dresser, doctor, etc.	22
witch doctor	2
layman, else	8
don't know/not relevant	0
religious affairs	
never	58
priest, pastor	25
catechist	13
layman	2
functionary traditional religion	2
don't know/not relevant	0
customary law	
never	76
native chief	1
headman and religious leaders	5
layman	17
don't know/not relevant	1

44. Did anyone ever ask your advice for:

	yes	no	don't know/ not relevant
growing of pepper	15	85	0
sickness and health	17	82	1
buying and selling goods	10	90	0
in religious affairs	21	88	1
in political affairs	5	94	1
customary law	20	80	0

1. Total higher than 100%, because some interviewees gave more than one answer.

45.	How regularly do you attend village meetings?	never	8
		sometimes	30
		often	28
		nearly always	7
		always	27
		don't know/not relevant	0
46.	If you do not agree with the decision of the village meeting to work on a project, (like cleaning the village) what do you do?	join the work without grumbling	82
		join the work but grumble	7
		keep quiet and don't work	7
		oppose loudly and do nothing	3
		don't know/not relevant	1
47.	How regularly do you attend the sessions of the village court?	never	47
		sometimes	38
		often	8
		nearly always	2
		always	5
		don't know/not relevant	0
48.	If the village court imposes a fine on you which you think is not fair, what would you do?	pay the fine	9
		propose to have it decided by an an ordeal	6
		say nothing but pay not	7
		see the Native Chief	67
		see the District Officer	8
		don't know/not relevant	3
49.	Would it be better if all people in this village are member of the same party?	yes	87
		no	2
		don't know/not relevant	11
50.	Would it be better if all people in this village have the same religion?	yes	95
		no	2
		don't know/not relevant	3
51.	Is it correct that people of this village rent or sell their land to the Chinese?	yes	3
		no	95
		don't know/not relevant	2
52.	Is a nice balai or community hall a necessity for this village?	yes	90
		no	7
		don't know/not relevant	3
53.	How much would you contribute to the construction?	nothing	9
		M$ 0.01 - 0.99	27
		M$ 1.00 - 1.99	31
		M$ 2.00 - 5.99	21
		M$ 6.00 or more	12
54.	Is a good sportfield a necessity in this village?	yes	86
		no	12
		don't know/not relevant	2
55.	How much would you contribute to the proper levelling?	nothing	9
		M$ 0.01 - 0.99	35
		M$ 1.00 - 1.99	31
		M$ 2.00 - 5.99	18
		M$ 6.00 or more	7
56.	Is a waterpipe a necessity for this village?	yes	92
		no	5
		don't know/not relevant	3
57.	How much would you contribute to the construction?	nothing	7
		M$ 0.01 - 0.99	28
		M$ 1.00 - 1.99	20
		M$ 2.00 - 5.99	28
		M$ 6.00 or more	17
58.	Is the present headman doing his work well?	yes	82
		no	7
		don't know/not relevant	11

59.	In the present situation, could you be the headman?	yes	3
		may be	4
		no	91
		don't know/not relevant	2
60.	Should the headman get some salary from the villagers, provided he is doing his work well?	yes, in cash	10
		yes, in labour	35
		no	44
		don't know/not relevant	11
61.	How much would you wish to contribute to that?	*in cash per year*	
		M$ 0.01 - 2.99	4
		M$ 3.00 or more	6
		nothing	90
		in labour per year	
		one day	27
		two days or more	8
		nothing	65
62.	Has any person of this household joined the Adult Education for one year or longer?	yes	23
		no	77
		don't know/not relevant	0
63.	What did they gain by it?	nothing	6
		can read bus number and write their name	6
		more	10
		don't know/not relevant	78
64.	Has any person of this household attended the course of the Home Demonstrator?	yes	21
		nobody	64
		don't know/not relevant	15
65.	What did they gain by attending it?		
66.	For what purpose is there a Women's Institute?	to teach the women to be progressive, to improve the life of the women	5
		to help the people	3
		to teach sewing, gardening, etc.	8
		to collect funds	2
		else	1
		don't know/not relevant	82
67.	Is any person of this household an active member of the Women's Institute?	yes	7
		no	31
		don't know/not relevant	62
68.	For what purpose is there a 4H club?	to develop the youth	4
		to improve the village, teach agriculture, etc.	4
		to build a club house	9
		to collect funds	1
		for fun and sociability	11
		else	1
		don't know/not relevant	75
69.	Is any person of this household an active club member?	yes	13
		no	30
		don't know/not relevant	57
70.	In which of the following types of shops do you prefer to buy your goods?	Bidayuh cooperative society, with Government advice	11
		Bidayuh towkay	24
		Chinese towkay	13
		there is no difference	51
		don't know/not relevant	1
71.	Do you have a towkay who helps you if necessary?	yes	51
		no	48
		don't know/not relevant	1
72.	What is he willing to give on credit?	fertilizer and chemicals	45
		rice	41
		other foodstuffs	37
		cash	31

(The questions 73 - 75 only for the youngest fertile women in the household)

73. Where did you have your first child?

74. Who assisted?

traditional midwife in the village	42
trained midwife in the village	1
trained midwife in the MCH clinic	3
in the convent	11
hospital	3
don't know/not relevant	40

75. Is the child still alive?

yes	56
no	4
don't know/not relevant	40

(Questions 76, 77 and 78 for the oldest couple younger than 45 years)

76. Did you ever try family planning?

77. Are you still practising?

78. What method do you use?

never	71
pill, no more	4
other method, no more	0
pill, still	5
sterilization woman	1
sterilization man	1
other method, still	0
don't know/not relevant	18

79. What taxes and licences are you paying?

	yes	no	don't know/ not relevant
house	84	14	2
radio	33	67	0
bicycle	7	93	0
gun	41	59	0
car/motorcycle	2	98	0
shop	5	95	0
else	3	97	0

80. What does the Government do with the money?

pays Government servants	36
uses it for development	27
to help the poor people	10
takes it away	2
else	0
don't know/not relevant	39[1]

81. Since last Christmas, how often did you visit:

	never	once or more	don't know/ not relevant
Office Department of Agriculture	68	32	0
District Office	56	44	0
Council Office	65	35	0
other offices	93	6	0

82. Since last Christmas, did you visit any important person?

yes	16
no	84
don't know/not relevant	0

83. How often do you work for daily payment or by contract for other people in this village?

regularly	19
seldom	35
never	46
don't know/not relevant	0

84. Nearly always with the same people?

yes	9
no	45
don't know/not relevant	46

1. Total higher than 100%, because some interviewees gave more than one answer.

85.	How often do you employ people from this village for daily payment or by contract?	regularly	55
		seldom	17
		never	77
		don't know/not relevant	1
86.	Nearly always the same people?	yes	2
		no	19
		don't know/not relevant	79
87.	Has your house a latrine of its own?	yes	34
		no	60
		shared with others	5
		don't know/not relevant	1
88.	Did you ever visit:		yes / no
		Kuching	81 / 19
		Bau	21 / 79
		Lundu	5 / 95
		Simunjan	4 / 96
		Simanggang	8 / 92
		Sibu	5 / 95
		Miri	1 / 99
		places outside Sarawak	3 / 97
89.	How often do you visit Serian (District Centre)?	at least once a week	14
		less than once a week but at least once a fortnight	7
		less than once a fortnight but at least once a month	16
		less than once a month but at least once in three months	10
		less	53
		don't know/not relevant	0
90.	Do you have a radio?		
91.	Does it give any sound at the moment?	no radio	61
		yes, it plays	29
		yes, it does not play	10
		don't know/not relevant	0
92.	What particular Bidayuh programme is most important to you?	any programme in Bidayuh	3
		news in general	32
		home news and announcements	21
		world news	8
		traditional songs, stories, etc.	21
		modern entertainment	1
		advice in general	2
		health	6
		agriculture	17
		development	3
		market prices	2
		no particular programme	3
		else	1
		don't know/not relevant	5[1]
93.	What languages can you read?	Land Dayak only	2
		Land Dayak and Malay	14
		Land Dayak and Malay and English	13
		none	71
		don't know/not relevant	0
94.	Did you ever get a farmer's bulletin or another leaflet from the Department of Agriculture?	yes	8
		no	92
		don't know/not relevant	0
95.	Are you a lucky or unlucky person?	lucky	14
		unlucky	65
		don't know/not relevant	21

1. Total higher than 100%, because some interviewees gave more than one answer.

		yes	no
96. Does a member of this household occupy one of the following positions?			
	Native Chief, headman, tukang gawai, tukang barih, catechist, church elder	19	81
	member of the following committees: cooperative society, paddy scheme, Women's Institute, 4H club, party branch, school committee	13	87

Other information obtained through unstructured questions:

a. Name of the village where the interview took place	Daso	16
	Empaneg	9
	Engkaru	18
	Mapu	12
	Murut	13
	Retuh	14
	Tangga	18
b. Size of the household	one, two person(s)	2
	three persons	7
	four persons	11
	five persons	12
	six persons	15
	seven persons	14
	eight persons	13
	nine persons	10
	ten persons	8
	eleven persons	5
	twelve or more persons	3
c. Age of the head of the household	20 years or younger	3
	21 - 30 years	23
	31 - 40 years	29
	41 - 50 years	23
	51 - 60 years	15
	61 years or more	7
d. Religion of the head of the household	Bidayuh traditional religion	25
	RC	47
	SDA	23
	else or 'free thinker'	5
e. Origin of the oldest married couple in the household	husband and wife from village of residence	67
	husband from village of residence, wife from elsewhere	12
	husband from elsewhere, wife from village of residence	13
	else/not relevant	8
f. Origin of men related by marriage (excluding oldest married couple)	none	91
	one from village of residence	5
	two from village of residence	1
	one from elsewhere	3
	else	0
g. Origin of women related by marriage (excluding oldest married couple)	none	87
	one from village of residence	8
	two from village of residence	1
	one from elsewhere	4
	else	0
h. Type of household, nuclear-extended family	one generation, without persons not directly related	1
	one generation, with persons not directly related	0
	two generations, without persons not directly related	60
	two generations, with persons not directly related	4

		three generations, without persons not directly related	28
		three generations, with persons not directly related	3
		four generations, without persons not directly related	3
		four generations, with persons not directly related	1
i.	Education of the head of the household	none	73
		primary 1 - primary 4	17
		primary 5 or higher	9
		don't know/not relevant	1
j.	Highest level of education gained by some member of the household	none	7
		primary 1 - primary 4	34
		primary 5 - primary 6	48
		form 1 - form 2	5
		form 3 or higher	6
k.	Occupation of the head of the household	farmer/housekeeper	89
		permanent labourer	6
		occasional labourer/farmer	4
		not working	1
l.	Other household members engaged as permanent labourer	none	95
		one	5
		two or more	0
m.	Other household members engaged as occasional labourer	none	94
		one	5
		two or more	1
n.	Number of working household members	one, two person(s)	29
		three persons	22
		four persons	19
		five persons	17
		six persons	9
		seven or more	4
o.	Household of respondent living in	detached dwelling	44
		attached dwelling	56
p.	Household of respondent living	within residential area of the village	94
		outside residential area of the village	6

Appendix III. Items and indexes used in the analysis of the information obtained from a survey of 400 households in seven villages

The majority of items and indexes that have been constructed do not need rationalizing. They are indicative of personal characteristics of the heads of households, like age, religion and sex, and activities the households are engaged in, like cultivation of crops, participation in village affairs, and travelling. However the index empathy and the items happiness and luck (SOCIAL STRUCTURE, nos 5, 6 and 7) need some explanation. Empathy was operationalized in accordance with Lerner's definition (1958, page 50): "Empathy is the capacity to see oneself in the other fellow's situation". The index was based on a number of questions with which I tried to assess the understanding the Bidayuh have of other people's position, especially of people responsible for the administration and development of their area and country. The subject of my study, the relation between Government and rural people, prompted this inclusion[1]. Happiness and luck were included in the analysis because the preliminary investigations in anthropological style had shown that most Bidayuh are unhappy about their situation, and that they attribute great importance to sheer luck. Previously Geddes (1954a, page 98) had described them in the following way: "Like martyrs but without inspiration, they are resigned to the fates which decreed that their way should be this way and not the way of fortune".

The construction of items and indexes was based on the different answers obtained. Abbreviated versions of these answers, and the corresponding questions are presented. The number(s) and letters in front of these refer to the original questionnaire, see Appendix II. When possible the answers to each question have been grouped into three (or two) categories which differed little in size. When the items were used for the construction of an additive index, weights of zero, one (and two) were assigned to the different categories. By adding the score on each item, the total score on an additive index was calculated for each household. The total scores obtained on the different indexes were again divided into three (or two) categories, called low, high and intermediate. The frequencies in these categories were used in cross-tabulations.

Here the items and indexes are presented in three groups (SOCIAL STRUCTURE, AGRICULTURE, LABOUR) and several subgroups, as they also appear in the association matrixes, Appendixes IV, V, and VI. The numbers in front of the items and indexes correspond with those in the association matrixes.

SOCIAL STRUCTURE

Personal characteristics

1.	Age question c: age of the head of the household	30 years or younger 31 - 40 years 40 years or older	102 116 182
2.	Religion question d: religion of the head of the head of the household	traditional Bidayuh, else or 'free thinker' a Christian denomination	116 284
3.	Education head of household question i:	none/don't know/not relevant some	295 105

1. In Appendix II the actual answers are presented in a number of concisely indicated categories, see Questions 31-42, and 80. They give a good idea on some of the opinions Bidayuh hold.

4. Urban influenced style of life, index

	weights		
	2	1	0
question 28: vegetable garden	yes	don't know	no
question 73,74: professional assistance with the first delivery of the youngest woman in the household	yes	dont't know	no
question 76,77,78: birth control practised by the eldest fertile couple in the household	yes	don't know	no
question 87: latrine	yes	shared/ don't know	no
question 93: literacy	yes	don't know	no

Total scores:

0 - 57 1 - 57	114	low
2 - 118 3 - 35	153	intermediate
4 - 69 5 - 11 6 - 37 7 - 7 8 - 8 9 - 0 10 - 1	133	high

5. Empathy, index

	weights	
	1	0
question 31: what difficulties in life are people like you facing?	an answer	don't know
question 32: how can these be overcome?	an answer	don't know
question 33: what problem is your village facing?	an answer	don't know
question 34: how can it be overcome?	an answer	don't know
question 35: what are the problems of the Bidayuh?	an answer	don't know
question 36: what are the problems of the Chinese farmers?	an answer	don't know
question 37: what are the problems of Sarawak?	an answer	don't know
question 38: if you were headman, what would you do?	an answer	don't know
question 39: if you were the Bidayuh minister, what would you do?	an answer	don't know
question 39a:if you were the Chief minister, what would you do?	an answer	don't know
question 40: for what reason are projects given to the people?	an answer	don't know
question 41: how does the Government obtain the money for the projects?	an answer	don't know
question 42: what do you think about the improvements in the life of the Bidayuh since independence?	an answer	don't know
question 80: what does the Government do with the money obtained from taxes?	an answer	don't know

Total scores

0 - 0 1 - 0 2 - 6 3 - 10 4 - 15 5 - 19 6 - 24 7 - 23 8 - 29	low 126	9 - 41 10 - 41 11 - 55	intermediate 137	12 - 57 13 - 43 14 - 37	high 137

6. Happiness

question 1: Are you happy or unhappy in your present situation?	happy	85
	don't know	17
	unhappy	298

7. Luck

question 95: Are you a lucky or unlucky person?	lucky	57
	don't know	86
	unlucky	257

Economic position

8. Occupation outside the village

question k, l, m: Occupation of the head of the household Other family members engaged in wage labour outside the village	one or more in the household	67
	none	233

9. Socio-economic status, index

question 79: House tax Radio license. Bicycle license Gun license Road tax car/motorcycle Other taxes/licenses	Total of taxes paid:	
	M$ 0.00 - 2.99	124
	M$ 3.00 - 4.99	133
	M$ 5.00 or more	143

10. Type of labour used

question 30: What method (type of labour) do you usually use on your fields and in your gardens?	household members only	156
	labour exchange	223
	paid labour (daily/contract)	21

11. Sufficient rice

question 13, 14: Is the harvested amount of paddy enough for this whole year? Finished how many months after the Harvest?	enough for 0 - 4 months	121
	enough for 5 - 9 months	139
	enough for 10 months or more	140

12. Pepper, mature vines

question 16: How many fruit-bearing pepper vines do you have?	none	190
	1 - 200 vines	134
	201 vines or more	76

13. Rubber, low yielding types

question 15: How many low yielding rubber trees do you have?	none/don't know	103
	yes	297

Social position

14. Traditionally existing position

question 96: Does a member of this household occupy one of the following positions: headman, deputy headman, traditional religious leader, catechist	none	323
	one or more	77

15. Newly introduced position

question 96: Does a member of this household occupy one of the following positions: schoolcommittee, leader irrigation scheme, W.I. leader, 4H club leader, party branch leader	none	348
	one or more	52

16. Participation in, and agreement with the conduction of village affairs, index

	weights		
	2	1	0
question 45: How regularly do you attend village meetings?	(nearly) always	often	sometimes/ never
question 46: Disagreement with decision of village meeting	accepts decision	-	oppose/ keep away
question 47: How regularly do you attend the village court?	often/(nearly) always	sometimes	never

question 48:	weights 2	1	0
question 48: Disagreement with ruling of the village court	pay fine	propose ordeal/say nothing, don't pay/don't know/not relevant	appeal
question 58: Does the present headman work well?	yes	-	no/don't know

Total scores:

0 - 3 1 - 2 2 - 22 3 - 36 4 - 65	Low 128	5 - 83 6 - 82	Intermediate 165	7 - 67 8 - 31 9 - 9 10 - 0	High 107

Items rejected, rejection based on correlation between item and preliminary total score, and mutual correlation between items:
question 49: Should all villagers be in the same party?
question 50: Should all villagers be of the same religion?
question 51: Correct to rent or sell land to Chinese?
question 52: Community hall a necessity?
question 54: Sport field a necessity?
question 56: Water pipe a necessity?
question 60: Should villagers reimburse headman's expenses?

17. Advised other people in the village, index

	weights 1	0
question 44: Advised about agriculture?	yes	no/don't know
question 44: Advised about sickness and health?	yes	no/don't know
question 44: Advised about trading?	yes	no/don't know
question 44: Advised about religious affairs?	yes	no/don't know
question 44: Advised about political affairs?	yes	no/don't know
question 44: Advised about customary life?	yes	no/don't know

Total scores:

0 - 236	Low	1 - 68 2 - 45 3 - 25 4 - 14 5 - 9 6 - 3	High 164

18. Searched for knowledge, index

	weights 1	0
question 43: Asked advice about agriculture?	yes	no/don't know
question 43: Asked advice about sickness and health?	yes	no/don't know
question 43: Asked advice about trading?	yes	no/don't know
question 43: Asked advice about religious affairs?	yes	no/don't know

	weights	
	1	0
question 43: Asked advice about political affairs?	yes	no/don't know
question 43: Asked advice about customary life?	yes	no/don't know

Total scores:

0 - 143 Low 1 - 109 Intermediate 2 - 73, 3 - 42, 4 - 24 High 148, 5 - 7, 6 - 2

Contacts outside the village

19. Radio

question 90: Do you have a radio?	no radio	242
question 91: Does it give any sound at the moment?	radio, not working	42
	radio, working	116

20. Travel experience, index

	weights	
	1	0
question 88: Visited Kuching?	yes	no
question 88: Visited Bau?	yes	no
question 88: Visited Simanggang?	yes	no
question 88: Visited Sibu?	yes	no
question 88: Visited places outside Sarawak?	yes	no
question 89: How often do you visit Serian?	at least 4 times a year	less

Total scores:

0 - 67, 1 - 118 Low 185 2 - 141 Intermediate 3 - 49, 4 - 19, 5 - 7, 6 - 2 High 74

21. Visits to Government offices, index

	weights	
	1	0
question 81: Number of visits to Department of Agriculture last year?	one or more	none
question 81: Number of visits to District Office last year?	one or more	none
question 81: Number of visits to Council Office last year?	one or more	none
question 81: Number or visits to other offices last year?	one or more	none

Total scores:

0 - 107 Low 1 - 128 Intermediate 2 - 90, 3 - 62, 4 - 13 High 165

22. Assistance by Government, index

	weights	
	1	0
question 25:Did you participate in the *Rubber Planting Scheme*?	yes	no/don't know
question 25:Did you receive budded fruit trees?	yes	no/don't know
question 25:Did you receive fish fry?	yes	no/don't know
question 25:Did you receive fish pond subsidy?	yes	no/don't know

question 25:Did you receive fowls?	yes	no/don't know	
question 25:Did you receive any other type of assistance?	yes	no/don't know	

Total scores:

0 - 142	Low	1 - 222 2 - 25 3 - 10 4 - 1 5 - 0	High 258	

23. Farmers' Training Centre course

question 26:Does/did a member of the household attend a course in a Farmers' Training Centre?	nobody	370
	one or more	30

AGRICULTURE

Paddy

1. Hill paddy

question 2, 3, 4: Was any hill paddy cultivated last season?	yes	274
	no/don't know	126

2. Yield hill paddy per gallon seed used

question 2, 4: The ratio of harvested amount in gallons to amount of seed used in gallons	.0 - 6.9	75	Low
	.7.0 - 13.9	81	Intermediate
	.14.0 or more	83	High

3. Ammophos

question 6 : Did you use Ammophos last season?	yes	9
	no/don't know	391

4. Increase or decrease acreage hill paddy

question 4, 5: Amount of seed in gallons used this season, minus amount of seed in gallons used last season	positive, increase	134
	zero, equal	72
	negative, decrease	114

5. Wet paddy

question 8, 9, 10: Was any wet paddy cultivated last season?	yes	300
	no/don't know	100

6. Yield wet paddy per gallon seed used

question 8, 10: The ratio of harvested amount in gallons to amount of seed used in gallons	0 - 14.9	90	Low
	15.0 - 29.9	97	Intermediate
	30.0 or more	100	High

7. Assistance to Padi Planters Scheme

question 12 : How much was planted in an APP Scheme?	nothing/don't know	345
	something	55

8. Increase or decrease acreage wet paddy

question 10, 11 : Amount of seed in gallons used this season, minus amount of seed in gallons used last season	positive, or increase	120
	zero, or equal	148
	negative, or decrease	53

9. Sufficient rice

See 11, under SOCIAL STRUCTURE

10. Paddy sold

question 27: How much paddy was sold last year?	nothing	345
	some paddy	55

Pepper

11. Pepper, mature vines
See 12, under SOCIAL STRUCTURE

12. Yield pepper per vine
question 16, 24, 24a:
Amount of black pepper plus amount white pepper in katis divided by the number of mature vines

0 - 1.9 kati/vine	81	Low
2.0 - 5.9 kati/vine	68	Intermediate
6.0 or more kati/vine	61	High

13. White pepper
question 24a:
Was any white pepper produced last year?

yes	26
no/don't know	274

14. Hardwood posts
question 17:
How many mature vines have hardwood posts?

none	83
not relevant/don't know	234
some or all	83

15. Expenditure on fertilizer per vine
question 16, 22:
The expenditure on fertilizer divided by the number of mature vines

nothing	32
M$ 0.01 - 0.99 per vine[1]	77
M$ 1.00 or more per vine	101

16. Expenditure on labour per vine
question 16, 22:
The expenditure on labour in pepper plantations divided by the number of mature vines

nothing	147
some money	63

17. Credit facilities
question 71, 72:
Is your trader willing to sell fertilizer for credit?

yes	179
no	26
no regular trader/don't know	195

Information

18. Course in Farmers' Training Centre
See 23, under SOCIAL STRUCTURE

19. Assistance by Government, index
See 22, under SOCIAL STRUCTURE

20. Printed information
question 94:
Did you ever receive a farmers' bulletin or other leaflet from the Department of Agriculture

yes	33
no/don't know	367

21. Advised others on agriculture
question 44:
Did anyone ever ask your advice for agriculture?

yes	61
no	339

22. Asked for information about agriculture
question 43:
Did you ever ask advice about agriculture?

never/don't know	323
staff Department of Agriculture	23
Bidayuh farmer	31
Chinese farmer	17
shopkeeper	6

Else

23. Other products sold, index

	weights	
	1	0
question 27: Did you sell maize last year?	yes	no
question 27: Did you sell fruit last year?	yes	no

1. 3 kg of inorganic fertilizer costs M$ 1.-.

question 27:
Did you sell sweet potatoes last year? yes no

question 27:
Did you sell groundnuts last year? yes no

question 27:
Did you sell pigs last year? yes no

question 27:
Did you sell chickens last year? yes no

question 27:
Did you sell ducks last year? yes no

question 27:
Did you sell fish last year? yes no

question 27:
Did you sell other minor products last year? yes no

Total scores:

0 - 270 Low

1	- 96	
2	- 29	
3	- 2	High 130
4	- 3	
5-9	- 0	

24. Number of workers in the household
question n:
How many members are productively engaged?

none, one, two	118
three, four	162
five or more	120

LABOUR

1. Sufficient rice
See 11, under SOCIAL STRUCTURE

2. Pepper
See 12, under SOCIAL STRUCTURE

3. Occupation outside the village
See 8, under SOCIAL STRUCTURE

4. Number of workers in the household
See 24, under AGRICULTURE

5. Occasionally working for co-villagers
question 83:
How often do you work as labourer with co-villagers?

never	183
seldom/don't know	70
regularly	22

7. Expenditure on labour per vine
See 16, under AGRICULTURE

8. Most efficient work force
question 29:
What is the most efficient way to arrange the work in your agricultural enterprises?

household members only	172
labour exchange/don't know	163
paid labour (daily/contract)	55

9. Type of labour used
See 10, under SOCIAL STRUCTURE

10. Accordance between type of labour force used and preferred
question 29, 30:
What is the most efficient way to arrange the work?
What method do you usually use?

accordance	284
no accordance	116

11. Having a regular employer
question 84:
Do you work (nearly) always for the same employer?

yes	34
don't know/not relevant	185
no	181

12.	Having regular labourers		
	question 86:		
	Do you employ (nearly) always the same people?	yes	9
		don't know/not relevant	316
		no	75

Appendix IV. Association between items and indexes of different aspects of social structure, obtained from the survey of households in seven villages, N = 400 (Appendix III)

		Personal characteristics							Economic position						Social position					Contacts outside the village				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Personal characteristics																								
Age	1																							
Religion	2	x																						
Education	3	.	x																					
Urban influenced style of life, index	4	x	x	x																				
Empathy, index	5	x	.	x	-																			
Happiness	6	x	-	x	x	-																		
Luck	7	x	x	x	x	x	x																	
Economic position																								
Occupation outside the village	8	-	-	-	-	-	x	x																
Socio-economic status, index	9	.	x	x	.	.	x	-	x															
Type of labour used	10	x	.	x	x	-	.	.	.	x														
Sufficient rice	11	-	-	.	x	.	x	x	x	-	x													
Pepper, mature vines	12	-	x	x	x	-	x	x	x	.	.	x												
Rubber, low yielding types	13	.	-	.	.	.	.	.	.	.	.	.	-											
Social position																								
Traditionally existing position	14	-	-	.	-	-	-	-	-	x	.	-	x	.										
Newly introduced position	15	-	-	-	-	-	x	x	-	x	.	x	x	.	x									
Participation in and agreement with village affairs, index	16	-	.	-	.	.	-	-	-	-	-	-	-	-	x	-								
Advised other people in village, index	17	-	.	-	x	x	-	x	-	x	-	-	x	x	x	-	x							
Asked for information, index	18	x	.	x	x	x	-	-	-	-	-	x	-	-	x	-	x	x						
Contacts outside the village																								
Radio	19	.	.	.	x	-	.	.	.	.	.	.	.	.	.	.	.	x	x					
Travel experience, index	20	x	x	x	x	x	x	x	.	x	.	.	.	.	-	x	.	-	x	x				
Visits to Govt offices, index	21	-	.	x	x	x	x	x	.	x	.	.	.	.	x	x	.	x	x	x	x			
Assistance by Govt index	22	x	.	-	-	x	x	x	x	x	-	.	x	.	-	x	x	x	-	.	-	x		
Farmers' Training Centre course	23	.	.	-	-	-	-	-	.	.	-	.	-	.	.	.	-	-	-	.	.	.	-	

x = association significant at 0.05 level (chi square); - = no significant association; . = association not investigated

DIRECTION OF ASSOCIATIONS

A young age corresponds with:	profession of the Christian religion urban influenced style of life empathy being happy being lucky use of labour exchange and/or working with household members only (N.B. Also old people nearly fully depend on these types of labour. Only the category of middle aged (31-40 years) uses paid labour comparitively often). having asked for information People in the category of middle age (31-40 years) have the widest travel experience. Those in the category of 41 years or older obtained more Government assistance.
Profession of the Christian religion corresponds with:	a high level of education an urban influenced style of life uncertaincy about one's luck either a high, or a low socio-economic status a high number of mature pepper vines travel experience
A high level of education corresponds with:	urban influenced style of life empathy being happy being lucky either a high, or a low socio-economic status use of paid labour a high number of mature pepper vines having asked for information travel experience visits to Government offices
An urban influenced style of life corresponds with:	happiness luck little use of labour exchange sufficient rice for home consumption a high number of mature pepper vines having advised other people having searched for knowledge owning a radio travel experience visits to Government offices
Empathy corresponds with:	being lucky having advised other people having searched for knowledge travel experience visits to Government offices having obtained Government assistance
Being happy corresponds with:	being lucky having a job outside the village a high socio-economic status sufficient rice for home consumption a high number of mature pepper vines newly introduced position travel experience visits to Government office having obtained Government assistance

To consider oneself as lucky corresponds with:	having a job outside the village sufficient rice for home consumption a high number of mature pepper vines newly introduced position having advised other people travel experience visits to Government offices having obtained Government assistance
Having an occupation outside the village corresponds with:	a high socio-economic status sufficient rice for home consumption a high number of mature pepper vines having obtained Government assistance
A high socio-economic status, as indicated by the total amount of taxes paid, corresponds with:	use of paid labour traditionally existing position newly introduced position having advised other people travel experience visits to Government offices having obtained Government assistance
Use of paid labour corresponds with:	sufficient rice for home consumption
Sufficient rice for home consumption corresponds with:	a high number of mature pepper vines newly introduced position having searched for knowledge
A high number of mature pepper vines corresponds with:	traditionally existing position newly introduced position having advised other people having obtained Government assistance
A high number of low yielding rubber trees corresponds with:	having advised other people
Holding a traditionally existing position corresponds with:	a newly introduced position participation in, and agreement with the conduction of village affairs having advised other people having searched for knowledge visits to Government offices
Holding a newly introduced position corresponds with:	travel experience visits to Government offices having obtained Government assistance
Participation in village affairs, and agreement with their conduction corresponds with:	having advised other people having searched for knowledge having obtained Government assistance
Having advised other people in the village corresponds with:	having searched for knowledge possession of a radio visits to Government offices having obtained Government assistance
Possession of a radio corresponds with:	travel experience visits to Government offices
Travel experience corresponds with:	visits to Government offices
Visits to Government offices corresponds with:	having obtained Government assistance

Appendix V. Association between items and indexes of different aspects of the agricultural system, obtained from the survey of households in seven villages, N = 400 (Appendix III)

		Paddy									Pepper							Information					Else	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Paddy																								
Hill paddy	1																							
Yield hill paddy per gallon seed	2	.																						
Ammophos	3	.	-																					
Increase/decrease acreage hill paddy	4	.	-	.																				
Wet paddy	5	-	.	.	.																			
Yield wet paddy per gallon seed	6	.	x	.	.	.																		
Assistance to Padi Planters Scheme	7	.	.	.	.	.	x																	
Increase/decrease acreage wet paddy	8	.	x	.	x	.	-	-																
Sufficient rice	9	x	.	.	-	x	.	.	-															
Paddy sold	10	.	.	.	.	.	.	.	.	x														
Pepper																								
Pepper, mature vines	11	x	.	.	-	x	.	.	-	x	.													
Yield per vine	12	.	-	.	.	.	-	.	.	-	.	-												
White pepper	13	.	.	.	.	.	.	.	.	.	.	x	x											
Hardwood posts	14	.	.	.	.	.	.	.	.	.	.	x	x	.										
Expenditure on fertilizer per vine	15	.	.	.	.	.	.	.	.	.	.	-	x	-	x									
Expenditure on labour per per vine	16	.	.	.	.	.	.	.	.	.	.	x	-	.	x	.								
Credit facilities	17	.	.	.	.	.	.	.	.	.	.	x	-	.	.	.	.							
Information																								
Farmers' Training Centre	18	-	.	.	.	-	x	.	-	.	.	-	-	-	.	.	.	.						
Assistance index	19	-	.	.	.	.	.	.	.	.	.	x	-	.	.	.	.	.	-					
Printed information	20	.	.	.	.	-	.	.	.	.	.	x	-	.	.	.	.	.	-	-				
Advised others about agriculture	21	.	-	.	.	-	.	.	-	-	.	x	-	.	.	.	.	.	-	x	.			
Asked for information about agriculture	22	.	.	.	.	-	.	.	-	-	.	-	-	.	.	.	.	.	-	-	.	x		
Else																								
Other products sold	23	.	.	.	.	.	.	.	.	-	.	x	-	.	.	.	.	.	-	-	.	.	.	
Number of workers in the household	24	x	.	.	-	-	.	.	x	x	-	x	.	.	.	.	.	.	.	.	.	.	.	.

x = association significant at 0.05 level (chi square); - = no significant association;

DIRECTION OF ASSOCIATIONS

Cultivation of hill paddy corresponds with:	insufficient rice for home consumption high number of mature pepper vines high number of workers in the household
A high yield of hill paddy per gallon seed used corresponds with:	a high yield of wet paddy per gallon seed used a decrease in the acreage of wet paddy the next season
An increase in the acreage of hill paddy corresponds with:	a decrease in the acreage of wet paddy
Cultivation of wet paddy corresponds with:	sufficient rice for home consumption a low number of mature pepper vines
A high yield of wet paddy per gallon seed used corresponds with:	participation in an Assistance to Padi Planters Scheme being trained in a Farmers' Training Centre
An increase in the acreage of wet paddy corresponds with:	a low number of workers in the household
Sufficient rice for home consumption corresponds with:	sale of paddy a high number of mature pepper vines a high number of workers in the household
A high number of mature pepper vines corresponds with:	production of white pepper a high percentage of hardwood posts a high expenditure on labour per vine availability of credit a high score on the index Assistance by Government having obtained printed information from the Department of Agriculture having advised others about agriculture little sale of other agricultural products a high number of workers in the household
A high yield per vine corresponds with:	production of white pepper a high percentage of hardwood posts a high expenditure on fertilizer per vine
A high percentage of hardwood posts corresponds with:	a high expenditure on fertilizer per vine a high expenditure on labour per vine
A high score on the index Assistance by Government corresponds with:	having advised others about agriculture
Having advised others about agriculture corresponds with:	having asked for information about agriculture

Appendix VI. Association between items and indexes of different aspects of labour, obtained from the survey of households in seven villages, N = 400 (Appendix III)

		1	2	3	4	5	6	7	8	9	10	11	12
Sufficient rice	1												
Pepper, mature vines	2	x											
Occupation outside the village	3	x	x										
Number of workers in the household	4	x	x	.									
Occasionally working for co-villagers	5	x	.	.	.								
Employment of co-villagers	6	x	x	x	.	x							
Expenditure on labour per vine	7	.	x	x	.	.	.						
Most efficient workforce	8	.	.	x	.	-	x	.					
Type of labour used	9	.	.	x	.	-	x	.	x				
Accordance between type of labour used and preferred	10	-	x	.	.	.	.	.	.	.			
Having a regular employer	11	.	.	.	.	-	.	.	.	.	.		
Having regular labourers	12	.	-	-	.	.	-	.	.	.	.	.	

x = association significant at 0.05 level (chi square); - = no significant association;
. = association was not investigated.

DIRECTION OF ASSOCIATIONS

Sufficient rice corresponds with:	a high number of mature pepper vines an occupation outside the village a high number of workers in the household not working for others employing others
A high number of mature pepper vines corresponds with:	an occupation outside the village a high number of workers in the household employing co-villagers for a payment in cash a high expenditure on labour per vine non-accordance between type of labour used and preferred
An occupation outside the village corresponds with:	employment of co-villagers a high expenditure on labour per vine disinterest in labour exchange use of paid labour
Occasionally working for co-villagers corresponds with:	never or seldom employing co-villagers
Employment of co-villagers corresponds with:	little preference for labour exchange the use of paid labour
The type of labour thought to be most efficient is also used most frequently, except for those who prefer paid labour. The latter also frequently work with their household members, and make use of the labour exchange.	

Appendix VII. Population of the First Division

Table VII.1. Population characteristics per District in the First Division in 1970

District	Area in sq. miles[1]	No population	Population density per sq.mile	Percentage change in population density 1960-1970
Lundu	726	17,847	25	33,1
Bau	321	29,587	92	28,0
Kuching Municipality	8	63,535	7,942	25,6
Kuching Rural	939	151,304	161	53,0
Serian (Upper Sadong)	813	53,658	66	43,6
Simunjan (Lower Sadong)	657	31,042	47	26,2
First Division	3,464	346,973	100	40,2
Sarawak	48,342	977,438	20	31,3

1. 1 mile = 1.6 km; 1 square mile = 2.56 km2
(Sources: Regional Planning Study of the First Division of Sarawak, Taxation Report, 1969; ((MG-SBK, Dept of Stat.) Population Census 1970).

Table VII.2. Population distribution over four major ethnic groups in 1970 and 1960

District	Land Dayak		Iban		Malay		Chinese	
	1970	1960	1970	1960	1970	1960	1970	1960
Lundu	35.5	30.1	14.3	15.0	31.2	31.6	18.7	22.4
Bau	62.8	56.5	1.9	0.8	69	6.5	29.6	35.4
Kuching Municipality	2.2	1.2	2.5	1.6	22.6	20.6	69.1	72.6
Kuching Rural	14.9	16.3	4.7	5.0	37.4	36.3	40.7	39.9
Serian (Upper Sadong)	60.3	61.8	11.2	11.5	9.5	7.7	17.3	17.7
Simunjan (Lower Sadong)	0.3	0.3	33.5	31.1	52.9	51.5	10.2	13.5
First Division	23.4	23.0	8.0	8.0	28.8	27.3	37.5	39.2
Sarawak	8.6	7.7	31.0	31.9	18.7	17.4	30.1	30.8

(Sources: Regional Planning Study of the First Division of Sarawak, Taxation Report, 1969; ((MG-SBK, Dept of Stat.) Population Census 1970).

Appendix VIII. Rural Development Programmes

This appendix enumerates and discusses briefly programmes and schemes for rural development in Sarawak. They are grouped according to the classification given in 3.5: Rural Development Programmes, which comprised the following categories:
- Subsidy schemes
- Rural credit
- Construction projects
- Organizations at village level
- Social services.

This classification is not exclusive. Several organizations at village level are formed to make use of certain subsidies, as the Assistance to Padi Planters Scheme. Other organizations, like 4H clubs and Women's Institutes, serve as channels for extension and education.

Much attention is given to the Rubber Planting Scheme. It was one of the first programmes for rural development established in Sarawak. During its period of existence it has consumed vast amounts of money. Because it has served as a standard for many of the schemes designed afterwards, this scheme illustrates the approach to rural development in Sarawak.

VIII.1 *Subsidy schemes*

VIII.1.1 Rubber Planting Scheme

The Rubber Planting Scheme (RPS) is divided in two categories A and B. The first applies to new planting and replanting by smallholders as well as estates, while the latter concerns the planting of rubber in Land Development Schemes. Plans for the scheme were nursed from 1947, until in 1956 the RPS was first made available. The provision for that year amounted to M$ 1.5 million. Originally the scheme was intended as a replanting scheme, enabling people who had contributed to the Colony's revenue by the export duty on rubber, to replant their gardens with high yielding varieties. The seedlings were made available by the Department of Agriculture together with a cash grant to overcome financial difficulties during the maturing period to a total value of M$ 450 per acre.

However, people who did not own rubber gardens were not excluded entirely from the scheme in those first years. The total value of the provisions made available to them was M$ 200 per acre, but did not include a cash grant. The response of the population to this scheme was extremely good and in 1958 the target to be reached by 1963 of 40,000 acres had to be increased to 60,000 acres. Until 1958 nearly 90% of the applications concerned new plantings, and the provisions made available to these were added by a retrospective cash grant of M$ 50 per acre to enable the farmer to spend more time on his newly planted rubber garden. From 1956 until 1965 a total amount of 8,337 acres were replanted and 100,712 acres were newly planted. For the period under the First Malaysia Plan (1966 - 1970) when the emphasis was again on replanting the figures for smallholders for the two categories were: 14,801 acres for replanting and 46,182 acres for new planting, both well over 80% of the target that had been set ((SGK-Dep.Agric.) Agric. Dev. Progr. 1968-1970; (SGK-Dep.Agric.) Mech. and Rules Rubber Planting Scheme,1971).

The rates of subsidy for smallholders whose application was approved in 1969 and 1970 consisted of the following amounts (M$):

Replanting	1st year	2nd year	3rd year	4th year	5th year
planting material	50.00	-	-	-	-
fertilizers	37.70	30.00	42.00	54.00	-
weedicides etc.	-	36.30	-	-	-
cash grants	150.00	150.00	70.00	70.00	60.00

total M$ 750 per acre of which M$ 500 in cash.

New planting	1st year	2nd year	3rd year	4th year	5th year
planting material	50.00	-	-	-	-
fertilizers	37.70	30.00	42.00	54.00	-
weedicides etc.	-	36.30	-	-	-
cash grants	40.00	40.00	30.00	20.00	20.00

total M$ 400 per acre of which M$ 150 in cash.

For the period under the Second Malaysia Plan (1971-1975) the cash element was reduced to M$ 450 per acre for replanting and M$ 100 per acre for new planting and the allocation for weedicides was increased accordingly. This was done to ensure a better standard of upkeep because participants invariably only put their holdings in order by slashing the undergrowth when cash payments were due. This measure intended to keep out participants more interested in the immediate benefits of cash grants instead of well established rubber gardens.

The expenditure on category A of the RPS, during the years 1968, 1969 and 1970 amounted to M$ 19,256,561 of which 46% was for cash grants and the remainder for subsidies in kind

and overhead costs, in which period 38,876 acres were planted, 97% by smallholders. The importance attached to the Rubber Planting Scheme is reflected by the fact that under the First Malaysia Plan (1966-1970) M$ 42.6 million, about one-third of the public development expenditure for Agriculture and Rural Development, was made available for the planting of rubber ((MGKL)Second Malaysia Plan 1971-1975).

In 1971 during a period of depressed rubber prices, when tapping of rubber, including the high yielding varieties, had almost come to an end, new applications for the scheme were no longer accepted. The allocated funds were instead directed to a newly designed Pepper Planting Scheme, the cattle breeding scheme and the agricultural diversification programme.

To become a participant in the RPS the farmer first had to submit an application form to the Department of Agriculture at District level. After investigations into the suitability of the site, its soil and topography and the conformity of the applicant with other conditions laid down by the Department of Agriculture, the applications were recommended to the District and Divisional Development Committee for approval or rejection. A successful applicant had to be a registered proprietor of land or a native occupying land under a native system of personal law. The maximum acreage per participating family was 10 acres, and the minimum 3 acres. This latter condition could be waved if the land comprised part of a contiguous block of holdings of different participants. In general, block plantings were given preference because these facilitated control by the staff of the Department of Agriculture.

In the first year approved applicants had to clear the sites by felling of poisoning the trees, to construct contour terraces and provide drainage where necessary, to dig planting holes to a number of 180 per acre, and to plant and fertilize the clonal rubber issued to them. During the next four years the participants had to maintain their gardens by pruning, clearing the five-foot planting lanes and slashing interrow vegetation, applying fertilizer, maintaining terraces and drainage, and controlling diseases. All work had to be done according to the directions given by the staff of the Department of Agriculture. If everything was done properly, the participant qualified for his annual cash grant. The participation was liable to be terminated if he withdrew voluntarily, failed to clear the site or to complete planting, or had not attained the neccesary standards of upkeep after the garden was established. In the latter case the exclusion could not become effective before two warnings in writing had been made, each allowing 30 days grace in which the participant had the chance to have the warning cancelled by bringing his holding back to a good state of upkeep. I do not know how often such situations occurred during the last years of the scheme, but during the Colonial times they were not infrequent. By 1962 a total of 33,217 acres had been rejected from the scheme, leaving 61,184 acres under subsidy ((SGK) Sarawak Ann. Rep. 1962).

Side by side with the planting of rubber, efforts were made to improve the production and processing techniques of the participants with leaflets, radio broadcasts, short courses and the establishment of processing centres at strategic points, consisting of an open shed with rubber mangles in it.

The production of rubber depends very much on its market price. This price was and still is directly related to the one prevailing on the world market, no price intervention mechanism being present to protect the price at farm level, like in West Malaysia. Calculations made of the income a family would derive from their rubber holdings were based on assumptions which were not always realized. It had been assumed that a rubber holding of six acres, producing a conservative estimation of 600 lbs per acre per year (450 kati) would provide the owner-tapper a monthly income of M$ 180.-, if the price was M$ 0.60 per lb ((SGK-Dep.Agric.) Sec. Malaysia Plan 1971-1975). However, the actual price at farm level during 1971 and 1972 was often only slightly more than M$ 0.20 per lb, and most households had less than six acres of high yielding rubber. A survey I made of 400 Bidayuh households in the Serian district in 1972 showed an average size of high yielding holdings of 1.8 acres, in addition to an average of 2 acres of old rubber plantings.

Table VIII.1. Price of rubber at farm level in M$ per pikul and total rubber exports from Sarawak in tons. 1 pikul=133 lbs=60 kg.

	M$	Tons
1961	87.04	46,904
1962	82.54	43,796
1963	77.45	44,834
1964	71.95	42,959
1965	74.06	40,034
1966	69.08	33,589
1967	55.85	28,445
1968	55.35	23,794
1969	74.54	38,729

Compiled from: Regional Planning Study of the First Division of Sarawak, 1971. Volume IV Agriculture, Annex 7 Agricultural Development; (MG-SBK, Dep. of Stat. Ann.Bull. Statistics 1971).

This low price level caused the export of rubber to drop under 20,000 tons in 1971, less than half the export in 1969, and the lowest level since 1961, see Table VIII.1. This steep decline in the production of rubber was not expected by the Government, because during

this period many high yielding holdings planted under the Rubber Planting Scheme came to full maturity and it was believed that the higher yield per tree would partly compensate the lower price per lb.

The standard of upkeep of the holdings by the participants was considered to be the greatest difficulty facing the Scheme, and the drop in production reinforced the idea that many farmers had joined the Scheme only for the cash grants. This opinion has certainly contributed to the intended reduction of the cash grants during the years 1971-1975, and to the final abolishment of the RPS in 1971.

At that time the price of pepper compared favourably with the price of rubber, and it seemed economically and politically wiser to assist farmers in the establishment of productive pepper holdings and other profitable undertakings.

So an end came to a Scheme which had existed for fifteen years and whose implementation cost much time and millions of dollars. When it was abolished little of the envisaged objects had been attained. Many factors caused this lack of success:

- The decline in price was too great to be offset by a higher yield per tree.
- Absence of a price intervention mechanism to support the price during slump periods.
- The acreage of high yielding rubber per family is small and often situated far away from the family dwelling, which can often not be changed for social (longhouse) and economical (sites of other crops) reasons. Moreover the holdings of old unsubsidized rubber are normally not contiguous with the new holdings, which makes it impossible to take into production an area of substantial size.
- Most of the larger rubberholdings are owned by enterprising families, who in this time of low rubber price preferred to devote their time to the establishment of other crops. Also in 1971 and 1972 the level of the rubber price was too low to attract others to enter a relationship of share tapper.
- Tapping and processing techniques are extremely crude and there is little or no price incentive to improve them.
- Lack of experience with the new rubber variety, especially about the time of taking into production, necessity of regular tapping and maintenance of the garden. Traditionally rubber growers used to tap their holdings only during periods of high prices, or when they were in an acute need for cash, neglecting them at other times. However, the new varieties do not do well under this irregular treatment.
- Competition by other crops, especially pepper, for the time of the farmer.
- The production of rubber gives little opportunity for social enjoyment, because the work is normally done alone and the tapper has to leave his house before dawn.
- The fear of gossip. The sudden and steep decline of the price has made rubber a poor man's crop, to be worked only by those who are extremely unsuccessful in their other undertakings.
- The price decline was so great that it was experienced as something not of this world. Therefore in this exceptional case some producers thought they qualified for assistance from an exceptional source, i.e the Government.

This enumeration indicates that an important part of the drawbacks already existed long before the price slump, but together with it caused a situation in which hardly any production occurred.

VIII.1.2 Coconut Planting Scheme

The Coconut Planting Scheme (CPS) can be considered as a counterpart of the RPS for the coastal areas where normally the soil is not suitable for the cultivation of rubber. As under the RPS the participants are provided with planting material, fertilizers and a cash subsidy during the first years. It is envisaged to plant 10,000 acres under this scheme annually.

Application and selection procedures resemble the ones described for the RPS. Except for household plantings of only 15 seedlings per applicant, this scheme does not prevail in the research area. Until 1970 a total of 4,210 acres had been planted under the CPS. For the period under the Second Malaysia Plan (1971-1975) a total of M$ 7.5 million has been allocated to this Scheme. ((SGK-Dep. Agric.) Agric. Dev. Progr. 1968-1970; (SGK-Dep.Agric.) Dev. Progr. First Malaysia Plan 1966-1970; (SGK-Dep.Agric.) Manual Coconut Pl. Scheme, 1971).

VIII.1.3 Pepper Planting Scheme

Sarawak produces about one-third of the world production of pepper. Recently the Federal Government established a Pepper Marketing Board which would try to increase the producers share in the income derived from this commodity. Also the Pepper Planting Scheme (PPS) was set up as a more promising alternative to the RPS.

Under the PPS which envisages an annual expenditure of about M$ 2 million three categories are differentiated:

1. Assistance to establish gardens in the form of subsidized chemicals and a small cash subsidy (maximum M$ 50) to encourage drainage. Both are intended for the prevention of footrot.
2. Assistance to immature gardens in the form of fertilizers at 50% of the nominal price.
3. Assistance to new gardens in the form of cash (maximum M$ 100) to cover the expenses for already purchased hardwood posts to sup-

port the peppervines, and also fertilizers at 50% of the nominal price.

Categories 2 and 3 are reserved for farmers who normally considered are not able to afford all the expenses for fertilizers during the first unproductive years. The first harvest of pepper can only be reaped in the third year. There is no experience yet whether the participants under category 3 are able to meet the remainder of the cash inputs which under circumstances of the maximum subsidy for posts (M$ 100) and the minimum of 200 vines to qualify for approval still amounts to M$ 345 (total cost of 200 posts M$ 400, total cost of 3 bags of fertilizer M$ 45).

There is a danger that the PPS might end in subsidizing those farmers who either do not really need the Scheme or cannot afford to participate in it. Unless the latter are provided with loans to meet the larger part of the necessary investments, they will be unable to make use of the subsidy.

In the first year applicants outnumbered several times the total of participants that could be met from the allocated funds. The procedure for application, selection and cancellation is similar to the one described by the RPS.

The cultivation of pepper is a very delicate and labour-intensive one. Differences in soil fertility, topography and the land tenure system in Sarawak cause the pepper gardens, normally not larger than one acre, to be scattered over wide areas. These factors make the supervision of the Scheme by staff of the Department of Agriculture an arduous task ((SGK-Dep.Agric.) Manual Pepper Subsidy Scheme, 1972).

VIII.1.4 Hill paddy fertilizer

Under the Assistance to Padi Planters Scheme (APPS) a fertilizer (Amophos) is sold to genuine hill paddy farmers at a subsidized rate of M$ 1 per 10-lb bag sufficient for one acre of land. The aim of this subsidy is not to encourage hill farming, but to help farmers in areas where no suitable areas for swamp paddy cultivation exist.

The fertilizer can produce an increase of the yield of 30%, thus allowing an extension of the fallow period and conserving unfelled jungle. Normally the farmers have to collect the fertilizer in a District or Sub-District Centre. In 1970 a total of 146 tons were sold in the whole State of Sarawak ((SGK-Dep.Agric.) Agric. Dev.Progr.1968-1970; (SGK-Dep.Agric.) Dev.Progr.First Malaysia Plan 1966-1970).

VIII.1.5 Agricultural Diversification Scheme

Under this Scheme assistance in kind only is given for the planting of various crops. The aim of the Scheme, established in 1966, is to diversify the cropping patterns in Sarawak. Comparison in terms of expenditure shows that this Scheme is of less importance than the CPS and PPS.

The crops which can qualify for subsidy are:
- fruit-trees, units of 30 high yielding seedlings are given with fertilizer sufficient for three years (total value M$ 100). This Scheme is very much in demand; in 1970 a total of 843 units, together an area of 337 acres were handed out.
- cocoa, the value per acre is M$ 250 and spread over three years. Cocoa is recommended for intercropping under matured coconuts. In 1970 an area of 484 acres was planted.
- coffee, also an expenditure of M$ 250 per acre spread over three years. The planting material is of the robusta-type of which 310 acres had been planted in 1970.
- annuals like ginger, ground nuts, vegetables, maize, soya beans and water melons. The Scheme provides planting materials and fertilizer up to M$ 100 per acre, and is mostly confined to off-season cropping of areas where an Assistance to Padi Planters Scheme has been implemented.
- miscellaneous perennials like bananas and pineapples, at a total value of M$ 250 per acre.
- Farm Unit is the term used for a grant under the Diversification Scheme which intends to encourage sound agricultural practices. It is mainly reserved for ex-trainees of Farmers' Training Centres to assist them in making a start with applying the knowledge gained during their training. The assistance is given in tools, fertilizer, fencing material, sprayers, day-old chicks and ducklings, up to a value of M$ 200 per applicant. In 1970 a total of 285 units were allocated.

Except for the fruit-tree subsidy which has to be approved by the District Development Committee, all other subsidies can be approved by the Department of Agriculture at District level. ((SGK-Dep.Agric.) Agric.Dev.Progr. 1968-1970; (SGK-Dep.Agric.)Dev.Progr.First Malaysia Plan 1966-1970; (SGK-Dep.Agric.) Manual Agric.Div.Scheme, 1970).

VIII.1.6 Fresh Water Fisheries Scheme

The Scheme was introduced in 1957 with the main object of making much needed protein available to the rural people. The first time participants are provided with implements, lime and fertilizer, and sometimes tools for the construction of a fish pond. If the pond is to be larger than 0.1 acre a grant of M$ 200 per acre is given. After construction locally produced and imported fish fry are issued, which take something more than a year to mature. It is expected that the second and following stocks are financed from the previous harvests, but sometimes new fry are issued free of charge. Applications are made to and approved by the Department of Agriculture. In 1970 more than 1000 ponds with an average size of ¼ acre were constructed, and well over one million fish fry issued ((SGK-Dep.Agric.)

Agric.Dev.Progr. 1968-1970; (SGK-Dep.Agric.) Dev.Progr.First Malaysia Plan 1966-1970).

VIII.1.7 Ulu Pig Subsidy Scheme

This Scheme envisages to improve the system of pig-keeping in the upriver areas by supplying the participants with crossbred weaners, sty-building materials and protein food.

Traditionally the pigs in these areas are scavengers under and around the longhouses and take care of most of the refuse. But they do not put on much weight on such a diet.

The Scheme is mainly reserved for ex-trainees of Farmers'Training Centres who themselves are able to grow the amounts of starchy feeds necessary in addition to the protein food. The farmer is expected to finance the inputs for a second production cycle from the proceeds of the first. The selection procedure and implementation are left to the Department of Agriculture. In 1970 a total of 141 units has been given to promising pig raisers. ((SGK -Dep.Agric.) Agric.Dev.Progr.1968-1970; (SGK -Dep.Agric.) Dev.Progr.First Malaysia Plan 1966-1970).

VIII.1.8 Livestock Distribution Scheme (Pawah Scheme)

The distribution of buffaloes at subsidized prices of M$ 150 per head had been closely linked to the Assistance to Padi Planters Schemes (APPS). Now mechanical traction (where possible) is advised for the cultivation of land under APPS the Livestock Distribution Scheme has been reorganized. Pregnant cows and a bull are supplied to the farmers selected for participating. Normally a group of participants numbers ten; each of them is provided with one female animal. The group leader is in charge of the bull. The ten participants should have at least 30 acres of land suitable for cattle-raising, and be readily accessible in order to facilitate transport of the animals. Besides the animals the farmers receive a subsidy of M$ 500 per unit for the purchase of fencing and housing materials, seeds and fertilizer for pasture establishment. Before the animals are distributed the selected farmers have to take part in a two week course in animal husbandry and pasture improvement at an agricultural station. The Scheme is completed if every participant has returned to the Government one female animal of 2.5 years, or has shared with the Government the proceeds of the sale of two bulls which he has raised to an age of 2.5 years. In Such a way the Government obtains part of the animals for future distribution.

Besides units of 10 cows and one bull, which are distributed free of charge, young bull calves are sold at M$ 80 per head for the upgrading of smallholders cattle. In the years 1968 and 1969 a total of 29 units were distributed, and 61 bull calves were sold from 1966 until 1970 ((SGK-Dep.Agric.) Agric. Dev.Progr. 1968-1970; (SGK-Dep.Agric.) Dev. Progr.First Malaysia Plan 1966-1970).

VIII.2 *Rural credit*

A major source for institutional loans is the State Development Finance Corporation (SDFC), a statutory body of the Sarawak Government, established by ordinance in 1958, and renamed State Economic Develoment Corporation in 1972. To provide loans under its rural credit programme to individual farmers and fishermen of all ethnic groups is one of its major activities. These loans are intended for the development and expansion of existing small enterprises.

By 1971 more than 90% of the loans approved were to pepper growers and poultry and pig keepers because no subsidy schemes existed for these enterprises. These loans were generally not larger than M$ 1000. In 1963 the regulation that loans had to be backed by fixed security was dropped, to enable more Malays and Dayak, who often do not have any form of fixed security, to apply. The rate of repayment has been very low, but since 1969 the outstanding loan balance has decreased rapidly due to improved regulations, stricter selection and effective supervision. Applications can be made at the District Office. The majority of applications are made by Bumiputras, (members of ethnic groups native to Sarawak). However the type and extend of their enterprises require loans smaller than those requested by Chinese. In 1972 the rate of interest charged was 7%, the period of a loan five till seven years. The money is provided in the form of letters of credit to certain shops. Pepper loans are sometimes repayed by the arrangement to sell the produce to a specified merchant. Payments can also be made through the Treasury at the District office (Sarawak Dev.Finance Corp.,Ann.Rep.,1971).

The Majlis Amanah Ra'ayat (MARA) which has been installed to foster the improvement of the position of the Malays and other indigenous people in the fields of industry and commerce ceased to provide loans for agricultural enterprises in 1966.

VIII.3 *Construction projects*

VIII.3.1 Minor Rural Projects

Although only a small item compared with the total expenditure for development, the Minor Rural Projects (MRP) form an important part of the development policy in Malaysia. Each MRP serves a limited number of people, very often restricted to the inhabitants of one village. These projects are designed as indicators of the attention paid by the Government to that particular village or area.

The MRP include: small infrastructural works

to improve the accessibility of rural areas like minor roads, bridges and jetties; community centres; minor water supplies (discussed separately under VIII.3.2); places for religious worship; and recreational facilities like badminton courts and playing grounds.

The demand for these projects from the population is extraordinarily high compared with the funds available.

Applications have to be made to the District Development Committees which together with the Divisional Development Committees investigate whether the application should be recommended for implementation and which priority should be assigned. It is not uncommon for the applicants to seek the influence of persons they think can promote a rapid approval of their request.

Whenever possible the implementation of a MRP is done on a 'gotong-royong' (mutual help) basis. However, the realization of the gotong-royong principle varies greatly from case to case. Sometimes the people contribute their labour free of charge and bear part of the cash expenditure too. Other times members of the public are employed as temporarily paid labourers. After completion normally the Local Councils are put in charge over the MRP. However, the Councils often lack the funds for regular maintenance and therefore the people themselves are expected to keep their projects in good order. Generally when the upkeep is entirely left to the people served by the project the standard of maintanance is low. No proper village institutions exist to take care of maintenance activities.

VIII.3.2 Rural water supply systems

An important aspect of the Rural Health Improvement Scheme (see VIII.4.3) is the construction of minor rural water supply systems, which are in very great demand with the people. Depending on the local situation these can be gravity fed, pumped pipe water, ram piped water, rain catchment or well water supply systems. Up to the end of December 1970 a total of 179 systems had been constructed, serving a population of 42,000. Funds for the construction come from various sources, from the Government, Medical Department as well as Development Expenditure; UNICEF provides materials; and often the people concerned have to contribute labour and some money, generally less than 10% of the cash expenditure ((MG-SBK,Med.Health Dep.) Ann.Rep.1970).

VIII.4 *Organizations at village level*

VIII.4.1 Assistance to Padi Planters Scheme

Under the Assistance to Padi Planters Scheme (APPS) small drainage schemes are constructed by the participant farmers under supervision of the Department of Agriculture. The acreage of these schemes is between 10 and 300 acres, with at least five participants. Generally, when the acreage is larger or irrigation is involved, the construction is under the responsibility of the Drainage and Irrigation Department. The scheme aims at a higher rate in self-sufficiency for paddy by improving all the patches of land suitable for the growing of swamp paddy. Successful schemes have shown a high cost-benefit ratio, costs defined as subsidy payments by the Government and benefits as increased production.

Under the Scheme the participants are entitled to a subsidy of maximum M$ 75 per acre in cash and kind during the two years construction period, and a maintenance grant in both cash and kind of M$ 10 per acre for another five years. (If the construction is done by the Drainage and Irrigation Department the subsidy amounts to M$ 50 only). During the first two years the subsidy is spent on the purchase of tools, materials, pesticides, pedigree seeds, fertilizer and mechanical cultivation. The amount of cash varies with the time spent on the construction of drains and bunds, and destumping.

Persons eligible for participation in this Scheme are those who are proprietor of land, or natives occupying land under a native system of personal law. Also persons, who possess leased or rented land on which they have permission in writing to farm continuously for five years, can participate. There are no legal provisions to enforce anyone holding land in an area suitable for swamp paddy to become participant in an APPS, not even if all owners of adjacent plots want to participate. Apart from persuading the owners of the larger plots to rent or lease parts of it, there are no provisions for the redistribution of land.

Applications are made to the Department of Agriculture which investigates the suitability of the soil, checks the land titles and recommends the applicants for approval by the Development Committees. After approval the APPS staff of the Department of Agriculture has to survey the boundary, vegetation and natural features, on which the layout of the Scheme will be based. The participants have to elect from among themselves an APPS committee, normally consisting of a chairman and four members. This committee has to act as an intermediate between the participants and the Department of Agriculture, to arrange the work to be done in the field, allocate the lots, to settle land disputes and other differences, and finally to warn and, if necessary, to exclude disobedient participants in the block. Under the rules of the Scheme, the land of a participant who fails to work on it can be cleared, planted and harvested according to an arrangement to be made by the APPS committee. The costs of these activities are to be met by the proceeds of the harvest.

By 1970 nearly 800 blocks with a total

acreage of more than 36,000 acres had been improved under this Scheme. Generally there is no possibility of double cropping with paddy. However, the farmers are encouraged to plant off-season crops during the dry period. They can apply for assistance in the planting of annual crops under the Agricultural Diversification Scheme ((SGK-Dep.Agric.) Agric.Dev.Progr.1968-1970; (SGK-Dep.Agric.) Dev.Progr.First Malaysia Plan 1966-1970; (SGK-Dep.Agric.) Manual Ass.Padi Pl.Scheme, 1970).

VIII.4.2 4H clubs

The 4H movement was introduced to Sarawak in 1961 and from 1963 actively propagated in the State. Peace Corps Volunteers helped in the establishment of the organization which was gradually taken over by local staff of the Department of Agriculture. Normally in each District one staff member acts as 4H coordinator.

Every youth between 9 and 30 years can become a 4H member. Often some ex-trainees of a Farmers'Training Centre or the participants in a Home Extension course are the first members of a newly started club. Also school clubs are formed which take care of the school gardens and other agricultural projects under guidance of the teachers.

The activities in which the 4H clubs engage in order to improve the present and future living situation are various. Agricultural projects like fish ponds, vegetable gardens, but sometimes also rubber and pepper gardens are implemented individually or collectively. They enable the members to learn while working, and serve as a source of cash necessary for other activities. Under the Agricultural Diversification Scheme and other Schemes, assistance for the start of these projects can be obtained from the Department of Agriculture. Besides the agricultural activities, 4H clubs are expected to contribute their services to the people by way of community projects, to be a nursery ground for leadership, and to provide recreation for their members.

Although leadership within the 4H movement is still problematic, the organization is becoming more and more independent of the Department of Agriculture. State, Regional and District Committees consist of elected members.

In September 1972 the total membership of the 282 registered clubs numbered 11,000, approximately 40% of this membership consisted of primary school pupils.

After internal discussions, in 1973 the 4H movement joined the United Youth Organization (SABERKAS) which is sponsored by the Ministry of Youth and Sports and under the presidency of the Chief Minister of Sarawak. SABERKAS aims at uniting all the non-uniformed youth organizations within the State ((SGK-Dep. Agric.)Summary Progr.4H Movement 1972;(SGK-Dep. Agric.)4H Leaders,1971;(SGK-Dep.Agric.)4H Manual,1971).

VIII.4.3 Rural Health Improvement Scheme

The aim of the Rural Health Improvement Scheme, which was started in 1963, is to raise standards of environmental sanitation in the villages in rural areas. Rural Health Supervisors are trained for nine months and then assigned to a group of five to eight villages, often in the area where they originate from. In 1970 a total of 45 Rural Health Supervisors were posted throughout the State. It is their task to make people interested and actively involved in environmental sanitation by establishing village committees. Their major concerns are the construction of pit latrines for which cement squatting slabs can be provided, the fencing of pigs, refuse disposal, and the establishment of safe supplies of water.

The Rural Health Supervisors provide medical assistance from a combination of Home Help and first aid kits. In the field they liaise with health inspectors, midwives, hospital assistants and home extension workers of the Department of Agriculture, and they assist in the detection of malaria ((MG-SBK, Med.Health Dep.) Ann.Rep.1963 and 1970).

VIII.4.4 Adult Literacy Classes

The Education Section of the Federal Ministry of National and Rural Development has been represented in Sarawak since 1965. It organizes different types of classes of which the most important are the National Language classes, and the Romanized classes in which the people learn to read and write their own language or Malay. In the urban areas similar classes are also arranged by the Sarawak Council for Further Education. On the District level the Ministry is represented by a supervisor. Applications from the population for the organization of a class are made to him. At least 20 people should be interested before a course is started, and when regular attendance drops below 10 the class has to be cancelled. The lessons are given in existing school buildings if present or in other meeting places. Small grants are available for the acquisition of essential furniture, pressure lanterns and kerosene. Instruction books are sold at heavily subsidized rates. Preferably primary school teachers are engaged on a part time basis as instructors in the adult classes, but everybody with at least six years of primary education can qualify. Short training courses are organized for the instructors. A full course comprises three lessons of an hour per week, for three years. After completion an examination can be held. The nature of this type of courses causes a high number of drop outs, especially during the first year.

VIII.4.5 Cooperative Societies

Since the formation of Malaysia the Cooperative Department in Sarawak is under Federal Authority, first being part of the Ministry of Agriculture and Cooperatives, later of the Ministry of National and Rural Development. The total number of societies registered throughout Sarawak was 225 in 1969, while it was 218 in 1964. Turnover is high: during 1969 a total of 10 new societies were registered, but 13 societies had to be closed. Circumstances in Sarawak are not favourable to a rapid rise in the number of cooperative societies. The rural population has only been sparsely educated, production is only partly market orientated, and there are many well-established private traders who provide useful services and do not severely exploit the population.

The multi-purpose cooperative society is the common type. This type of society is thought to be the most effective in the competition with private traders. But it is also the most difficult to operate. Other existing types are savings and loans, rice milling and consumer societies. About half the number of societies have a membership of less than 50 persons. The initiative to form a cooperative society can come from the public or from the Department. Propaganda by the latter is made by means of films, radio broadcasts and talks during meet-the-people sessions. The initial capital has to be provided by the members themselves. But even more scarce than capital is leadership. An able leader often tends to dominate the whole society, either in the position of manager or as chairman of the committee. The Department provides supervision and performs the annual audit. Cooperative officers visit the societies for checking and training on the spot. Trading societies are visited about once every two months. Cooperative societies are expected to bring the following advantages to their members: fair weights and products of good quality, dividend on shares (never more than 5%) and a bonus according to the volume of the trade. The calculation of the bonus necessitates an extensive administration ((MG-SBK,Dep.Coop. Dev.)Ann.Rep.Coop.Development 1969).

Farmers' organizations are not essentially different from cooperative societies. However, they are established under a separate ordinance and administered by the Department of Agriculture. Only a few have yet been formed in Sarawak. They include a larger region than the cooperative societies. Production, marketing, credit and extension are among their activities. Staff of the Department of Agriculture is permanently involved.

VIII.4.6 Sarawak Federation of Women's Institutes

The start to the establishment of the Sarawak Federation of Women's Institutes (SFWI) was made in 1963 by the Department of Agriculture. Soon afterwards the SFWI became an autonomous body receiving a grant from the Ministry of Welfare. Since its inception a total of 301 Women's Institutes have been formed with a membership of 9500 women of fifteen years and older. An organization has been built up with an Executive Committee and headquarters in the State capital, supervisors on the Divisional and District levels. The SFWI employs instructors on a part time basis. These instructors have been trained in order to guide and supervise the activities of the Women's Institutes on the village level. Each Women's Institute has its own committee.

Normally a Women's Institute is formed after the women in the village have expressed the desire to do so. During the first years of the SFWI often female teachers or the wives of male teachers were the driving force behind the establishment of a Women's Institute in a village. The Women's Institutes in the rural areas concentrate on classes and courses in cookery, nutrition, child care, home management and handicrafts. Other activities which aim at improvement of the living situation are the construction of meeting places, communal fish ponds and vegetable gardens. Proceeds of the latter two are used for other projects like the construction of waterpipe systems. A favourite recreational activity of the rural Women's Institutes are trips to Kuching which often include visits to the Sarawak Museum, hospital and the studio of Radio Malaysia Sarawak.

The urban Women's Institutes are often called upon during actions for the common good like collection of Relief Funds, and assistance at the annual sales of the Salvation Army and other benevolent societies (Sarawak Fed. Women's Inst., 1972).

VIII.4.7 Bidayuh Association and Bidayuh Youth Club

The Bidayuh Association and Bidayuh Youth Club are voluntary organizations established by urbanized Land Dayak along lines similar to the pattern drawn by the representative organizations of other ethnic groups. Both organizations indicate that the Land Dayak become more aware of the position of their own group and want to secure a rightful place for it among all the ethnic groups living in Sarawak.

The Bidayuh Association is fostering plans for a new building in Kuching, in which meetings can take place, a collection of literature about the Land Dayak and other artifacts can be stored, and which can serve as a hostel to people from the rural areas who have to stay overnight in town.

The Bidayuh Youth Club which formed no part of the Bidayuh Association was founded in 1968. First its purpose was to assist young people in becoming acquainted with urban life when they came to stay in Kuching for their

studies or work. Later rural branches were established with the intention to broaden the outlook of the rural youth and to provide entertainment. This programme was hampered by a lack of supervision. The Bidayuh Youth Club received a grant of the Ministry of Welfare via the Sarawak Youth Council.

The Bidayuh Youth Club merged into the national youth organization SABERKAS in 1972.

VIII.5 *Social services*

VIII.5.1 Curative medical services

In 1970 a total of 41 dispensaries existed in Sarawak, mainly situated in District and Subdistrict centres. A chief hospital assistant, senior hospital assistant or ordinary hospital assistant are in charge of these. They have been trained in diagnosis and treatment of the common diseases of Sarawak for at least three years. The difficult cases are referred to the hospitals in the larger towns. The dispensaries are equipped with a number of rest beds for patients who need treatment for some days in succession and are unable to return to the dispensary daily. In order to achieve a further extension of medical curative service nineteen mobile dispensaries (either situated in a longboat or a landrover) travel in certain parts of Sarawak. According to a fixed schedule they return at fortnightly intervals to places selected for their concentration of population. An hospital assistant is in charge of each of these mobile dispensaries.

In addition to these dispensaries there are two schemes under which medical care is provided to isolated areas. The first is the Ulu (upcountry) Dressers Scheme which dates back to the 1950s. Young men were trained in simple medical and surgical diagnosis and treatment. On their return to their villages they were paid a small salary and provided simple care to the people of their own and neighbouring villages. Due to inadequate supervision the results were less than expected and the scheme is gradually running down.

The Home Helps Scheme with more modest goals was introduced to replace the Ulu Dressers Scheme. Home helps are voluntary workers who after a training at the nearest static dispensary provide medical assistance in minor but nevertheless potentially harmful cases. In 1970 a total of 24 ulu dressers and 272 home helps were active throughout the State. The medical care provided by the Government is free of charge ((MG-SBK.Med. Health Dep.) Ann.Rep.1963 and 1970).

VIII.5.2 Mother and Child Health

The number of Mother and Child Health Clinics (MCH clinics) is more than two times larger than the number of static dispensaries (in 1970: MCH clinics: 99, dispensaries: 41). These MCH clinics are staffed by 172 midwives who have received two year's training at the Midwifery School in Sarawak. In the clinics antenatal and postnatal care is provided free of charge.

To a limited number of clinics the Sarawak Family Planning Association has assigned one or more family planning motivators, but the midwives too have been trained in family planning methods. The MCH clinics are under authority of the Councils for Local Government, but especially the smaller Councils among them draw heavily upon the Medical Department for supervision and professional advice ((MG-SBK,Med.Health Dep.)Annual Rep. 1970; (MG-SBK,Med.Health Dep.) Distribution Med.Health Facilities,1971; (MG-SBK,Med. Health Dep.) Health Districts).

VIII.5.3 Primary Education

In Sarawak primary education is provided for by several agencies. Local authorities have a general responsibility for the provision of primary education in their areas, with power to levy rates. The number of primary schools directly under their management continues to increase. Chinese Committees of Management elected by local communities, Church and Mission as well as Private Committees provide a number of educational facilities. The Chinese Committees were the pioneers in education in Sarawak. The Missions were the first to establish schools with English as the medium of instruction. In 1972 all primary schools used either English or Chinese as principal medium of instruction.

Primary education in Sarawak has been provided free of charge since 1966. Schools managed by local authorities and voluntary agencies are eligible for financial assistance from the Federal Government under a grant code which came into force in 1956.

Education was only introduced to the rural areas of Sarawak after 1946. During the first decades the extension of the education system was severely hampered by a shortage of qualified teachers, which has gradually been overcome by the continuous output of two Teacher Training Colleges. The indigenous rural population of Sarawak expressed a great interest in education with English as the medium of instruction because they understood that only in this way could they secure their rightful place in the future. Requests for schools and teachers were made to Government and Missions. Generally the villagers themselves had to construct the first school buildings of a temporary nature. Sometimes in their enthousiasm the school building was constructed first, after which the request the request for teachers could hardly be refused. Now most of the temporary buildings have been replaced by permanent structures. Sometimes during the construction of the latter the villagers are asked to assist in the selection

and preparation of the site, transport of materials and other activities. To facilitate contacts between the education system and population, school committees consisting of teachers and parents have been established. The organization of a school sports day is one of their activities.

Rural schools sometimes provide education up to primary four only, or have to take in new pupils during alternate years. The number of schools with a full six year primary course is increasing. Many villages in the remote parts of Sarawak are too small to provide a number of pupils sufficient to justify the establishment of a primary school within the village. Consequently one school has to serve two or more villages, or the children have to attend boarding schools in the centre. By 1970 admissions to primary one and the total enrolment in the 1220 primary schools in Sarawak seemed to have been stabilized around 28,000 and 144,000 pupils respectively, which is surprising compared with the annual population growth rate of nearly 3%. It is possible, because school attendance is voluntary, that education has lost part of its attraction for some people.

The number of drop-outs during the primary course is considered to be serious. In 1970 nearly 10,000 children (6% of total enrolment) left before completing the course. The number of drop-outs is highest in the rural areas. Girls increasingly take part in education. In 1970 45% of the primary school students were girls.

Up to 1971 only 30% of the primary school leavers could qualify for secondary education. This percentage will gradually be increased, leading to abolishment of the Common Entrance Examination ((MG-SBK,Dep.Educ.)Penyata Tahunan, bagi, 1970).

VIII.5.4 Agricultural Education

Apart from subsidy schemes which by way of their rules have caused farmers to improve their methods and techniques, emphasis has been laid on training. The training is provided by Farmers'Training Centres (FTC), Farm Institutes (FI) and short courses.

The courses in the seven FTC are of 14 weeks duration in which period the main crops and livestock of the area of the trainees are taught, as well as woodwork for male and home economics for female trainees. Boys of at least 17 years and girls of at least 15 years with primary education from agriculturally developed and well accessible areas are eligible to join. During the training they are entitled to free food and lodging, uniforms and tools at M$ 70 per trainee, and pocket money of M$ 0.50 per day. The selection is done by the Department of Agriculture at District level. If possible the trainees in one batch should come from a limited area to facilitate the follow-up visits by the field staff of the Department of Agriculture after the trainees have returned to their homes. During the two year follow-up period ex-trainees get preferential treatment in the allocation of several subsidy schemes.

An evaluation study in 1972 revealed that the large majority of the 4000 ex-trainees were still engaged in agriculture, but that the management of their holdings had not increased very significantly.

Since 1970 the possibility exists for boys with secondary education to attend a course of one year duration at a Farm Institute. These trainees too are expected to return to their homes after the course in order to take up farming.

The short courses deal with one subject only of which poultry and inland fisheries are the most important at present ((SGK-Dep.Agric.) Agric.Dev.Progr. 1968-1970;(SGK-Dep.Agric.) Dev.Progr.First Malaysia Plan 1966-1970; (SGK-Dep.Agric.) FTC Programme, 1971; (SGK-Dep.Agric.) Progr.Rep.Survey FTC trainees, 1971).

VIII.5.5 Home Economics Extension Service

Agricultural extension in Sarawak was started in 1957 by ten teams consisting of one male and one female extension worker. These teams visited some selected villages where they stayed for several days at a time. No proper programme was made and the range of subjects taught was limited. This led to a decreasing response from the side of the farmers. Subsequently the male staff was assigned to other activities of the Department of Agriculture.

In 1969 the Home Economics Extension Service was placed on a stronger footing by a reorganization of its programme. Under the new programme prior to the start of the extension course the people's needs are assessed in a survey. Then a definite time table for the period of one year is drawn up in which period the necessary and requested subjects are covered. At the end of the course an achievement day is organized, and follow-up is provided by either a Women's Institute or a 4H club. The Home Economics course is given if at least 10 persons, boys and girls mixed or women only, are interested. The course is given by trained Home Demonstrators who therefore visit the village weekly for at least one full day at a time. Whenever necessary for activities like fish pond construction, male staff of the Department of Agriculture may be called upon. Subjects to be included in the course, dependent on the composition of the group, are vegetable gardening, health and hygiene, nutrition, sewing and child care. Optional subjects are fruit growing, fish pond construction or poultry rearing which may end in the group undertaking these projects collectively. The group is eligible for assistance under the Agricultural Diversification Scheme ((SGK-Dep.Agric.) Manual Home Demonstrators, 1970).

Appendix IX. Cases of rural development projects

The following cases were collected in different villages by the different participants in the research project. I tried to present here a wide variety of projects and clubs, to include outright successes as well as situations in which nearly insuperable difficulties arose. In the studies presented here emphasis is on the social relations between villagers, and with the outside agent during introduction, implementation and continuation of the scheme or project. Objects, rules and extension of these have been dealt with in Appendix VIII.

Case 1. *Assistance to Padi Planters Scheme (APPS), in third season after implementation*

It is not fully clear who introduced the idea to convert a large swamp area into an APPS. The headman and the catechist of the village, both diligent and industrious men, claim that after a private visit to an irrigation scheme in a neighbouring village they together went to the District Agricultural Office to request a similar scheme for their village. All other villagers have the opinion that the Department of Agriculture spontaneously offered to guide and assist in the construction of an APPS. At a village meeting the proposal made by some staff members was warmly welcomed. Though no one wanted to be a candidate, a scheme committee of four members was elected at the same meeting, the catechist becoming its chairman. One of the elected committee members withdrew from the committee and the scheme because his father-in-law did not allow him to use land belonging to his wife's descent group as soon as the old man realized the profits to be reaped from the scheme. He was not replaced by a new member. A second member simply denied that he had been elected, and another stated that he did not like the function but: "it cannot be helped, they elected me". This leaves the chairman as the only active responsible person. When a group of people work together on the infrastructure of the scheme he writes down their names and sees to it that none of the thirty participants is absent. Anybody who does not contribute his labour when required is fined M$ 3.- a day to be paid to the scheme fund. However, until now those unable to attend preferred to send a daily paid labourer instead. Extensive pepper plantations sometimes keep their owners occupied, but also enable them to hire a labourer. Construction of dams, main bunds, drains and gates took about 20 days in the first year, and 14 days in the second year, to be contributed by every participant. Maintenance takes comparitively little communal labour; everybody is responsible for the upkeep of bunds and drains along his field. The participants, of which the majority own plots of 1.5 - 2 acres, can plant, irrigate and harvest their land independently. The layout of the scheme does not necessitate much consultation about these activities. Because of the large amount of personal freedom and the increased yields from the land, everybody is happy with the scheme and no difficulties exist around its management.

Case 2. *Assistance to Padi Planters Scheme (APPS) in first season of implementation*

A Junior Agricultural Assistant (JAA) visiting the village discovered a swamp area that seemed suitable to be transformed into a scheme. He explained the object and rules of such a scheme, and found a large group of people interested to construct one.

At first the villagers thought that irrigation would be improved in every swamp in the village territory. Later, when it was realized that only one area would be included, sixteen persons who did not own land in it still registered themselves as participants, because it was once mentioned that they could rent or borrow a plot. However, nothing about these transactions was finalized and they soon felt uneasy. They were unwilling to contribute labour to the construction of the scheme, but also reluctant to withdraw themselves for fear of spoiling their personal and village name with the Department of Agriculture. The scheme committee of five members with an intelligent but timid chairman has not yet been able to solve this problem. Neither was it able to convince a man to join the APPS, who during the survey was found to own land in the area but had failed to have himself registered as participant.

According to the wishes of the JAA it was decided that the participants would work in small groups, taking turns. No one would be allowed to send his wife and absentism would be punished with a fine of M$ 4.-. Tools and several loads of ironwood were provided by the Department of Agriculture and carried by the participants to the scheme area. On the first days Agricultural staff were present to explain the building of the dams. Afterwards the people continued with the construction

under guidance of a member of the scheme committee. However, there was much doubt that so few dams would be able to irrigate such a large area, and the scheme would be a success. The workers became reluctant to cut the valuable wood into smaller pieces. In their minds they had already reserved it for house-building and they hammered extremely long posts into the soil. When the free fertilizer was delivered the JAA inspecting the progress made, became angry because of the incorrect ways of construction. That night the scheme committee called for a meeting where it was decided that there were too few materials for proper construction and that construction better could be postponed to the next year.

Case 3. *Project road construction and maintenance*

In colonial times a feeder road had been constructed which bypassed a number of villages. The inhabitants of the village created a foodpath to the road. The ever increasing number of Government servants visiting the village stimulated them to widen the one mile track from time to time, and finally a collection was held and the small bulldozer of the Seventh Day Adventists mission contracted. Although two small rivers still had to be traversed, the village could be reached by four wheel drive vehicles in the dry season. After a school was built in the village the headman, on behalf of his people, requested from the Government the construction of a proper road and sport field. The headman claims that after he had met the Chief Minister during a visit to the District Centre, the request was quickly approved and implemented. The road was improved and extended by several miles to another village with mechanical equipment, and proper bridges were built across the streams. Some of the villagers assisted for a daily wage. Maintenance of the quickly eroding project road was left to the people. Sometimes the District Council made a small amount of cash available which was used either to hire a small vehicle to transport gravel collected from a river bed or to pay some villagers to repair the road. In years when no money was made available little was done, though the local shopkeeper did not fail to stress the importance of a road.

Because of absence of gang leaders and lack of knowledge about the conditions of an earthen road for vehicles repairs have not been done correctly. Primary school students guided by their teacher, who because of his private car is interested in road maintenance, are more effective. After repairs sometimes long discussions are held about the possibilities to collect toll from vehicles using the road, especially from those passing through to the next village. However, a toll was not introduced, partly because of not knowing who to approach for collection. The villagers are afraid that the driver of the vehicle as well as the one who ordered the goods might get angry. Once a man lost his temper and hit the local shopkeeper when he and his dealer transported goods over the road.

Case 4. *School building and school committee*

None of the inhabitants can remember why the two teachers visited their village more than ten years ago. But they spread the news that if the people wanted a school the Government probably would be willing to grant one. More than a year afterwards a villager visited the District Council Office to make an official request, probably very much on his own initiative. It took six months before the request was approved on condition that the people themselves built a classroom and living quarters for the teacher. After five meetings 'everybody' agreed with the proposal and contributed seven days labour to the construction. A school committee was installed to act as liaison between parents and teacher. The man who originally made the request for the school became its principal member.

Two years later a new school was built by a contractor about half an hours walking distance from the village, but easy accessible for outsiders. Soon a group of people converted to Christianity built their houses near to the school. The path from the old village to the school is maintained by the villagers, but when one of the footbridges collapsed, they thought that the District Council should take a share in it too by contributing materials. Headman and school committee wrote a letter to request some poles of ironwood. In the meantime nothing has been done to improve the situation.

At present the school has two teachers, both are Bidayuh. The headmaster comes from the village itself. He belongs to one of the richest families, which runs a well-organized shop. Apart from their business the family members have little contact with other villagers. The other teacher comes from a village many miles away and belongs to a different Christian denomination than that of the people living close to the school. Besides teaching he is not engaged in any other activity in the village.

Soon after the start of the present school year a meeting was held, which the parents of the school children attended. Then the teachers urged the parents to send their children to school regularly, and, if possible, to dress them in the school uniform. The teachers also stated that no school sports day could be organized because of lack of funds. This was a disappointment to many people who rejoice in such festive occasions.

Case 5. *Women's Institute / Home Economics Course*

Not long after Sarawak was given Independence within Malaysia a few persons of the Sarawak Federation of Women's Institutes visited the village and proposed to start an adult literacy class. The idea was welcomed, and potential participants together built a classroom. Two villagers who had received some elementary education at the mission school in the District Centre acted as teachers. First lessons to the forty students were in English. When the medium of instruction was changed to Malay some participants were disappointed not to learn the language of the previous rulers though probably the new National Language was easier for them to understand. Most students got bored very soon and did not attend the lessons regularly. Within a year the school was closed.

For a period of about five years nothing much happened in the Women's Institute in the village. Then a Home Demonstrator (HD) of the Department of Agriculture proposed that the women organize themselves in a group to cultivate wet paddy, vegetables and fruits under her guidance. Twenty-four women agreed and started working on land contributed by two of them. At present four days in every month the women work together in their garden. Those absent have to pay M$ 2.- to the fund of the Institute. The harvested produce is for their own use, and part of it is sold to other villagers or to traders. The proceeds are deposited in a Post Office savings account from which members and non-members may borrow at 10% interest per month. One of the most intelligent and active women in the village is in charge of it. When one of the members of the group dies or resigns for some other reason, her place is taken over by someone else in her family. If new members want to join the group an entrance fee is asked. However, this has not happened in the three years the Women's Institute exists.

After the HD had finished her practical lessons in gardening she was replaced by an instructor of the Federation of Women's Institutes who specializes in cooking and sewing. The 4H club coordinator of the Department of Agriculture tried to arose interest in the village for a 4H club, partly as a follow-up of the farming course by the HD. Some adolescent boys quickly erected a building of soft wood, bamboo and sago leaves, perhaps with the idea of mainly using it for go-go dances. A real 4H club was never formed. The Women's Institute used the building for its achievement day, which was organized with help of the HD and the WI instructor. The village had been decorated and a festive mood prevailed with all the people. The ladies showed samples of their skills in cooking, needlework and handicraft. Several dignitaries of different departments and organizations visited the village on this achievement day and returned home with the impression of a village inhabited by progressive and cooperative people.

Case 6. *4H club*

The 4H idea was introduced to this very remote village by a young man who had worked for some time in an agricultural research station but had returned home, suffering from homesickness. All the young people were enthusiastic and joined the club. Their first activity was to construct a clubhouse. The man who had taken the initiative asked for recognition from the Department of Agriculture, which was obtained. He himself became the principal leader. In name several others have a function in the club committee too, but little can be delegated to them. To most members the 4H club is a way to entertain themselves. Agricultural projects mainly serve to provide the funds necessary for entertainment, though the members also have pleasure in working together. An indication that entertainment is a very important function is that everone resigns immediately upon marriage, because married people are not supposed to attend go-go dances.

After the formation of the club a vegetable garden, a paddy farm and a fruit orchard were established with assistance of the Department of Agriculture. Vegetables were sold to shopkeepers around a nearby army camp, or direct to the soldiers. Paddy was partly sold to the villagers and used for communal meals. The fruit orchard was a failure. Several seedlings were stolen, others suffered from a lack of fertilizer. In the meantime the club members had started to organize dances with individually owned guitars. Soldiers from the camp sometimes attended these dances. Soon it was realized that dancing was an easier and more pleasant way to make money and the soldiers were made to pay a contracted price of M$ 10.- to 30.-, the amount depending on the size of the group. It is surprizing that no unpleasant affairs resulted from those parties. In this way a total amount of about M$ 1,000 - was collected, which was spent on new and better instruments. One member borrowed M$ 100.-, but failed to pay it back.

Since the army camp has been dissolved the club has started farming once more to obtain the necessary funds. A hill paddy farm has been established. However the soil is exhausted and only a small harvest is expected. No one seems to know of the existence of hill paddy fertilizer distributed by the Department of Agriculture.

There are plans to make vegetable gardens, pepper plantations and to improve the clubhouse, provided assistance is received from outside. Due to the remoteness of the village, two hours walking from a motorable road, the 4H club coordinator visits the village only twice a year. Requests for assistance

have not been put forward yet. At present the members have not yet started activities for which outside assistance is not essential.

Case 7. *Water Supply System*

People in the village had heard about the possibility of constructing gravity-fed watersupply systems with Government assistance. Most had seen one working in a neighbouring village, where people had paid for it from their own pocket.

It was realized that in the hills near the village a small stream could be blocked to create a basin from where a system could be fed with clear unpolluted water. On behalf of his people the headman went to the District Officer to request the Government's assistance. After some time two staff members of the Medical Department came to survey the potential supply and course of the pipeline. They realized that the construction, though well possible, would cost thousands of dollars and advised the villagers to reserve money for their own contribution to the water supply.

A 20-acre swamp area in the village territory, normally used as communal fishpond was drained and rented as wet paddy land to some interested villagers. In this way over M$ 1,000.- was raised in some subsequent years. This money was deposited at the District Treasury. During this period the headman visited the Divisional Development Office a few times, but these visits had no immediate effect.

Potentially the same mountain stream could serve a neighbouring village as well. Though its present water supply, a small muddy stream, is even worse than that of the first village, the inhabitants never strongly expressed their desire to possess a waterpipe. Thus their project was given lower priority. One day a truck with plastic pipes was unloaded at the roadside and the pipes stored in a nearby shed. Some people had seen this and they became suspicious that these pipes, probably intended for their water supply might be diverted to the village which previously had shown little interest. A visit by some representatives to the Bidayuh member of the State Cabinet made their rights clear. A 'free-lance liaison officer' of a nearby village instigated this visit and actually accompanied the representatives because of his claim to be familiar with the minister. The next Sunday after the church service the pipes were carried to the village. The task was a very light one. Some households had sent a child as representative. A happy mood prevailed when the pipes were carried into the village. Nobody seemed to realize or to worry that the pipes delivered would only cover part of the distance between the source and the village.

Case 8. *Adult Education*

One evening the radio broadcasted a programme about adult education. The people were impressed with the opportunity to study the National Language and talked together about it for many days. In the end it was decided that in their village an evening class should be organized. A few men went to the District Office where they met the coordinator in charge of the organization of literacy classes in the District. A teacher of the nearby Council school had declared himself willing to give the lessons, one hour, three times a week. Because the lessons could not start early, not everybody would have finished his bath and meal before 21h00, the Council school outside the village could not be used. An adult school out of bamboo and sago leaves was erected in the village by the pupils in a few days. The Organization for Adult Education provided simple furniture and a pressure lantern. For the first lessons the schoolbuilding was overcrowded with people, even some grandfathers took part. Gradually the number of pupils diminished, the study being harder than they had thought at first. The teacher was transferred to another village. His duties were taken over by another teacher in the Council school. Upon his departure the latter was replaced by one of the villagers. This man, who had received primary education at the Mission Centre, passed the test of the coordinator for this M$ 3.- per hour job. However he refused to attend the annual course for adult literacy teachers in the State capital. After one and a half years the number of regular attendants had dropped below the critical level of ten and the coordinator advised the teacher to stop the lessons. A few of the students had learned to read and write their own language and simple Malay. The large majority of the pupils could write their own name and read the bus numbers.

Case 9. *Church organization and chapel*

Some of the brightest boys of the village continued their studies after primary 4 level at the Mission school in the District Centre. Because of the recent introduction of education most of them were older than the present primary school students. At the Mission station they became impressed by the religion of the foreign missionaries and almost immediately changed their religious affiliation. One of them, the son of the headman, followed a little later, because he had taken the time to think about it carefully. Upon their return to the village they told the other people about the new religion and its advantages. For the first years they had to remain in the shade, the traditional religious institutions were still too strong. However, when some had married and established independent households gradually more attention was paid to their convictions.

By that time the headman's son had become a teacher in the village school. One time after a poor harvest several families in the village were in trouble, because they did not have enough rice and fowls to prepare for one of the festivals. The night before the festival they informed the headman's son and expressed their desire to become Christians. A few prayers were said to mark this religious conversion. From that moment a real church community started to grow. Instructions from the Mission were received as to how to study the catechism and to say the rosary. Those who had attended the lessons in the Mission school all became catechists, which included duties such as guiding the other people, leading church services, praying for the sick, and taking care of funerals. A real clash occurred with the representatives of the traditional cults when a simple chapel was built. After interference of the Native Chief the chapel had to be pulled down. The next traditional festival was proudly celebrated by those who had not changed their affiliation.

The set back was only temporary, more people became interested in the 'easy' Christian religion. It was a breakthrough when the headman, who was also the leading priest of the ancestral cult, and his father followed their son and grandson and had themselves baptised. Because of his personal capabilities, his occupation as teacher, and the backing of his father, the headman's son became the leading catechist. He organized the construction of a new chapel and its extension afterwards, for which he advanced the money to buy the roofing material. The Mission assisted by providing the major posts. A few years later still not all churchmembers had repaid their debts to him.

Besides his job and his activities in the church the teacher also stimulated the formation of a 4H club and an adult literacy class, and still could find time for the management of a family shop and agricultural enterprises such as the raising of broilers.

Although after a few years the teacher was transferred to a school in another village, he still returns to his family home every weekend to direct church affairs. The 4H club and adult education have been handed over to others. Because of his knowledge of customary law, learnt from his father, combined with his knowledge of church law, he has a strong voice during sessions of the village court. In sermons, part of the Sunday church service, he does not hesitate to criticize the behaviour of the other villagers if he thinks they lack morality.

In the course of time passive resistance has built up against this dominant personality. Accusations of economic exploitation through the shop are made. There was gossip about his keeping the village fund, the church fund and the 4H club fund under lock and key in the counter of the shop for a certain period. When the teacher's father, the then ex-headman, died, more of this resentment came out in the open. Nevertheless few people think they could do without this man who infringes upon their personal freedom and dignity by excelling so much. It is realized that none of the other catechists could be such a dynamic leader. In dealings with the Mission he again plays a vital role, which reinforces his position in the village. He frequently visits the District Centre where the Mission station is located so that he functions as messenger in both directions and explicator of the meaning of Christianity in general as well as of specific church regulations. Only two or three times a year a missionary visits the village to hear confessions, to celebrate a Mass and to check the progress made by those still learning the catechism. Nearly always the missionary turns to the teacher for a review of the situation in the village and stays overnight in his house. In this way the dominant position of the catechist remains unaffected.

Appendix X. Size of village territories and average acreages per household

On a map supplied with Andriesse (1964) the acreage of a number of villages or clusters of these as surveyed by the Land and Survey Department are recorded, as well as assessments of the writer about the acreage of a number of other villages. These acreages combined with information about the number of households present in 1963 (Andriesse, p.c.) and in 1971 (obtained from survey) result in the following quotients of acreage per household, see the table below. The quotients are to some extent inflated because the limited number of non-Bidayuh households present within the village areas were omitted.
N.B. The average number of persons in a household is approximately 6.9.

	Village area in acres	Households in 1963	Households in 1971	Acres per household in 1963	Acres per household in 1971	Minutes walking from busstop
Taie	5179	150	205	35	25	120
Nyabet	2508	36	49	70	51	150
Bentang	1888	22	32	86	59	180
Tarat Mawang/Melawi/Sibala	3248	86	112	38	29	30
Lanchang/Tungga	5013	78	108	64	46	105
Baru/Bunga	2073	63	143	33	15	30
Tangga	2846	47	73	61	39	5
Riih/Daso	4091	87	152	47	27	10
Kakeng	4562	46	66	99	69	150
Jenan/Sepiping	2000	51	47	39	43	105
Pichin	5909	95	137	62	43	5
Koran Mawang/Sorah/Empaneg	6037	137	196	44	31	90
Merian/Longgo/Marang/ Bedup Sungei Berok	6707	80	85	84	79	100
Rasau	1962	27	40	73	49	10
Slabi Mawang/Sengkam/Ntukuh	3508	60	85	59	41	40
Sebenkoi/Ampungan/Ranchan/ Saroban	4623	91	139	51	33	105
Totals and averages for the whole area	62134	1156	1668	54	37	

Differences in acreage per household are fairly large. Generally the quotient is lowest in well accessible villages. Probably population growth in these has been very high, due to proper nearby medical care, and preference of marriage partners to migrate into villages close to service centres.

The value for the Q of Yule between acreage per household and distance from bus stop is 0.18 in 1963, but 0.80 in 1971. (For its calculation the sixteen villages, or clusters of villages, were divided in categories of equal size).

Appendix XI. Cases of village meetings

This appendix includes reports of two different meetings. The first report concerns a village meeting discussing the construction of a community hall. The second a group of adolescent boys and girls together with staff of the Department of Agriculture who reviewed the possibility of activating the existing 4H club.

Both meetings were recorded on tape, and translated afterwards. In the translation I tried to follow the argument of the predominant speaker at a time. Unintelligible passages because of many speakers have been omitted, as well as personal communications not related with the subject of the meeting. When spoken language is written down, it does not result in beautiful prose. However, I did not try to improve the style of the report. That would obscure the true character of the proceedings of this kind of meetings.

Report 1

The meeting started at 21h30 and was terminated at 22h15. About 20 adult men, representing a third of the households in the village had come to the meeting place, the clubhouse of the 4H club. Originally the TK (headman) had called for a meeting the evening before, but because of heavy rainfall nobody had turned up.

TK: I wanted to have a meeting with you last night, but due to the bad weather the meeting was postponed. None would have come. Even on a fine night as tonight, how many people are willing to come, though they know that there is something to be done. I believe that if everybody is to be engaged in the construction of the balai (community hall) not all will work. So I called for a meeting with you tonight. Our plan was a very good one. Six or seven men should work as paid labourers. We should not regret the days they gain. They work for seven days and get ten days labour in return. They would not gain so much profit from that. And now, what do you think of the work. They put the posts in but they were too high in spite of the advice that the height should be 6 feet.

P.: Why did you not make a remark to him?

T.: He wouldn't listen.

P.: Everything was measured correctly according to what has been planned.

TK: You must be careful to handle the materials. A few were there and the work is difficult.

T.: Why did you good carpenters not make it the style you wish.

TK: We had a meeting to look for 6 men. We agreed. A week later we heard a remark came from some of you that it was not the way used by our grandparents, when working on communal properties. We cannot practise the old way in the present world.

T.: Some remarked that they didn't want this, otherwise some may send their children to work on the fields. Young children do not know how to weed and dig. That is why the work cannot be done according to the wise plan.

TK: They are fond of this gossip. How can you make . . . You have opposed that plan. What result does it give? Everyone has agreed, even M.

Another: I do not like to oppose.

Another: We would like to.

M.: If there are carpenters for it . . . the start is wrong

Another: If six men were to be working there . . .

T: You said that I oppose. How many times did I oppose?

TK: You didn't want to listen. Just imagine how many days does it take you to work there? If you follow the other plan . . .

Another: I worked there for seven days.

Another: I do not wish to work there myself.

TK: Everyone do it then . . .

Another: Everyone wishes to work there, but who wants to climb up? Let the skilled people do it. Just see the posts to that side. None is in upright position.

T.: Another[1] said that although an agreement was to be made that six men work there, he would rather work there too.

TK: That was what he said previously.

T.: I have worked whenever some village project was done. I never oppose. Because you regarded him as an important person you don't put the blame on him but you put it on me.

M.: . . . they have contributed labour for a day but mine is more.

T.: I have said that if they are busy putting up the roof for 4 days you receive 6 days work afterwards.

TK: We just go there tomorrow. If we can improve it we may do so or otherwise we let it be.

N.: We need something up there to see whether the posts are in their correct position.

Another: The post at the middle . . .

T.: That joint has been made by me. I joined the group which put up the post, without cutting it

1. This person's name was not mentioned.

Another: That night a meeting was held and the work started the next day. That's why the thing has not been planned well.

B.: I went there the next day. I said to myself what the others have made cannot be improved.

T.: I just made the hole for the post.

M.: Why did P. did not make it as he told us he wanted to.

Another: He wasn't present that night.

M.: I was not present myself.

T.: An old man told me we should not have the work done by a few carpenters, because our grandfathers never had any. I don't mind that. I just count the number of days we have to work. In the other way many would just stare without doing anything.

Another: H. is another who spoilt everything. He said that if the carpenters made the balai he would be there too.

T.: Only three opposers. The majority wants it that way and now let these three shut their mouths. Even if the three don't take part the balai can be completed by the majority.

TK: Why then be beaten by the vote of three? The carpenters were ready to make the balai.

Another: There is no carpenter actually.

N.: What did you agree upon during the last meeting? I wasn't there, you have appointed someone haven't you?

Answer by several persons: No, actually nothing.

Another: B. is one of those who are opposing. They said that they wanted to work there, no matter if the carpenters are there or not.

T.: Yes, you did, on the day you said that our grandfathers didn't do the work in labour exchange.

B.: I merely mentioned that point only. H. said we need not have a carpenter at all.

TK: We had meetings like this before but I have never come to such cases of opposition as this one.

Old man: Well we just improve, the holes are full of water.

T.: Yes, we try to make some improvements. But you said that the mistakes were made by the previous people.

M.: I heard someone saying that our talk was agreed upon. I was the one who firmly said that we should ask a few skilled men to work there.

Another: H. never attends meetings, yet he simply opposes what is agreed on. I am angry with him because of that.

M.: Don't say that I oppose. Five days have been spent there. If I were to be one of these carpenters how many days may I be working, more than will be paid back to me. I would not count those days. You who were present at the previous meeting made a mistake. Why did you not appoint a few men to do the work?

Another: I want all men from every family to do the job. I do make clear that I am very ready to do so. I regret that no projects have been successfully made by us.

Another: I am the one who said that not all people will work if the project is to be done in gotong royong style (all men contributing). I was certain that some men might bring cigarette leaves and a big lump of tobacco, so big . . . (to sit down and smoke instead of working).

T.: That's what I don't like.

TK: If you wish we just go there tomorrow. I am prepared to go. If you are not interested I cannot force you. We are equals. If your work in the farm or garden is not done, so is mine.

Report 2

4H club meeting in the presence of the Assistant Agricultural Officer (AAO) the principal agricultural field officer in the District and a Junior Agricultural Assistant (JAA), who is the 4H club coordinator in the District. The meeting started at 21h00 in spite of unwillingness of several members of the Club Committee to attend, only the President, Vice-President and Project Leader are present. Besides twenty 4H club members and the two staffmembers, the previous headman (ex-TK) of the village, and the headmaster of the village-school were present.

Probably the ex-TK feels himself obliged to attend the meeting, because he and his son (not present now) took the initiative to form the 4H club many years ago. All the original members resigned because of marriage etc. The teacher is interested in the 4H club movement, he intends to start a junior club with the pupils working in the schoolgarden.

The medium of conversation is the Bidayuh dialect, of which the AAO (Chinese), the JAA (Land Dayak from other District) and the teacher (Chinese) have a fair command.

AAO: We came here to have a discussion with you on your club. I observe tonight that half of the members are absent. What should be concluded about this club. Will it be continued or not? The TK has agreed to have a club here. This club here in the village has it brought any changes? Does it bring profit to the village? Does it make you happy? Do you follow it? You members have to know. What are you to do with your club? I think you should discuss what should be done to improve your club. Know too why your club is not successful.

President: Why has this club been such a failure? We[1] experience opposition. I led them to work but they refused. The members are usually disobedient. We are eager to plant long beans. We are even ready to buy seeds from other people (outsiders) but they are not willing to work.

1. He means the members of the Club Committee.

JAA: Do you want to work? You have told me you are afraid of those who are big. Who are they? Those big members or small members?

President: Those ex-members.

Ex-TK: Actually there is no opposition. The club has been given over to the bachelors and it was their duty to run it smoothly.

JAA: You said there is no land available. Of course there is land but you have no strength to toil it. We Dayak have plenty of land.

Project leader: We agree with your words, JAA, but we will not make a vegetable garden on the previous place any more, unless you provide us with a wire netting. The young plants are eaten by the chickens.

JAA: Wire netting will not be given unless I see that your work is good.

Project leader: Of course we want to work for the club. We do not dissolve the club.

AAO: Well you have land. What more do you want. Three acres is a big piece to work with cangkols. You do not concentrate all the time on the club, but help your parents too. Three acres is big. It does not mean that you work to-day and get rich by to-morrow. You have land. It is not the ex-members nor the kampung people that interfere with you. You think very little. You do not know how to organize your work. You cannot simply say that there is interference. Unless you work with the spirit of cooperation you will not be successful. You see your brothers and sisters in school have a good garden. Their teachers teach them. They are younger than you but they do better. Do you know why, because they cooperate. Don't be afraid of work. Nowadays people are working hard to make a better living. Share your knowledge with your friends. Don't just keep it inside. We work in gotong royong (communally). Improve your village for your own good. It is your village. You have a good road which facilitates transport. If there are holes in the road fill them on a gotong royong basis. That is the spirit of a 4H club. Work once a week for the club. Four hours work is sufficient. You should improve your road since you use it every day.

JAA: Where are we to have a new garden. I want to hear it from you. When we say this and that, there is no response from you.

AAO: We see that your club is empty. It is better for me to look at the sky with its full moon.

Vice-President: You may ask us to plant our vegetables there, but it cannot be done. First of all, on that soil plants do not grow well. And secondly, if they grow they are stolen by the people. Thirdly, the chickes eat the seeds. Before we were given the wire netting so that our work was successful. We asked for bean seeds, but instead you gave us spinach seeds. We want to make a new vegetable garden near the project road, provided we have wire netting to fence it.

JAA: Where is the wire I gave you last time?

Vice-President: I don't know. The ex-members know.

Ex-TK: Used to fence the fishpond

Vice-President: We rolled it but it was stolen.

Ex-TK: How can people take it?

JAA: You have been beaten by the students who are smaller than you. They succeed in their work.

Vice-President: They have no other work besides that. We have to go to the farm otherwise we have nothing to eat. Students have their parents to feed them. The teachers guide them in their work.

Teacher: They work only half an hour a day. After your regular work you play football until 4 or 5 o'clock.

Vice-President: It is only half an hour, but they work every day. It cannot be like that to us. We are of the same size. Students are asked by their teachers to work[1].

AAO: You have four acres rubber isn't it? You can tap them in four or five years to come. You can plant any kind of cash crops. If your club has some money you can lend it. There is nothing wrong in lending.

Project leader: You have said that the Government probably will give us more wire netting. We will try and we shall see whether the chickens disturb the garden or not. We are ready to make a garden behind the paddy stores.

Ex-TK: If you make a fence of bamboo and look after the vegetables properly then your garden may be successful. If the garden is successful the Agricultural staff will be very much impressed. Then they may give you a wire netting. You simply ask for the wire. They cannot give you because this thing costs money.

JAA: First do your work properly, then you ask for such kind of things from us. You said that you wanted to work. First you have to work together. Secondly some repair has to be done in this clubhouse. Thirdly you have to be punctual during the meeting. Whenever I attend a meeting with you I never see everybody present. Whenever a meeting is held it is you who should speak first, then we can follow afterwards. I never see the President conducting the meeting. There is only one speaker in the meeting. That's not the correct way. Don't be afraid to speak. Nobody can be clever straight away.

Project leader: Nobody is supposed to be out to work elsewhere this Saturday. Those absent must not say that they are still members of the club. Once the gong is beaten, everybody must stand by. Don't follow what you used to do before. Have you not heard what the JAA has told you just now?

Vice-President: We will work. If the garden seems successful we ask wire netting from the JAA. It is up to him to give it or not.

1. He indicates that the members of the Club Committee and the ordinary members are equals, who cannot direct each other.

AAO: In the past we have given seeds. I want you to be wise. When you harvest the fruits you must keep some for your seeds. You are not a squirrel. The seeds of chillies and long beans can be kept.

Vice-President: Long beans are very good.

AAO: Good of course. That is why you keep the seeds.

Vice-President: Spinach is not good.

AAO: Just as you keep paddy seeds for the next season. You don't ask these vegetable seeds from the Government. Your fathers and grandfathers have done so. If you take everything and store nothing it is your own fault. When the Home Demonstrator comes here she can demonstrate how to cook vegetables.If you want to prosper do your work in your rubber plantation, or plant pepper.If you have any project in mind, inform your president. We will come here to guide you. We will try all we can to help you but you must help yourselves.

Vice-President: JAA, you have given us fish fry before. At first we thought the young fish escaped because the pond was overflown after rain. But I saw there were still young fishes over there. I used to give rice bran to them. One day I saw ducks there. All fish was gone. If we have wire netting the ducks will not be able to get there.

JAA to the AAO in a low voice: You see he still insists on wire netting.

Vice-President: When we had wire before we collected quite a lot of fish there. It is a good place for fish because the water is good. But now without the wire it is useless to put fish fry there.

Appendix XII. Kendall's rank correlation coefficients (tau) between the indexes and other variables based on the information obtained from a survey of 96 Bidayuh villages

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
2	-0.06																								
3	0.09	0.17																							
4	0.34	-0.02	-0.02																						
5	0.21	0.17	0.18	0.00																					
6	0.33	0.02	-0.02	0.33	0.17																				
7	0.05	0.01	0.01	-0.11	0.02	-0.02																			
8	-0.04	0.04	0.09	-0.08	0.04	-0.01	-0.10																		
9	-0.01	0.21	0.05	0.12	-0.05	0.03	-0.01	0.12																	
10	-0.24	-0.05	-0.06	-0.36	-0.19	-0.42	0.36	-0.02	-0.06																
11	-0.33	-0.17	-0.05	-0.34	-0.29	-0.48	-0.10	0.06	-0.04	0.41															
12	-0.09	-0.43	-0.17	-0.09	-0.08	0.03	0.34	0.00	-0.17	0.25	0.17														
13	-0.08	-0.04	0.03	-0.18	0.08	-0.10	0.26	-0.23	-0.18	0.14	0.04	0.13													
14	-0.29	-0.17	-0.04	-0.33	-0.07	-0.35	-0.17	0.07	-0.13	0.23	0.37	0.12	0.17												
15	-0.06	-0.02	0.06	-0.24	0.05	-0.10	0.48	0.08	-0.12	0.30	-0.03	0.34	0.20	0.01											
16	-0.10	-0.11	0.09	-0.29	-0.08	-0.32	0.22	0.04	-0.11	0.38	0.32	0.26	0.28	0.30	0.18										
17	-0.26	-0.16	0.01	-0.09	-0.04	-0.07	-0.17	0.09	0.03	0.03	0.13	0.10	0.00	0.30	0.06	0.07									
18	-0.05	-0.07	0.07	-0.10	0.08	-0.05	0.12	-0.13	-0.04	0.09	-0.02	0.13	0.27	0.12	0.18	0.06	0.12								
19	-0.59	-0.14	-0.07	-0.31	-0.24	-0.48	-0.06	0.08	-0.02	0.32	0.40	0.15	0.03	0.31	0.07	0.16	0.26	-0.03							
20	0.01	-0.05	0.03	-0.24	0.16	0.00	0.23	-0.05	-0.18	0.20	0.05	0.11	0.24	0.11	0.26	0.15	0.05	0.17	0.03						
21	-0.30	-0.15	-0.11	-0.37	0.00	-0.34	0.11	-0.13	-0.10	0.41	0.37	0.25	0.24	0.38	0.20	0.43	0.30	0.16	0.35	0.23					
22	-0.22	-0.04	-0.02	-0.17	0.02	-0.13	-0.02	-0.06	-0.04	0.08	0.16	0.13	0.14	0.21	0.03	0.15	0.27	0.15	0.14	0.05	0.26				
23	0.02	-0.10	0.07	0.06	-0.05	0.07	-0.04	0.02	0.04	0.02	-0.03	-0.01	0.03	0.08	-0.03	0.16	0.09	0.10	0.08	0.07	0.04	0.08			
24	0.09	-0.09	0.08	-0.04	0.09	0.09	0.24	-0.10	-0.09	0.17	-0.01	0.05	0.27	-0.01	0.04	0.16	0.06	0.06	-0.02	0.42	0.21	-0.02	0.10		
25	0.03	-0.20	0.12	-0.10	0.08	0.01	0.23	0.08	-0.13	0.21	0.07	0.23	0.06	0.05	0.23	0.24	0.08	0.05	0.06	0.43	0.18	-0.04	0.30	0.57	
26	0.00	-0.19	0.15	-0.11	0.04	0.04	0.23	0.05	-0.13	0.20	0.06	0.20	0.15	0.08	0.24	0.26	0.10	0.02	0.06	0.42	0.15	-0.05	0.33	0.61	0.89

Names of variables

1. Secular homogeneity
2. Moral homogeneity
3. Religious homogeneity
4. Law and order
5. Goodwill and participation
6. Unchanged village
7. Communal properties
8. Tired leader
9. Popular headman
10. Differentiation
11. Accessibility
12. Village size
13. Orderliness
14. Short-term projects
15. School building
16. Voluntary organizations
17. Activities instigated by Department of Agriculture
18. Long-term projects
19. Presence of Chinese
20. Entrepreneurial activities
21. Relative centrality
22. Assistance schemes for individual households
23. Interlock between traditional existing positions, and positions in newly established organizations (Ion)
24. Interlock between traditional existing positions and the group of entrepreneurs (Ioe)
25. Interlock between positions in newly established organizations, and the group of entrepreneurs (Ine)
26. Interlock between traditional existing positions, positions in newly established organizations, and the group of entrepreneurs (Ione)

Appendix XIII. Interlocks in Bidayuh villages

In the survey of all villages in the Upper Sadong District (see Chapter 1.2) I asked for the names of the occupants of twenty possible positions in a village. The positions were classified in three categories and it was assessed which persons held positions in more than one category. The overlap in each village between the categories was expressed as a measure of interlock, defined as: the number of persons who hold positions in two or more categories as a percentage of the actual number of positions in the smallest of these categories[1].

The first category comprises functions traditionally existing in Bidayuh villages. These are the position of headman, his deputy and religious specialist (traditional and Christian ones). The average number of these positions per village is 4.7, the concentration of these positions per person is 1.06.

The second category consists of positions in organizations which have been established by recent outside influences. These positions are member of school committee, paddy scheme committee, cooperative society committee, party branch leader, intermediary with the Bidayuh Association, leader of Women's Institute, and leaders of 4H and other youth clubs. The average number of these positions per village is 3.1, the concentration per person 1.05. (When the Women's Institute and youth club positions were occupied by a woman or a youth they were attributed to the head of the household).

The third category includes persons engaged in activities of an entrepreneurial character such as large-scale pepper cultivator, shop keeper, rice miller, transporter and people who borrowed from a statutory body. The average number of these positions per village is 2.8, concentrations per person 1.12.

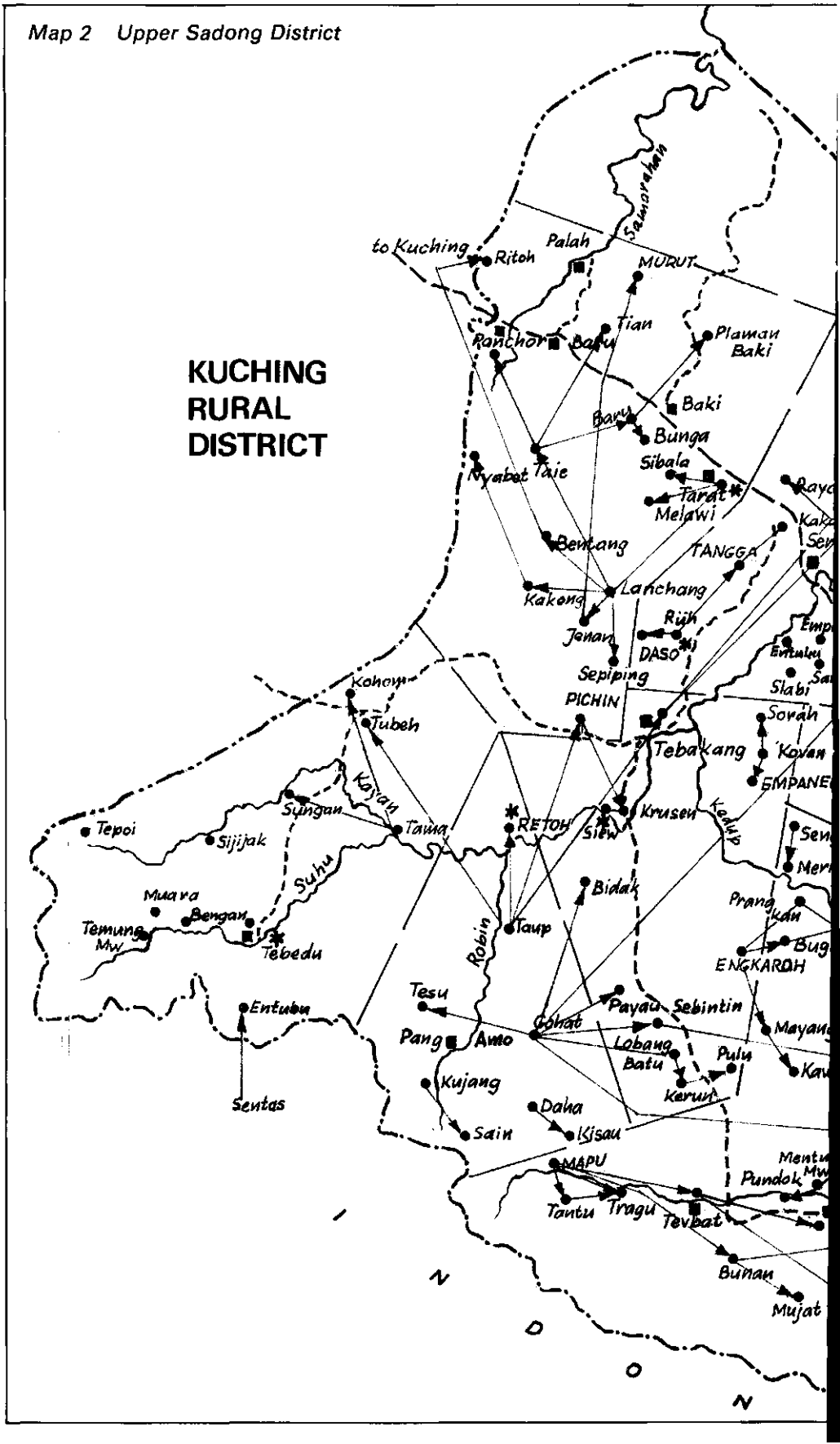
The average interlock between the three different categories in each village is as follows:

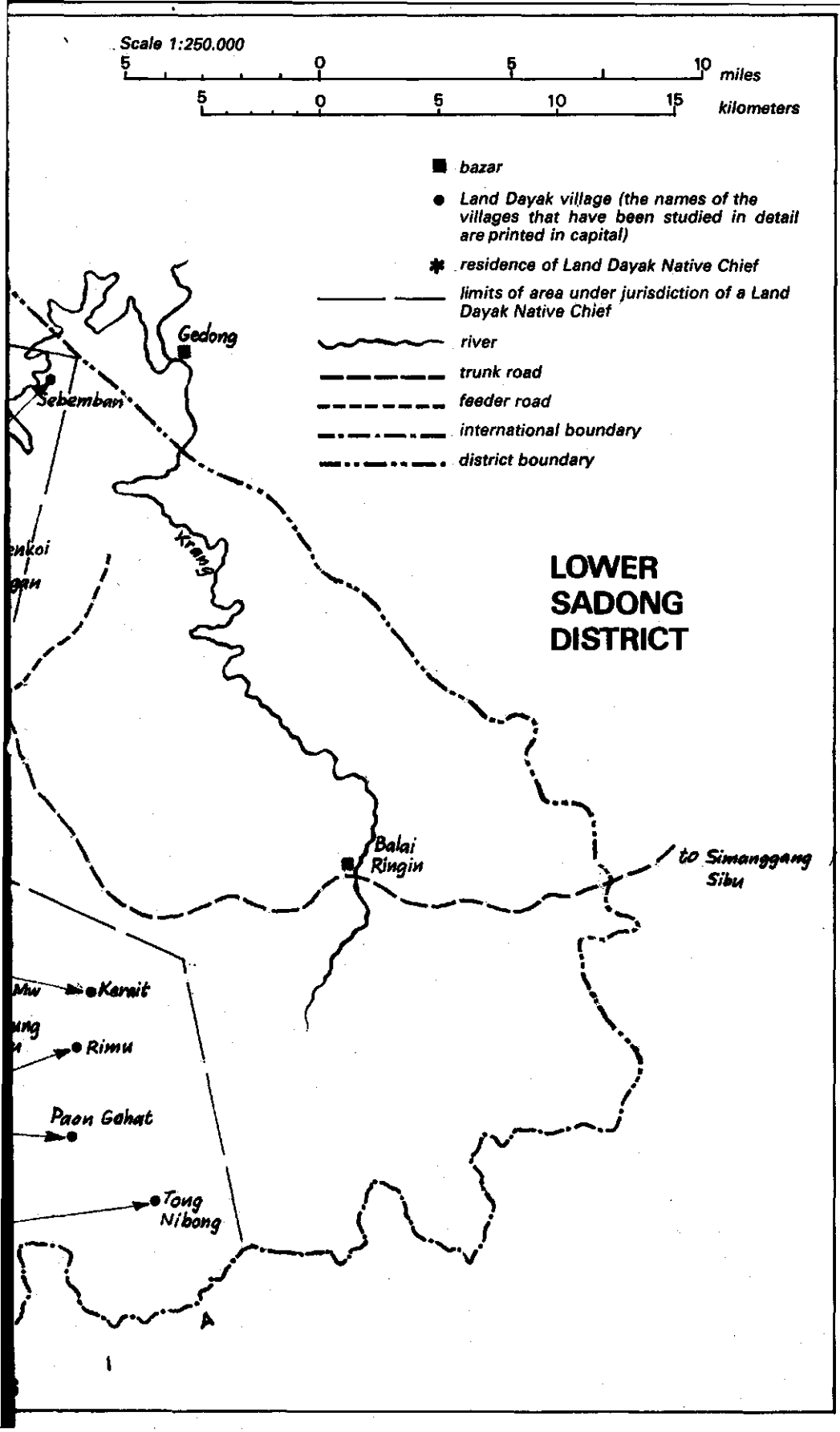
- between traditionally existing and newly established positions (Ion) 0.35;
- between traditionally existing positions and entrepreneurs (Ioe) 0.23;
- between newly established positions and entrepreneurs (Ine) 0.16;
- between traditionally existing positions, newly established positions and entrepreneurs (Ione) 0.09[2].

1. This interlock measure was developed by Nypan & Vaa (1970). They derived the idea from Young & Larson (1965).

2. 'o' stands for traditionally existing positions, 'n' for positions in recently established organizations and 'e' for entrepreneurs.

Map 2 Upper Sadong District




Scale 1:250.000
5 0 5 10 miles
5 0 5 10 15 kilometers
bazar
Land Dayak village (the names of the villages that have been studied in detail are printed in capital)
residence of Land Dayak Native Chief
limits of area under jurisdiction of a Land Dayak Native Chief
river
trunk road
feeder road
international boundary
district boundary
LOWER SADONG DISTRICT
Gedong
Sebemban
Krang
Balai Ringin
to Simanggang Sibu
Karait
Rimu
Paon Gehat
Tong Nibong