

THE 'UNPAVED' ROADS OF DEVELOPMENT

CHANGE AND CONTINUITY IN THE TOURISM DEVELOPMENT TRAJECTORY OF LAKE SANDOVAL

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SUMMARY

This thesis traces the development trajectory of Lake Sandoval in Peru into a destination for tourism. Like much of the Peruvian Amazon, Sandoval is characterized by a multiplicity of land use patterns, informal practices and institutions, and it is into this heterogeneity that institutionalization of both tourism and conservation has been introduced. Consequently, this study understands progressive iterations of institutional arrangements not as simply a matter of replacement, but as a complex process of *layering* that produces both congruencies and incongruencies. In the case of Sandoval with its multiple stakeholders, focusing on this layering process from the 1940s through the present day reveals certain patterns in the trajectory of development.

By adopting the Policy Arrangement Approach, which posits policy arrangements as a dynamic field constituted by *actors*, *rules*, *resource* and *discourses*, the study traces the interplay of these four dimensions and their unfolding over time. The PAA provides a framework from which to analyse the layering of newly introduced institutions on those that are already embedded locally. It facilitates the identification of those events that have proved critical in shaping the Policy Arrangement of Sandoval and how certain actors/rules/resources/discourses have perennially wielded the most influence.

Data was primarily collected from 29 in-depth semi-structured interviews with key informants from government, civil society and the private sector, and supplemented both by focus groups conducted with tour operators and local inhabitants as well as field observations during visits to Sandoval that revealed the nuanced relationship between formal rules and daily practices. Using software for qualitative data analysis, emergent themes and patterns were discovered.

From the analysis, it was determined that actors such as foreign conservation NGOs and state regulatory bodies consistently had the greatest influence in guiding the development trajectory. This stood in strong contrast to the absent voices of local inhabitants and those working as tour guides and operators. This asymmetry was enabled by a discursive terrain that privileged expert biological knowledge over that of locals. As a result, the layering of new institutions was often incongruent with locally-embedded practices, forcing inhabitants and guides to continually adapt to changing conditions and formally legitimize themselves through licenses, entitlements, etc. On the other hand, new institutions were often quite congruent in terms of existing power relations, which they tended to reinforce.

ACRONYMS

AGOTUR – Asociación de Guías Oficiales Turísticas

AGITUR – Asociación de Guías Inoficiales Turísticas

CI – Conservation International

CITES - Convention on International Trade of Endangered Species

DIRCETUR – Dirección Regional de Comercio Exterior y Turismo

INRENA – Instituto Nacional de Recursos Naturales

IUCN – International Union for the Conservation of Nature

FZS – Frankfurt Zoological Society

MINAM – Ministerio del Ambiente

MINCETUR – Ministerio de Comercio Exterior y Turismo

NGO – Non-governmental Organization

NPA – Natural Protected Area

PA – Policy Arrangement

PAA – Policy Arrangement Approach

PROFONANPE - Fondo de Promoción de las Áreas Naturales Protegidas del Perú

RN – Residentes Naturalistas

SERNANP – Servicio Nacional de Áreas Naturales Protegidas por el Estado, in this thesis the term is used specifically to refer to the managing body of the Tambopata National Reserve

SERNANP TNR – referring to the department of SERNANP in charge of the Tambopata National Reserve

SERNANP HQ – referring to the head office, which is overseeing the specific Protected Area departments

SENATI – Servicio Nacional de Adiestramiento en Trabajo Industrial

SINANPE – Sistema Nacional Áreas Naturales Protegidas por el Estado

TSMO – Transnational Social Movement Organization

TCRZ - Tambopata-Candamo Reserved Zone

TNR – Tambopata National Reserve

TABLE OF CONTENT

1. INTRODUCTION	10
1.1 Background	10
1.2 Problem statement.....	14
1.3 Research objectives and questions	15
1.4 Relevance.....	15
1.5 Outline.....	15
2. THEORETICAL CHAPTER	17
2.1 Literature review.....	17
2.1.1 Epistemological Considerations: Social constructionism and nature	17
2.1.2 Theoretical approaches to the analysis of policy development	18
2.2 Policy Arrangement Approach	20
3. RESEARCH METHODOLOGY	23
3.1 Research design	23
3.2 Data collection.....	23
3.3 Data analysis.....	26
3.4 Strengths and limitations to research design	27
3.5 Positionality	27
4. RESULTS.....	29
4.1 Sandoval and its local resource utilization (1940s – 1975).....	29
4.2 Shift I (1975 – 1990)	34
4.3 Shift II (1990 – 2000)	38
4.4 Shift III (2000 - 2008)	45
4.5 Shift IV (2008 - 2014).....	60
5. CONCLUSIONS & DISCUSSION	68
5.1 Conclusions.....	68
5.2 Discussion	70

LIST OF FIGURES

Figure 1: Representation of the agency/structure relationship19

Figure 2: Policy Arrangement Tetrahedron21

Figure 3: Foreign tourist arrivals in Puerto Maldonado, Peru between 1981 and 1999..... 38

Figure 4: Problems identified by the group of researchers.41

Figure 5: Family tree García family..... 43

Figure 6: Distribution land entitlements García family..... 44

Figure 7: NPA category and human intervention..... 46

Figure 8: National Reserve Tambopata and control postsr 47

Figure 9: Map, left situation before, right situation according to the Site Plan 52

TERMINOLOGY

Acompañantes – local guides who are knowledgeable about certain areas and assist researchers with practical matters such as arranging transport

Aguajal - palm swamp that is primarily inhabited by the *Mauritia Flexuosa* or aguaje palm

Aguaje – refers to the palm tree *Mauritia Flexuosa* or to the fruits its produces which are harvested by local people

Castañero - someone that is earning their living through harvesting and selling *Castaña* (Brazil Nut)

Chacra - (from the Quechua word *chakra*) term for farm or field. It is a rural area where agriculture or livestock farming is exercised, whether it is minor or major. Chacras are typically established on the outskirts of cities dedicated to produce food for the city. In the case of Sandoval the local inhabitants were both exercising cattle ranching and they had also large fields with various crops. They transported their products to the main town Puerto Maldonado by boat.

Chismoso – a gossip

Conocedores – local people who are knowledgeable about an area

Collpa - Quechua word for salt lick. Collpas are soil horizons – usually found on river banks – that are regularly consumed by Amazonian animals. Especially parrots are attracted to them.

Colonos – Peruvian migrants labourers or settlers that came from the Andes region or urban areas to find their luck in the Amazon, often encouraged by national policies aimed at developing the Amazon. The colonos are a different group than the *nativos* which have a longer history of settlement in the Amazonian jungle. The colonos were typically involved in short-term economic exploitation on the bases of the extraction of natural materials, such as timber and animal skins. Moreover they were also involved with agricultural expansion in the jungle. The deforestation of the rainforest are often related to the arrival of agricultural *colonos* who cleared forest to establish fields or cattle ranching and did not have much knowledge about sustainable agricultural practises suitable for the Amazon.

Comunero - member of a community

Crisnejas - a bunch of leaves interweaved and tied to a slat which are used throughout the Amazon to roof houses and other buildings

Direct Use Zone - spaces intended to carry out the direct use of wild flora or fauna, including fishing, in the management categories that include such uses and according to the conditions specified for each ANP. Educational activities, research and recreation is permitted. The direct use zones can only be established in areas classified as direct-use areas, according to art. 21 of this law (*Ley de Areas Naturales Protegidas*, 1997).

Ecotourism – in this study ecotourism is used as a synonym for nature-based tourism. It does not say anything about whether the touristic activities are sustainable.

Empirical guide – A local tourism guide who did not receive any type formal education. He is a *conocedor* and guides on the basis of his personal experience in the field and the local knowledge he has.

Habituation – refers to a decrease in responses by repeated presentation of a stimulus. In the case of tourism it refers to the process through which wild animals get used to the presence of tourists

Hospedaje - accomodation

Gringo/gringa – Term used for a foreigner who is not a Spanish speaker. It is typically used to refer to light-skinned or fair-haired persons.

Guacamayo - Macaw

Master Plan – a planning tool especially designed for the management of specific protected areas to set out the strategy for the protected area and to order the different activities taking place often by establishing various zones.

Morador - inhabitant. This term is used to refer to the local inhabitants that live within the reserve at Lago Sandoval. This term doesn't refer to the general inhabitants of Puerto Maldonado

National Reserve - areas that are established for the conservation of biological diversity and the sustainable use of aquatic or terrestrial wildlife resources. Commercial use of natural resources is allowed under management plans, approved, supervised and monitored by the relevant national authority. They relate to IUCN category VI (Solano, 2009).

Official guide – A guide who has received formal education to become a guide and is in the possession of a diploma

Oxbow lake – U-shaped lakes that are formed by rivers who change their course by which a wide meander is cut off from the main river and left landlocked. Many oxbow lakes can be found in the Amazon and often become rich wildlife habitats which also attract Giant river otters. Lake Sandoval is also an oxbow lake.

Palmiche – Native palm tree. The leaves of the palmiche are used for roofing.

Paper park – A legally established protected area where experts believe current protection activities are insufficient to halt degradation. They are conservation areas that exist 'solely on paper' but the conservation laws are not enforced often due to lack of management capacity

Residentes Naturalistas - Resident Naturalists, foreigners who come to do research in the field of conservation (biologists/ecologists/forest engineers) and stay for a long term in the area. They often have a cooperation with a lodge where they can stay for free if they guide tourists and explain them about the jungle.

Shiringa - kind of rubber tree. It has been of major economic and historic importance of the Madre de Dios department as the milky latex which is extracted from the tree is the primary source of natural rubber. Often an distinction is made between *caucho* (*Castilla Elastica*) and *shiringa* (*Hevea Brasiliensis*) because they ways to extract the liquids from the trees are distinct and distribute various consequences.

Site Plan - a planning tool especially designed for those places where they develop public use activities of the establishment of some kind of facilities for visitors or when it is needed for the management and administration of the area to count with a Site Plan, as appointed in the respective Master Plan, which is prepared by the headquarters of the natural protected area” (Huayca & Verand, 2008).

Special Use Zones - spaces occupied by existing human settlements which existed before the establishment of the Natural Protected Area or in which for special situations some kind of agricultural, livestock, agroforestry pastoral techniques or other activities that imply the transformation of the transformation of the original ecosystem occur (*Ley de Areas Naturales Protegidas*, 1997)

Unofficial guide – guide without valid license, the guide doesn't have a diploma in guiding

1. INTRODUCTION

1.1 BACKGROUND

TOURISM DEVELOPMENT IN THE AMAZON

Human population and economic growth are often held responsible in neo-Malthusian discourses for the growing demand for natural resources, which has led to increased competition and conflict over control and access to land (See further debates in: Homer-Dixon, Peluso, & Watts, 2003). The establishment of protected areas has been seen as the central instrument for the conservation of natural resources by restricting users of an area and avoiding the exploitation of resources. The development of new protected area designations can thus be seen as part of - as well as a reaction to - this global change (Galvin & Haller, 2008). The Amazonian rainforest in particular has been characterized by an intense exploitation of natural resources over the last decades. At the same time the efforts to conserve these resources grew as the area became renowned as a biodiversity hotspot which gave it one of the highest conservation priorities worldwide. Consequently many protected areas have been established in the Amazon (Jenkins & Joppa, 2009; Myers, Mittermeier, Mittermeier, Da Fonseca, & Kent, 2000).

However these new protected areas do not cover 'pristine forests', untouched by the human hand as often is assumed. Instead the Amazon is a mosaic of different land uses, people and landscapes. Many people are depending on the access to these forest resources for their livelihoods. Consequently the human presence in the Amazon has posed a challenge to protected area management to not primarily focus on conservation but also allow a variety of resource uses, such as Brazil nut collection, small scale agriculture; scientific research; fishing and developing various tourism activities. In turn many protected areas became increasingly more people oriented, aiming for conservation while allowing sustainable use of its natural resources.

The dual focus on the preservation of natural resources and sustaining livelihoods also resembles a wider paradigm shift in protected area management. Through the appearance of a new conservation paradigm the aim of protected areas had broadened from conserving biodiversity to also promote development by sustainable resource use. The new conservation paradigm or 'conservation with development approach' resulted from the convergence of development agendas and conservation debates that occurred in the late 1980s and early 1990s (Holland, 2012). While traditionally protected areas were based on a 'fortress' conservation philosophy, securing conservation areas from human practices or settlement, a new paradigm started to promote the inclusion of residents and incorporate their forest practices by aiming at sustainable use of resources. The approach found particular entrance in developing countries, where many newly established protected areas were aimed at integrated conservation and development by taking into account multiple uses.

Through the new conservation paradigm tourism in protected areas has especially been promoted to make the crucial link between livelihood and conservation (Van der Duim, 2011a). Tourism development is one of the most prominent and expanding activities in or around many protected areas worldwide, and nature-based tourism is growing globally (Balmford et al., 2009). Additionally the amalgamation of the

conservation and development debates resulted in the appearance of a particular dominant paradigm: 'sustainable tourism development' (Van der Duim, 2011b). While no agreement exists in what the term exactly entails, as it composed of a set of diverse contested discourses and practises, it also has become a central yet pluriverse organizing principle for how tourism should ideally be developed in protected areas.

In the amazon the rise of the 'conservation with development approach' has distributed changes in the institutional frameworks of protected areas. Many protected areas have moved away from a state-centred conservation model towards a multiple stakeholder governance model where various interests became combined or contested. In the new institutional arrangement conservation and tourism development are incorporated in various ways, making space for an increasingly complex political arena to organize protected area landscapes in the Amazon.

While institutional arrangements incorporating tourism as a tool for conservation and local development are often heralded as win-win solutions, the effectiveness of such arrangements can be questioned. First of all, the multiple land usage has increased pressure on ecosystems and natural resources as activities such as tourism are intensifying. In turn the growing and diversifying demands of protected areas have given rise to issues of multi-stakeholder conflicts, complexity and uncertainty in the management of protected areas (Plummer & Fennell, 2009). To solve such problems the arrangements often rely on adopting more forest policies and regulations of which land-use zoning is often a favoured tool to integrate resource use with biodiversity (Naughton-Treves et al., 2006) (Westley, 1995; Innes and Booher, 1999 in Jamal, 2004).

Second, the effectiveness of such policies is dependent on whether and how these may take local dynamics and socio-material heterogeneities into account. In the amazon, characterized by the multiplicity of land use patterns, this local context is particularly filled with a myriad of informal practises and institutions. The new institutional arrangements are often criticized for not taking these informalities into account (Long 2001; Mosse 2005). The development of these arrangements is furthermore never linear, but rather complex, synchronic and largely unplanned (Arts & Van Tatenhove, 2004). In line with Arts and Tatenhove, I will start to argue that this developmental process of integrated conservation and development in protected areas of the amazon emerges out of a precarious (re-)blending of local dynamics and institutional reforms.

THE CASE OF SANDOVAL

Lake Sandoval, located in the southern Peruvian Amazon, is used as an illustrative site of this study. In Peru, natural protected areas are increasingly aimed towards multiple uses, especially as they are added to the country's portfolio of tourist attractions. Various actors from both government and the tourism industry have been promoting eco-tourism, leading to new tourism geographies as tourists themselves grow more interested in Peru's protected areas in addition to culture sites like Machu Picchu (Bonilla, 2003). Lake Sandoval - located inside the Tambopata National Reserve - has been the principle receptor of these tourists, due to location close to the capital of the Madre de Dios department called Puerto

Maldonado¹. The town is nowadays easy accessible from Cuzco, the tourism hub of Peru, which has facilitated the arrival of both migrants and tourist. Sandoval is in fact the most renowned tourism location in the southern Peruvian Amazon and numbers of visitors continue to increase – from 8,000 in 2003 to 22,801 in 2014.

To steer this rapid development of tourism while at the same time ensuring the conservation of the area, various policies have implemented, such as site management plans, land-use zoning and licenses and contracts. These reforms emerge from a long history of institutionalizing resource use and forest practices in Sandoval. The past forty years have seen not only the establishment of the protected area, but also policy reforms aimed at biodiversity conservation and increasingly towards sustainable development of tourism.

However, such institutional changes have not been introduced to a blank space; Lake Sandoval was already home to a variety of (forest) practises – even more so than most protected areas because of its proximity to Puerto Maldonado which made it more susceptible for human influences. Institutional reforms thus take place amidst a complex and dynamic local context, containing many interacting actors with various and sometimes competing interests. Various frictions have emerged in the history of tourism development in Sandoval, including situations in which no single actor seems to have the resources nor authority to overcome a problem, leading to impasses of Sandoval's tourism development. This has recently manifested itself in the problematic access road to the lake (“unpaved road to Sandoval”), which has been deteriorating under increased pressure from tourism in combination with various other policy constraints. The lack of maintenance has become the central discourse explaining its failure leading to the deterioration while no solution seems available amongst involved actors.

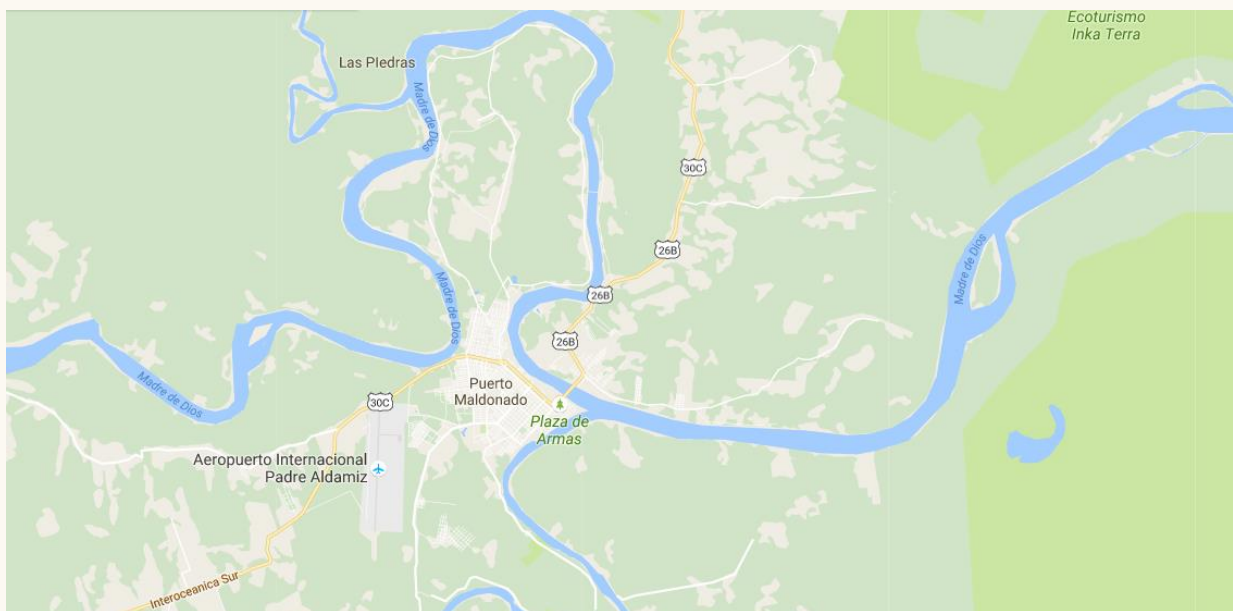
Sandoval is characterized by a multiplicity of actors and patterns of resource use. This complexity is often overlooked in ongoing policy formulations. Over the last forty years various actors have appeared at the lake, attracted by its abundance of natural resources. For villagers of Puerto Maldonado, Sandoval was an attractive foraging ground for extract forest resources, including bush meat, fish and gathered fruits and nuts. One family, the García's took a more prominent role, residing permanently on the lake shores to farm and raise cattle. Biologists, forest engineers and other scientists, intrigued by the great biodiversity, also found their way to Sandoval and assisted local guides. Tour operators appeared, taking advantage of the broadening interest of tourists who are increasingly interested in discovering Peru's jungle. This plurality of actors came with a corresponding set of conflicting ideas about the use of Sandoval and how it ought to be developed. Success or failure of various institutional reforms has been influenced by the (in-)ability or willingness of policy arrangements to account for this local complexity. The incorporation of human influences is especially notable in Sandoval because the protected area allows human settlement

¹ The population of Puerto Maldonado is growing in a high rate due to the influx of migrants who are coming to work in the gold mining sector. In 2015 they town counted with an estimated 74.494 inhabitants (INEI, 2012).

within its borders. New institutional arrangements forced the García family living at the lake to change their livelihoods, by limiting agriculture and encouraging tourism.

STUDY AREA DETAILS

Lake Sandoval is located in the Madre de Dios province of Peru. This province - in particular the Tambopata area - was the birthplace of nature-based tourism in the Peruvian Amazon (C. Kirkby, Lee, & Tailby, 2013). Madre de Dios is one of the most biodiverse areas on the planet and was nominated as the 'biodiversity capital' of Peru. Lake Sandoval is a so-called *oxbow lake* formed long ago by the shifting waters of the Madre de Dios river. This U-shaped waterbody is formed when a river changes its course and a wide meander is cut off from the main stem and left landlocked. Oxbow lakes can become rich wildlife habitats, and Giant river otters frequently live in Amazonian oxbow lakes. While oxbow lakes are very common in the Amazon because of the abundance of meandering rivers, Lake Sandoval is a special case as its proximity to the town Puerto Maldonado has made it particularly exposed to human influence. In fact with its 10 kilometre distance from Puerto Maldonado it is the closest, most accessible lake from city. Nowadays it can be accessed by a half-hour motorboat trip downstream from the Madre de Dios river, followed by a 5km walk (1 hour 30 minutes) from the river bank to the lake. Where in the past Sandoval's location had made it an attractive hunting ground and place for resource extraction by the villagers of Puerto Maldonado, these same characteristics nowadays make it an important tourism destination.



The lake's surface comprises 127 hectares, which is surrounded by *aguajales*, swamp-like areas where the native palm *aguaje* grows. Additionally, giant kapoks, mahogany, rubber and brazil nut trees can be found at the site. The area refuges a great variety of birds, butterflies, monkeys, black caimans, as well as the endangered giant river otter. The variety of flora and fauna together make it a renowned destination for nature-based tourism. In the year 2000, Sandoval fell under the jurisdiction of the Tambopata National Reserve (TNR), which is the principal tourist destination in the Amazonian jungle of Peru. Sandoval receives about 60% of the visitors to the Tambopata National Reserve, making it the most important nature tourism destination of south-east Peru. In 2014 the lake received 22.801 visitors - an increase of

285% compared to the 8000 tourists in 2003 (SERNANP, 2015). Likewise, Sandoval has also become important in economic terms (in 2013 generating 700.000 soles) by charging entrance fees and granting concessions to deploy tourism activities within the Natural Protected Areas (NPA's). This is used to maintain Peru's protected area system. In the same year, TNR generated 16.2 % of the revenue from tourism in the NPA system, of which a substantial part (60%) was thus made by Sandoval.

What makes lake Sandoval an especially interesting case is that it also houses several families that have been living at the shores of the lake since the creation of the Tambopata Reserve. They are involved in offering various tourism services, like renting boats to the tour operators who offer sightseeing tours and accommodation. The families that reside permanently at the lake are also involved in other activities as agriculture. They cultivated banana, cassava, pineapple, pumpkin, corn and other vegetables. They also have fruit trees like mango, orange, lime, avocado and papaya. The majority of production is for auto consumption and less than half is destined for sale. Two of the family members collect *castaña* in the months of January until April. Also the collection of leaves from the *palmiche*, for the construction of roofs for their houses at the lake. They further fish and also collect *aguaje* from November to February.

The hunting, fishing, gathering nuts, *aguaje* and logging must be authorized by the head of the TNR, which sets collection time, number of species and other management standards. The authorizations must also be carried out for their own consumption. With regard to fishing on lake, intensively fishing is not allowed; activities have been coordinated to control fish stocks of tigerfish and catfish. Hunting and fishing are optional activities for each family.

Almost all families raise free-range pigs, chickens, ducks and turkeys, both for consumption and for sale. In the sector there are currently four accommodations, the luxury "Sandoval Lake Lodge" and three accommodations ran by individual members of the García family. Besides the accommodation offered by the families, various lodges have been constructed in the buffer zones of the reserve, which offer excursions to Sandoval.

1.2 PROBLEM STATEMENT

Multiple steerings of Sandoval as a multi-land use territory has become increasingly complex in the last decades. Its political arena has hence become influenced by many competing claims, divergent interests and values, by multiple stakeholders such as NGOs, governmental organisations, tour operators and inhabitants. *An inequitable distribution of costs, benefits, resources and power among different actors created a fertile ground for conflicts and disturbs the balance between development and conservation (see also Wells et al. 1992; Goodwin 2002; Kiss 2004; Brockington et al. 2008; Sandbrook 2008; Sachedina et al. 2010; Ahebwa et al. 2012) in van der duim et al. 2012.* At the same time new policy arrangements are being placed over others, creating an increased layeredness of policy arrangements effective in the management of Sandoval. These novel layers tend to recursively implement solutions to problems that seem to match narrow interests. The multiplicity of such interests and related claims on the polity of Sandoval's development tends to oversee wide local and historical dynamics that seem to influence ways in which current conflicts (re-)gain shape.

1.3 RESEARCH OBJECTIVES AND QUESTIONS

RESEARCH OBJECTIVES

Whereas there are wide dynamics related to Sandoval's overall development, this thesis aims at an understanding of the growing complexity of its institutionalization as a tourism destination. For this purpose I adopt the Policy Arrangement Approach (cf. Arts, Leroy, & Van Tatenhove, 2006; Arts & Van Tatenhove, 2004) in order to get more insight in the internal dynamics of policy change and power relations between actors and the interplay between old and new arrangements. By getting a better understanding of the many policy arrangements performing in Sandoval, I aim to explore the complexity of a seemingly simple deteriorating of the 'unpaved road' to Sandoval.

RESEARCH QUESTIONS

- 1) Which events have driven change in the policy arrangements of Sandoval since the 1970s? And on basis of this, which different arrangements can be identified over time?, including:
 - a. Which actors and actors coalitions can be identified? And what role have these actors played?
 - b. Which formal and informal institutions have been put into place?
 - c. Which discourses have guided these changing process?
 - d. Which resources have been made available to actors to pursuit their interests?
- 2) As new policy arrangements emerge and are layered over previous arrangements how do they interface in terms of congruency?

1.4 RELEVANCE

The relevance of this thesis is twofold. First, new insights can be gained by approaching tourism development in protected areas as a complex and dynamic social-ecological system (Farrell & Twining-Ward, 2005). Despite the fact that the debate on protected areas and the role of tourism development within them has been widely discussed, most of them focus on the environmental and socio-economic effects of a certain institutional arrangement. They do to a lesser extent give insight in the dynamical process underneath, that shape tourism development and conservation practises. Hanna, Clark & Slocombe (2008, p. 226) therefor identify a need for more understanding of the "*new policies and more diverse, and often complex governance arrangements*".

Secondly, the application of the PAA can lead to theoretical explorations of the theory/approach. The PAA has typically involved the study of singular policy arrangements of tourism development, but is put here in a wider historical perspective emphasizing the non-linear evolution of policy arrangements over time.

1.5 OUTLINE

This thesis consists of five chapters. *Chapter one* introduces the research topic by presenting the main debates surrounding tourism development in protected areas, which lead into a concise problem statement. Also the objectives of this research are presented together with the research questions which

guided this research. *Chapter two* covers theoretical discussion and presents the analytical framework of this thesis based on the Policy Arrangement Approach. The methodology of this research is stated in *Chapter three*. It gives an explanation of the methodological choices made and the methods employed, such as semi-structured interviews, focus groups, participant observation and document analysis. It continues to set out the strategy adopted for the analysis of the data. In *Chapter four* the empirical findings are presented. The findings are split into six subchapters. The first, *Chapter 4.1*, provides a background to the tourism developments that occur in Sandoval. The following subchapters the tourism developmental trajectory of Sandoval. The results are presented in historical order, each subchapter referring to a specific phase. *Chapter 4.2* sketches the situation at Sandoval between 1940s and 1970s framed within the Policy Arrangement Approach. In the next chapters various shifts in the arrangement are discussed and the changes they have distributed in the arrangement. *Chapter 5* concludes this thesis with answers to the research questions presented earlier, followed by a discussion of the findings. It also discusses the limitations of this adopted approach in this study and recommendations for further research. At the end of this thesis the literature list and appendices can be found.

2. THEORETICAL CHAPTER

In this theoretical chapter the literature review is presented in the first section (2.1). It presents the epistemological stance that is adopted in this research, which shapes the way developments in protected areas are seen. Subsequently a theoretical discussion on policy changes and institutions is presented of which the agency-structure debate forms an essential part. After considering these theoretical debates, the Policy Arrangement Approach (2.2) which is adopted in this study will be explained in more detail.

2.1 LITERATURE REVIEW

2.1.1 EPISTEMOLOGICAL CONSIDERATIONS: SOCIAL CONSTRUCTIONISM AND NATURE

In order to understand how Sandoval evolved in tourism destination under protection we need to make clear what is actually understood with institutions especially like protected areas, why they are designated by humans and how can we understand the developments within them. These are questions of the epistemology and ontology within which my research unfolds. Answering them first requires consideration and reflection upon the nature/culture debate that became prominent in cultural geography and related fields during the 1990s.

How geographers have studied nature and its relation to humans has changed over the course of history. In *Key Ideas in Geography*, Castree (2005) outlined the various theoretical frameworks through which geographers have approached nature. One of the most important trends in recent history is the blurring between concepts and the material objects to which they refer, leading to the understanding of nature as a *social construct* (Demeritt, 2002; Ginn & Demeritt, 2009). This move can be understood as a philosophical critique on the longstanding nature/culture and subject/object dualisms of Western schools of thought where nature was perceived as a separate category ‘out there’. Subject/object dualism entails that a person (*subject*) is seen as distinct from all the other animals, plants and material things (*object*). From this perspective, it is easy to understand that reserves were created to set aside nature, literally sealing off the land from people (West, Igoe, & Brockington, 2006).

The understanding of nature as a *social construct* implies that nature is not a fixed, objective category separate from humans, but that what is understood as nature depends on changing historical contexts and cultural determinations. Constructionists such as Descola assert that rather than one nature, there are many ‘*natures*’ (Descola, 1996), based on ethnographic work with indigenous ontologies. The social construction of nature does not however imply that we must surrender to an idealist doctrine, diminishing nature to a mere mental abstraction. A concept commonly used in the social sciences to explain the link between the physical and the mental is *discourse*, which can be described as a “*frame of collectively conscious and subconscious elements present in a certain culture at a certain time determining interpretation of things there and then*” (Van Assche, 2004, p. 54).

Although the social construction of nature is not the main focus of this thesis, it informs the epistemological framework from which it proceeds. It is important to consider that protected areas are constructed through historical and social practise and not merely defined by physical characteristics

(Puhakka, 2008). Nature is also subject to the realm of cultural norms and ideas. West therefore concludes that “*protected areas are the material and discursive means by which conservation and development discourses, practices, and institutions remake the world*” (Brosius 1999a, Watts 1993 in: West et al., 2006).

2.1.2 THEORETICAL APPROACHES TO THE ANALYSIS OF POLICY DEVELOPMENT

Within policy literature, several approaches can be identified that are aimed at understanding and explaining policy change and stability (Fischer, Miller, & Sidney, 2007; Marsh & Stoker, 2002; Sabatier, 2007). This section discusses some of the main approaches, as well as their basic assumptions and critical responses.

Rational choice theory and institutional approaches have been favoured in studies aimed at analysing policy development in protected areas (Arts, 2012). Rational choice theory assumes that actors compare the costs and benefits of the available choices, upon which they base their rational individual decisions (Sabatier, 2007). Hardin, for instance, noted in “Tragedy of the Commons” that choices might be rational on the individual level, yet on the collective level still produce negative outcomes (Hardin, 1968). Critics of these theories claim that rational choice cannot fully explain human behaviour and political outcomes. Institutionalists argued that choices are not merely based on individual preferences but also mediated by rules and norms, commonly referred to as *institutions* (Ostrom, 1990). Such institutional approaches have been very influential in the field of protected area governance (Kjaer, 2004; Bevir 2011). Ostrom’s Institutional Analysis and Development framework has for instance often been adopted to evaluate the effectiveness of nature and forest governance arrangements. Nevertheless, the strong belief in rules that guide human behaviour - which is a basic premise of this approach - has generated its own criticism in turn.

The positivistic, materialistic premises of these approaches have led some to support theories that place more emphasis on the influence of ideas behind policy practices, a turn to *discourse analysis*. Hajer’s theory on *discourse-coalitions* (1993), based on a Foucauldian theory of discourse, can be understood as such an approach. Hajer refers to a discourse coalition as “*the ensemble of a set of story lines, the actors that utters these story lines, and the practices that conform to these story lines, all organized around a discourse*” (Hajer, 1993, p. 47). This argumentative approach conceives of policy-making as a struggle for discursive hegemony in which the actors try to win support for their definition of reality.

Other critics of rational choice and institutional approaches contest the portrayal of policymaking as a linear administrative activity. Grindle and Thomas (1991) for instance assert that policymaking cannot be reduced to a technical-administrative exercise, that it is far from being a neutral activity and should be treated as a political one (Grindle & Thomas, 1991). Other scholars have further elaborated on this idea and claim that policy-making does not happen in a vacuum. They stress the importance of complex socio-political and historical settings in which policy-making is embedded, and opt to take them into account (Arts, Behagel, Van Bommel, De Koning, & Turnhout, 2013).

However, to some policy scientists the inclusion of historical and socio-political constraints alone does not sufficiently explain policy and institutional changes. Such constraints deny the capacity of actors to change

developmental courses on the micro-level. Actors do not follow institutions literally, but interpret, reshape or even reject them in practice (Clever, 2002). One of the advocates for a micro-perspective on actors and their interactions is Norman Long (Bramwell, 2006). While he admits that large macro structures are indeed of great importance, he argues that we need to abandon the idea of structural determination in explaining developmental paths, that applying an inexorable structural logic is insufficient. He reasons that external forces “*necessarily enter the existing life worlds of the individuals and social groups affected, and in this way they are mediated and transformed by these same actors and structures*” (Long, 2001, p. 13). Reification of structures relies on support from below, and as such research ought to involve documenting everyday practices because it is here where actors and groups have agency - the capacity to act independently and handle problems. On this level, actors have room to manoeuvre and can avoid rigid macrostructures (Bramwell, 2006). Long’s actor-oriented perspective draws on the ‘structuration’ theory of Anthony Giddens, which attempts to reconcile structure and agency by showing how they reinforce each other. Giddens directed attention to the interplay and interconnectivity of the dialectic process between them. He explains:

“Crucial to the idea of structuration is the theorem of the duality of structure [...] The constitution of agents and structures are not two independently given sets of phenomena, a dualism, but represent a duality. According to the notion of the duality of structure, the structural properties of social systems are both medium and outcome of the practices that recursively organize” (Giddens, 1984, p. 25).

The debate over the primacy of structure and agency has been a key thread in theoretical debates in the social sciences (e.g. Dolfsma & Verburg, 2008), yet there are few uses of structuration theory in tourism research (Bramwell, 2006). Hall (2005) advocates the usage of these ideas to understand development process. He also highlights a growing volume of recent research employing actor-network theory to address questions of structure and agency.

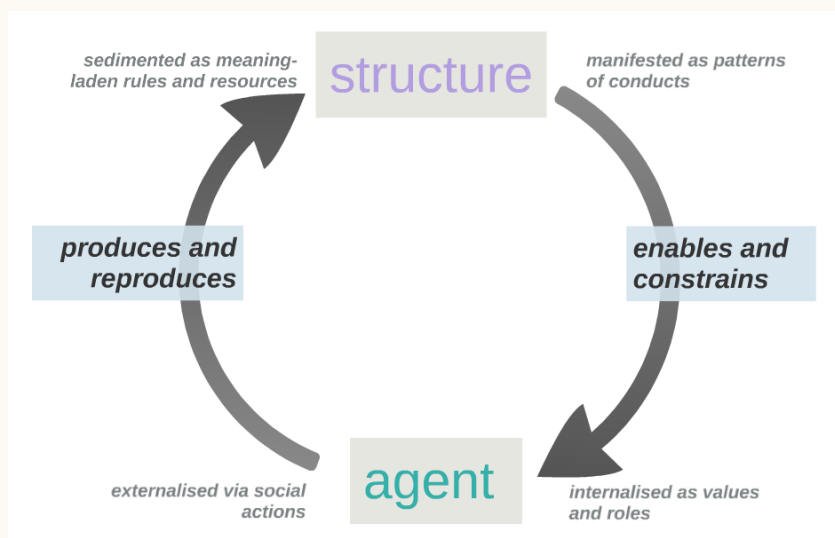


Figure 1: Representation of the agency/structure relationship described in Giddens’s structuration theory adapted from Lane (2001).

Bianchi argues that the majority of tourism development studies have given primacy to structure over agency which can risk “*ignoring the creative engagement of local populations with different modalities of tourism development*” (Bianchi, 2003, p. 14). At the same time agent-centric approaches have also been criticized for isolating study cases from the hierarchical power relations and structures of domination that connect localities to the wider political economy. There is a need to strive for a balance between structure and agency, rather than highlighting one at the expense of the other (Milne, 1998 in Milne & Ateljevic, 2001).

The Policy Arrangement Approach (PAA) is (Arts & Van Tatenhove, 2004; Liefferink, 2006; J. Van Tatenhove, Arts, & Leroy, 2000) a framework for the analysis of policy development designed to bridge these divides by drawing attention to the dynamics of policy making as an interplay between the interactions of actors (who put policy into practise on a daily basis) and macro processes of social and political change. Doing so, it acknowledges both the influence of actors on the development of policies and the impact of the institutional and structural context in which actors operate (Jan Van Tatenhove, Edelenbos, & Klok, 2010). This approach makes use of the so called ‘analytical dualism’ that Archer suggests to bridge the so called “actor - structure duality” in social and political sciences (Archer, 1996 in: Arts & Buizer, 2009).

This analytical tool enables a balanced view between content and organization of social, political and policy processes (Arts et al., 2006). It allows the researcher to conduct an in-depth empirical study on the interactions between multiple actors while keeping an eye open to the underlying (global) discourses that are negotiated in the tourism destination. The policy arrangement approach puts emphasis on: (1) the institutional embeddedness of multi-actor policy processes; (2) the manifestation of structural developments, such as globalization, in concrete policy practices; (3) the role of different faces of power in policy-making; and (4) the importance of both substance and organization, as well as of change and continuity in policy practices (Arts & Van Tatenhove, 2004). All these factors together make it a suitable approach to facilitate the analysis of the tourism policy developmental track of Lago Sandoval. The Policy Arrangement Approach will be elaborated in more detail in the following section.

2.2 POLICY ARRANGEMENT APPROACH

This section explains the Policy Arrangement Approach as it has been adopted throughout this study.

The Policy Arrangement Approach has three central concepts: *institutionalization*, *political modernization*, and *policy arrangements* (Arts et al., 2006). A *policy arrangement* can be understood as the ordering of a policy domain in terms of coalitions, resources, rules and discourses (Arts & Van Tatenhove, 2004). That is, it represents a temporary stabilization in both substance and organization of a policy domain (Arts et al., 2006). However, policy arrangements are under constant pressure of change, coming from day-to-day interactions and policy making (*political innovation*), structural changes of policy making and relations between state, markets and civil society (*political modernization*), changes in adjacent policy arrangements (e.g. forestry or agriculture) and external events (*shocks*) that change the socio-economic or environmental context of policymaking (Arts & Van Tatenhove, 2004). The institutionalization of policy arrangements resulting from these change processes is therefore in continual

flux (Arts et al., 2006). The interplay of policy practices (*agency*) and processes of political modernization (*structure*) results in specific policy arrangements and new forms of governance as an expression of changing relations between state, market and civil society (Arts & Van Tatenhove, 2004).

A policy arrangement consists of four interrelated dimensions:

- 1) *Actors and coalitions* – the actors and their coalitions involved in the policy domain;
- 2) *Resources and the associated power and influence* – the division of resources between actors, leading to differences in power and influence, where power refers to the mobilisation and deployment of the available resources, and influence to who determines policy outcomes and how they do so;
- 3) *Rules of the game* – the rules of the game currently in operation, in terms of formal procedures of decision making and implementation as well as informal rules and ‘routines’ of interaction;
- 4) *Policy discourses* – the current policy discourses, where discourse refers to the views and narratives of the actors involved (norms, values, definitions of problems and approaches to solutions)

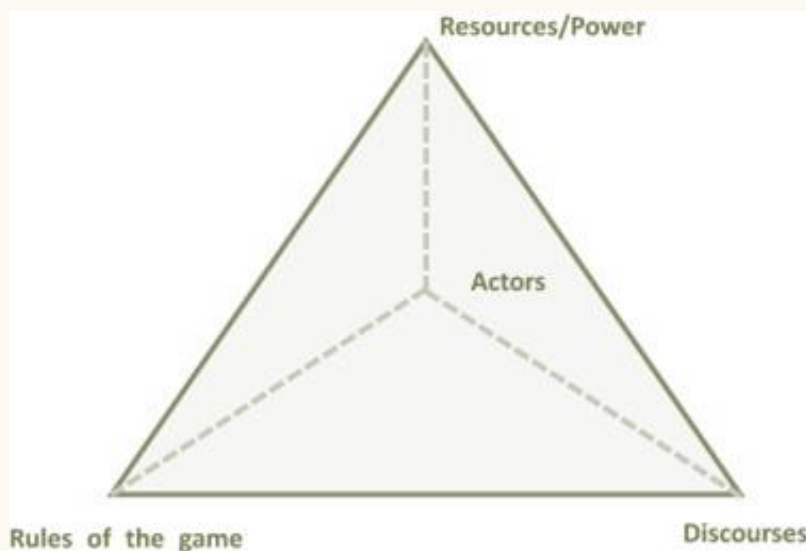


Figure 2: Policy Arrangement Tetrahedron (Liefferink, 2006, p. 48)

The lines between these four dimensions in the tetrahedron indicate the interconnectedness of the different dimensions and visualize how a change in one dimension may induce change in one of the other dimensions. For example, the introduction of new actors can have implications for the distribution of resources. The appearance of new discourses - such as ‘sustainable tourism’ - in the policy arena can in turn mobilise new types of expertise or legitimacy, which might be ascribed to the resource dimension, or cause increased flexibility in the rules designed for the area.

However, as it is not my intention to assign a typology to particular policy arrangements but rather to understand the changes in the arrangement over time, a better explanation about *how* the different dimensions relate to each other is needed. Then we can determine how a change in one of the dimensions is influencing the other dimensions in the arrangement or causing incongruence.

The Policy Arrangement Approach (PAA) was especially designed as an analytical tool to understand dynamics in the environmental policy field. It has in turn been adopted for empirical research in

environmental policy fields but also applied to other policy fields. These wide-ranging empirical applications have enhanced the development of the theory and its central concepts. The PAA has been predominantly adopted to study forest policies (Arts & Buizer, 2009; Ayana, Arts, & Wiersum, 2013; Park, 2015; Van Gossum, Arts, De Wulf, & Verheyen, 2011; Veenman, Liefferink, & Arts, 2009) it has also been used for the analyses of nature policies (Arnouts & Van der Zouwen, 2012) river management (Wiering & Arts, 2006) regional land policy (Van Straalen, Van den Brink, & Van Tatenhove, 2015) the biochar policy field (Rittl, Arts, & Kuyper, 2015) public health policy (Stassen, Smolders, & Leroy, 2013) and tourism-conservation arrangements (Ahebwa, van der Duim, & Sandbrook, 2012; Van der Duim, Ahebwa, & Sandbrook, 2012) among other fields.

Where the PAA is often employed for the analysis of a specific institutional arrangement this study takes on a more historical approach and is focused on a longitudinal evolution of policy arrangements, comparable to the study of Ayana, Arts and Wiersum (Ayana et al., 2013).

Arts and Goverde (2006) further have noted that the PAA is lacking an evaluative component. It is found useful for describing and understanding policy changes but it does not offer evaluative instruments to assess the policy making process. They have in turn introduced Boonstra's (2004) concept of *congruence* to solve this shortcoming for an institutional assessment of governance capacity. Three components of congruence are distinguished: (1) the policy views of the different actors (*strategic congruence*); (2) the coherence between the four dimensions of policy arrangement (*internal-structural congruence*); and (3) the extent to which the policy arrangement matches the institutional context (*external-structural congruence*) (see: Ahebwa et al., 2012).

However this study is not aimed at assessing congruency *inside* an arrangement, but looks at historical dynamics of institutional reforms and the congruency between older and newer arrangements. The concept of congruence will therefore in this study be adopted to assess congruency *between* arrangements to understand the interface between old and new arrangements.

The analysis of a policy arrangement can take one of the interrelated dimensions as a starting point of the analysis. In this study the actor dimension will be central to the analysis. Since the family that resides at the lake have been a constant actor in the different policy arrangements of Sandoval we will look how the arrangements evolved around them. Furthermore, Agrawal (2001) added to sustainable resource management discussions that it was needed to focus on the individual as opposed to the limitations the state poses, which was found to be a too deterministic view. Haller further asserts that in line with new institutional theories the focus on the resource user is needed to understand the position and the incentives and to understand the interaction between actors and institutions.

3. RESEARCH METHODOLOGY

This chapter describes the research methods used to study the developmental trajectory of policy arrangements of Sandoval. In Section 3.1, the general research design is presented, including a justification for the chosen research strategy. In the subsequent sections, the methods for data collection are presented: semi-structured interviews (with topic list) (3.2.1), field observation (3.2.2) and document analysis (3.2.3). The chapter continues with an explanation of the method for data analysis, for which coding software was used (3.3). The chapter concludes with a discussion of the strengths and limitations of the overall research strategy (3.4) and a statement of the researchers positionality (3.5).

3.1 RESEARCH DESIGN

The principle research aim is to understand policy and institutional changes related to (tourism) development at Lago Sandoval, through an in-depth case-study. As explained in the theoretical framework, social actors are believed to have an active role in the construction of reality, and from this ontological stance a qualitative approach was found to be most appropriate. The research will describe the developmental process of Sandoval and explore the complexity in processes of institutionalization.

3.2 DATA COLLECTION

In the collection of data, a variety of methods were employed: focus groups, in-depth semi-structured interviews, participant observation (ethnographic method), and document analysis of key policy documents. Combining multiple information sources is necessary to build sufficient understanding of the interactions between agency and structure. Where document analysis will facilitate the analysis of the discursive and institutional dimensions of the Policy Arrangement Approach, interviews and participant observation will contribute towards understanding the reaction of actors to policy changes in their daily practises. A further advantage is that the combination of different data collection techniques is beneficial for the validation of findings. Prior to the study, focus groups were carried out during a consultancy project where SE Peru was commissioned by the reserve authority SERNANP to update the Site Plan of Sandoval. I was involved with the project as an intern field assistant. These focus groups mapped out the problems in Sandoval perceived by two different groups: actors from the tourism sector (operators, agencies and lodge-owners) and the local inhabitants of Sandoval (see Appendix I: Focus Groups. The field work period lasted from May through June 2014.

3.2.1 SEMI-STRUCTURED INTERVIEWS

Semi-structured interviews were the primary source of data in this study. Not only were they necessary due to a lack of documentation of Sandoval's historical developments, they were also needed to understand the positions of different actors in the Policy Arrangement and which ideas they were supporting. Kvale (1996) defines qualitative research interviews as “*attempts to understand the world from the subjects' point of view, to unfold meaning of peoples' experiences, to uncover their lived world prior to scientific explanations*”. Out of different possible interview types, semi-structured interviews were preferred. As opposed to structured interviews - where a standardized question list is employed - semi-structured methods allow for more flexibility. A list of predefined topics was used to facilitate the

interview. This list was partly developed on the basis of the four dimensions of the PAA adopted in this study, but was also informed by the researcher's preliminary knowledge of the study area and the issues at stake. For each topic, guiding questions were developed to start, prompt or guide the interview in case deviation from the topics occurred. At the same time, the format allowed new ideas to be brought up during the interview by the interviewee. An interview guide was prepared, outlining the main themes and related questions which can be found in Appendix II. The average interview lasted for a bit more than an hour, while there were some interviews that even passed 2 hours. These were often people that had a long during involvement with Sandoval and were essential to understand the earlier Policy Arrangements of Sandoval.

In compliance with the 'cultural norms' of the jungle, strict planning of interviews was not required. Most actors in the tourism sector do not have a 'nine-to-five' mentality and were still working even at nine o'clock at night. Conducting interviews and participant observation inside the Tambopata National Reserve did require more coordination, and a research permit was granted after negotiating with the reserve authority SERNANP.

SAMPLING TECHNIQUE AND KEY INFORMANTS

The selection of research units was aimed at including a variety of perspectives, rather than seeking a statistical representation (Yin, 2003). For this reason the 'purposive sampling' technique was preferred, meaning that the informants were deliberately selected according to the needs and purpose of the study (Boeije, 2010, p. 35). This technique involves selecting informants who possess certain qualities - such as knowledge or experience (Creswell & Plano Clark, 2011). When using purposive sampling, it is especially important to be clear about the biases of selection (Allen 1971).

In the Policy Arrangement Approach, a central role is assigned to actors and coalitions inducing or refusing certain developments. Accordingly, informants with a prominent role in the tourism development of Lago Sandoval (e.g. park authorities, lodge-owners) and persons with privileged knowledge (e.g. local inhabitants at Lake Sandoval) or professional expertise about the case (e.g. consultants) were selected. Including key informants from different backgrounds (market, state, civil society) gave a view of the issues from varying perspectives. Due to the timespan covered in this thesis, it was important to not only look at diversity of opinion, but also to approach informants who had been involved in the arrangement for a longer period of time and witnessed various changes. A total of 29 interviews were conducted, the interviewees can be categorized into the following groups:

Tourism industry	Local inhabitants	NGO	Government	Experts	Guides
<ul style="list-style-type: none"> • lodge-owners • tour operators • travel agencies • association 	<ul style="list-style-type: none"> • Family García - two generations • Moradores non García 	<ul style="list-style-type: none"> • AIDER • FZS • SE Peru 	<ul style="list-style-type: none"> • Regional (DIRCETUR) • SERNANP 	<ul style="list-style-type: none"> • Consultants • University professor 	<ul style="list-style-type: none"> • Empirical guides • Official guides • AGOTUR

It is important to note that strict categorization is difficult. Many stakeholders have held different positions; empirical guides have started tourism businesses, park guards have started guiding, local inhabitants have started tourism businesses. However, this was in fact a welcome addition to the interview process, as stakeholders often held a bigger picture of what was happening and could explain the positions of different stakeholders in more detail. In Appendix III a more detailed list of the interviewees is given with their corresponding codes used for the quotations in the results chapter.

A large part of the informants were identified prior to beginning data collection, due to the researchers' prior involvement in the field. Also, policy documents often included a scheme of the actors involved, and were reviewed to further identify who was involved in Lago Sandoval. Finally, a list of the tour operators active in Sandoval was provided by SERNANP. Occasionally, respondents recommended other important stakeholders, which can be seen as a kind of *snowball sampling*.

The interviews were conducted in Spanish, with the exception of two respondents who were equally proficient in English. For confidentiality purposes, the names of informants were replaced with pseudonyms.

3.2.2 FIELD OBSERVATION

Practices of field observation were undertaken at Sandoval itself in order to gain a richer understanding of local dynamics and interactions between various actors. Field observation contextualized the data from interviews and document analysis, and provided insight into the complex relationship between formal rules and daily practices. It also revealed the existence of informal institutions, which are less visible on paper but nevertheless play a significant role. Also comments in the reserve's guestbook gave some insight into what was happening on the lake (see Appendix IV)

During the fieldwork at Lago Sandoval, I lived in the homestay of one of the family members. Because the family has been witness to the entire course of tourism's history at the lake (and also been practically engaged with it), I considered it important to stay a longer period of time with them and earn their trust. Such *rapport* proved valuable in learning about how use of the lake has changed over time. Besides the family, the fieldwork period also included a variety of interviews with other local stakeholders. Also during this time, numerous informal conversations with park guards, guides, employees and tourists contributed towards my understanding of the situation, as did personal observations and moments of reflection. Field notes were made to record behaviours, events and personal reflections.

3.2.3 DOCUMENT ANALYSIS

In order to understand the rules and policies introduced in Sandoval, a document analysis was also conducted - by which policy plans, studies, reports and the legal framework have been analysed. The documents were also scanned for emerging narratives and discourses about how the protected area and its developmental and conservation issues are understood and what kind of solutions are mentioned. The following documents were analysed:

- Plan de Sitio Lago Sandoval 2004
- Plan de Sitio Lago Sandoval 2008-2014

- Plan de Sitio Lago Sandoval 2015-2019
- Guía Planes de Sitio para la elaboración de Intendencia de Áreas Naturales Protegidas (Huayca & Verand, 2008)
- Plan de Uso Turístico RN Tambopata 2009 – 2014 (SERNANP, 2009)
- Legislation and applicable concepts to protected natural areas in Peru (Solano, 2013)
- Legal Framework for Protected Areas Peru (Solano, 2009)
- Plan Maestro Reserva Nacional Tambopata 2004 – 2008 (INRENA, 2003)
- Plan Maestro Reserva Nacional Tambopata 2011 – 2016 (SERNANP, 2011)
- Diagnóstico del Proceso de Elaboración del Plan Maestro Reserva Nacional Tambopata 2011-2016
- Estudio de Límites Aceptables de Cambio para el Lago Sandoval en la Reserva Nacional Tambopata (Quillahuaman, 2013)
- Ley de Areas Naturales Protegidas (Ley de Areas Naturales Protegidas, 1997)

3.3 DATA ANALYSIS

Voice recordings of the interviews were transcribed and simultaneously translated to English. In some cases, fragmented phrases were adjusted to improve their flow and readability; more profound adjustments were placed within brackets in the quotations that are presented. Subsequently, the data was analysed with the qualitative data analysis program Nvivo to extract order, structure and meaning from the large amount of data. The advantage of Nvivo is that different sources of data can be added to the same database. Accordingly, drawings made by respondents during the interviews could also be included and coded.

The *a priori* codes *rules*, *resources*, and *discourses* were derived from the theoretical framework. While grounded theory argues that formulating theoretical codes ahead of time can dampen the researcher's theoretical sensitivity and risk overlooking relevant data (Glaser & Strauss, 1967, p. 37). it has been criticized in turn for assuming too much objectivity in the researcher and thereby concealing their implicit assumptions. In this research - where emphasis is given to theory-testing rather than theory building – *a priori* established codes were found to be desirable. By analysing text segments against the PAA framework, new insights could be discovered both in cases where the PAA seemed to accurately explain the developmental changes and in cases where it came up short.

For the 'actors' code, several sub codes - *child codes* in Nvivo terminology - were created to represent each actor involved, derived from a list of actors deduced from prior knowledge. The data was then interpreted along the analytical dimensions of the Policy Arrangement Approach. Subsequently, text sections and important themes that emerged from transcripts were coded and continuously compared against the pre-established codes and the passages within the selected code. This ensures the consistency of coding and allows the researcher to revise already coded passages. *Child codes* were made if the passage could be related to one of the dimensions, but it was desirable to divide them into more specific codes. When the information did entirely not fit into any category, new *open* or *emergent codes* were also created. Next, relations between the codes were established in Nvivo, as the goal of the research was to understand changes and dynamics. Analysing how different codes relate to each other reveals whether or how a

change in one dimension of the PAA has caused the change in another dimension. Furthermore, it shows how the dimensions relate to broader contextual conditions. Throughout the coding process, memos were used to register reflective thoughts and later used to interpret the data.

3.4 STRENGTHS AND LIMITATIONS TO RESEARCH DESIGN

The study faced some limitations during the process of data collection. Some of the larger, luxury eco-tourism companies are composed of a consortium of businesses with different lodges and travel agencies throughout Peru. These companies often have their head offices in Cusco or Lima, which meant that it was difficult to arrange interviews with the heads of these companies. Although interviews were conducted with local managers, they sometimes did not know much about the role of their company in the initial phase of tourism development at Sandoval. Some other stakeholders were out in the field and could not be interviewed.

Another limitation was the collection of data regarding the earlier phases in the developmental trajectory of Sandoval. Since people change positions rather frequently, especially in governmental positions, and the situation is further complicated by the fact that the institution that used to be in charge of the reserve has since been dissolved. As such it was sometimes difficult to acquire a variety of perspectives on these earlier phases. The reconstruction of the initial phases were based mostly on interviews with *empirical guides*, local inhabitants of Sandoval and experts, which could potentially have resulted in a biased view with implications for the validity of this research. Moreover the shifts established in this thesis are arbitrary, they are based on the data from the interview, it is however important to note that often these shifts have been more gradual processes than abrupt.

Another practical limitation was due to the cross language character of the research. All interviews except for two were conducted in Spanish. Although the researcher is reasonably fluent in Spanish, the language barrier might have led to overreliance on the interview guide, rather than fully engaging with the interviewees' points.

Because we are dealing with a specific case-study, the findings are not generalizable for other places of tourism development of the region. The situation in Sandoval seems to be quite unique, due to the variety of activities and stakeholders involved.

3.5 POSITIONALITY

In qualitative research, the research instrument for data collection and analysis is the researcher themselves. It therefore imperative for researchers to reflect upon their own biases and limitations.

First of all, my academic background in Development Geography and Environmental Studies have influenced the approach adopted in this study. Understanding the connections between development and environment has been the principle focus of my academic pursuits, which also shaped my choice to enrol in the master study of Leisure, Tourism and Environment. More importantly, my background in Development Geography has made me sceptical, if not outright critical, of the involvement of foreign parties in development and the unfavourable results it can lead to.

With regards to my appearance, it is important to stress that being a white foreigner - a *gringa* - influenced the way stakeholders perceived me. In general, the political climate of the Madre de Dios region is very negative towards foreign NGOs and experts. These ideas are reinforced by the pro-mining regional government, who claim that NGOs are frustrating development. These critiques are, however, mostly targeted at international conservation NGOs and forest engineers and biologists.

While in the field at Sandoval people expressed a similar discontentment with NGOs. According to them, NGOs were primarily concerned with conservation and less supportive of local communities developing alternative sustainable economic activities. Actors in the field of Sandoval expressed they were happy to see social scientists such as sociologists, anthropologists and economists in the area, in this light also my academic background was an asset.

Although actors might have been suspicious of my motives in being involved with updating the Site Plan, my internship was found to be helpful in building *rapport*. In this consultancy, we interviewed many stakeholders, held focus groups and negotiated with the reserve authorities. It was quite helpful to have already been introduced to the stakeholders before initiating my own research project.

It is possible that informants held the idea that I had influence on decision-making and were willing to cooperate with my research because of this. At the same time, it could also have influenced their responses, exaggerating some of the problems they were facing. Furthermore, my homestay with one of the families in the lake may have led another family member to refuse participation in my research.

It is important to stress that in the area of Sandoval I was not just perceived as a researcher, but at the same time also as a *tourist*. This gave me certain insight into what was happening in people's behaviour and adherence to the rules of the reserve.

4. RESULTS

In this chapter the results of the study are presented. The first section (4.1) describes the situation in Sandoval before organized tourism started to develop. The following sections 4.2 to 4.5 each describe an important shift triggered by an event in the policy arrangement of Sandoval and their implications. The first shift explained in 4.2 sees the arrival of organized tourism in Sandoval. The second shift (4.3) explain the involvement of conservation parties in Sandoval but also in the wider Tambopata region leading to Sandoval's incorporation in a reserved zone. The next shift is described in section 4.4 covers the introduction of regulations and control. It also explains how these institutions interact with the local informal institutions. The last shift (4.5) further problematizes the multi-stakeholders setting of Sandoval and describes how the developmental process of Sandoval gets jammed. After each section a schematic overview is giving of the Policy Arrangement.

4.1 SANDOVAL AND ITS LOCAL RESOURCE UTILIZATION (1940S – 1975)

This chapter provides a brief sketch of the situation in Sandoval from the 1940s till the 1970s, prior to the commencement of organized tourism and the introduction of formal institutions aiming to steer developments. Diverse human activities had long taken place in the Southern Amazonian jungle, of which some remain important today. Rubber extraction, hunting for the pelt trade, logging, collection of Brazil nuts and mining have all made their entrance and underlie the development trajectory of Sandoval. Yet this variety of human interventions did not occur all at once, various historical economical phases can be distinguished which entered and sometimes disappeared again while leaving their traces at Sandoval. In the following paragraphs the domain will be outlined through the distinct dimensions of the Policy Arrangement Approach: actors, rules, resources and discourses.

ACTORS

In the mid-19th century Colonel Faustino Maldonado (after which the town Puerto Maldonado was named) was one of the first explorers² to venture into the jungle and the one who made the first map of the area. Although the region had just been 'discovered' it was immediately brought into the folds of global markets. In the late 19th century, the region's first economical phase was initiated - the rubber period. The town Puerto Maldonado, located close to Lake Sandoval, would start off as a rubber boomtown in 1902. Also around Sandoval rubber plantations emerged. As exploitation of the region's rubber peaked, the migration to Puerto Maldonado of workers and merchants seeking jobs in the rubber sector also increased. However, when the Europeans established rubber plantations in their Asian and African colonies, the Amazon lost primacy in the rubber market and the rural population started to look for other forest products with which to earn income which heralded the period of pelt hunting:

² While the first Spanish explorers already found their way into Madre de Dios from 1567 in search of gold, facing many setbacks it was much later that similar expeditions were made.

When Arturo Gonzáles del Río died, the centre and road were abandoned and slowly taken over by the jungle. The past is however not completely erased as traces are still visible in Sandoval which is demonstrated by the car wreck that can still be found. This presents a sharp contrast to the current state of Sandoval's infrastructure, where such developments are mired in institutional deadlock. Also the centre would in a later stage gain be repurposed into a luxury lodge, embodying the rapid *layered* transformations in Sandoval, from rubber plantation, to missionary centre, to luxury eco-lodge.

In 1948 *castaño* Cesar García entered Sandoval, to look for Brazil nuts together with two companions. They walked over a trail until the lakeside, where they used the canoe of a couple of native people who were living by the lake. They stayed with this native couple for some time until Cesar decided to open up land for small-scale agriculture and settled permanently in Sandoval.

"He found Brazil nut and was working in Brazil nut, and after a while, on a very beautiful place he said: 'I'm going to do chacra, agriculture'." (INH1)

People discouraged him to go and live there, as in those times it was an adventure to reach Sandoval; it was a long trip and there were jaguars, ocelots and lots of macaws. However, Cesar was determined to move to Sandoval:

"(...)when he went to live at the lake my father said to him: 'you are crazy, you are going to die and nobody will find out that you are dead!' But he said: 'no I'm going to hunt and I need a place to raise my family', that is why Cesar went there." (TUR3)

The García family developed the area of Sandoval to suit it to their agricultural pursuits. Agricultural colonization, by *colonos*, Peruvian settlers or migrants, was in those times encouraged by the government and which meant that the family faced little constraints. The trees were cut down trees by the family to make space for *chacras* at Sandoval, their fields slowly expanded and they also obtained a number of cows. They were now managing a real farm: *"there was a farm, from the father, it was big, with a paddock and eight cisterns," (GOV3)* Cesar also opened up a *caño*, an exit canal together with a worker that helped. The worker had a sawmill of which many were installed during those years to exploit the rich reserves of fine hardwood like cedar and mahogany (Shepard, Rummenhoeller, Ohl-Schacherer, & Yu, 2010). They felled the trees and with the canal could easily get the products they extracted out to market.

As time passed, Cesar also came to realize that Sandoval was an attractive place for tourism. He had conversations with the first tourists that came to Sandoval. In 1961 the first tourist entered, soon to be followed by a second. Both of them advised Cesar to work in tourism, due to the attractive flora and fauna of the lake.

RULES

The most important rule that was introduced during this period was the prohibition on professional pelt hunting in 1973 by the Ministry of Agriculture, to avoid overhunting. The giant river otter was also included in CITES (Convention on International Trade of Endangered Species), which restricted the trade in otter fur (Groenendijk et al., 2014). This national wildlife management act however made an exception

in the use of certain game for subsistence by the rural Amazonian population. Also, the commercialization of skins obtained by subsistence hunters remained legal (Bodmer, Richard, 1994). The amounts of pelt exported decreased drastically after the introduction of these regulations, although this drop might also be attributed to the decline of the wild animal populations due to overhunting and subsequent lowered economic returns.

Furthermore, important prerequisites for the agricultural development of Sandoval undertaken by the García family were the favourable land tenure policies that were designed under the presidency of Belaúnde. Obtaining land and developing agricultural activities such as cattle ranching were even encouraged to stimulate the economic development of the region.

RESOURCES

During this period the rich natural resources of the Amazonian rainforest were the central resources of importance. Particularly during the rubber period, much land was controlled by rich rubber barons from Europe and the US, who established plantations and attracted migrant workers. They also often forced the indigenous population to work, due to labour shortages. The abundant wealth created from the exploitation of natural resources did not, however, reach the workforce. While various resources were available, their value was heavily influenced by the vicissitudes of the world economy. After the rubber period ended, many rubber barons and other wealthy elites went elsewhere to seek fortune. However, the existence of valuable hardwoods (especially mahogany and cedar), the growing market for Brazil nut, the abundant opportunities to procure animals skins and furs through hunting and, of course, the presence of alluvial gold served to attract more people to the region. After the fur business crashed, many people started to work in logging or began colonizing parts of the jungle for cattle ranching, as Cesar García had done. In fact many *colonos* arrived lured by the promise of free land, social services and farming equipment.

Furthermore, the development of aviation was significant as it became easier to transport products out of Puerto Maldonado, which was important part of the strategy to develop the region and increase accessibility. While rubber and pelting lost primacy in the Amazon, many of the other activities are still primary industries at the present moment.

Likewise, in Sandoval infrastructure was developed to ease the transport of resources. In Sandoval the missionary family Gonzáles del Río owned a field and a road to Sandoval, which also other villagers used:

“[The family] had a path, no a road! Even cars could pass to the lake! The family drove a small van and they used the road to collect Brazil nut. So we entered through this road from the river to the end of Fundo Concepcion to Sandoval and there was a lot of fauna(...)”
(TUR₃)

DISCOURSE

While various economical phases can be distinguished, the discourse about the use of the lake and its resources did not show much variation. The development discourse that dominated was of an explicitly

exploitative character. Various forest resources were extracted and commercialized with the aim of getting them abroad. One conservationist explains that:

“(...) in our amazon there has been a very extractive vision before, more extractive without control, the rubber eras, the wood eras, the shiringa⁴ eras.... [the people] had the view that you can exploit directly without any type of control.” (NGO1)

The inhabitants of Puerto Maldonado primarily valued nature and its animals for its economic reasons; the values of biodiversity conservation had yet to be introduced. Many ‘western’ countries were also not involved in safeguarding the natural resources of the Amazonian rainforest as they were the principal consumers of the forest resources:

“In this time there was no environmental awareness. Holland kept on buying a lot of skins... of the river otters. Europa was the principal client of animal skins, Italy, France, and here there was absolutely no awareness, we were hunters.” (TUR3)

The prohibition on professional pelt hunting did seem to change the extent to which hunting took place, as the amount of animals declined. Yet the mentality of the local people did not change much, and they took advantage of the exclusion of substance hunting from the wildlife act:

“The amount of parrots and macaws was impressive. We entered with shotguns and brought back dozens of macaws, they were a big part of the food. Macaw soup. Fried macaw. For the population ecology did not exist.” (TUR3).

Likewise, the people that went to Lake Sandoval were mostly hunters that were not frugal with the forest's resources. This discourse of abundance is recalled by one of the García family members:

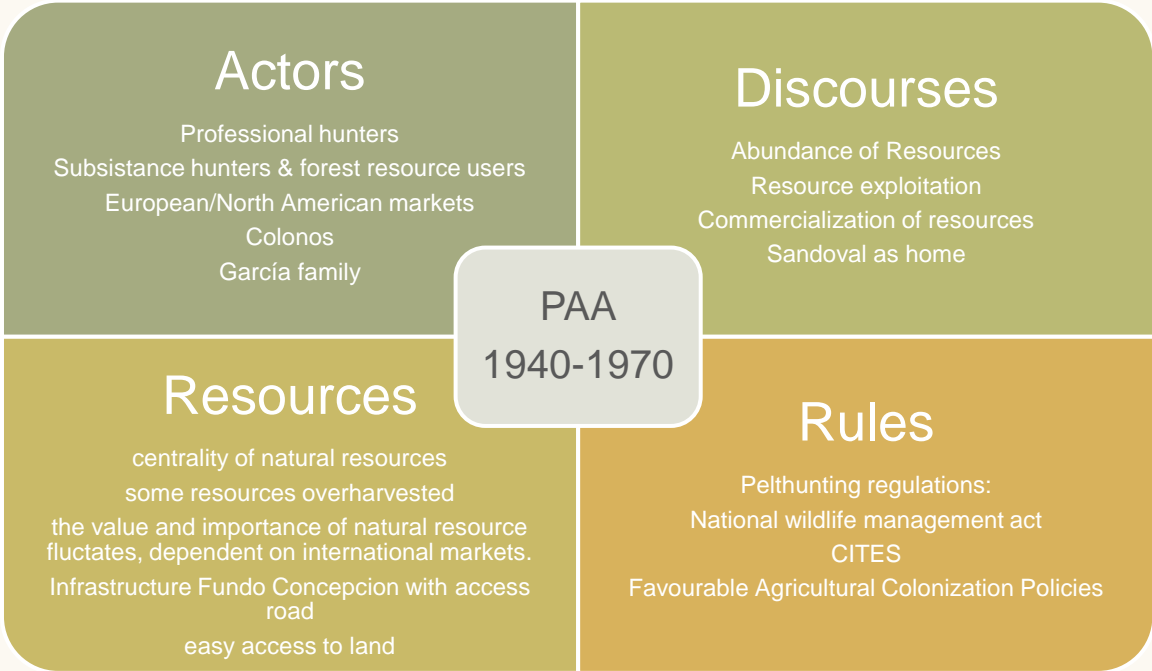
“At least in the time of castaña, Brazil nut, the people entered and there is when they were hunting, in the Brazil nut harvest time all years long. And sometimes they came a weekend to hunt, and sometimes they knew little, and they wasted it” (INH1).

Commercialization of resources remained an important element, especially for logging, mining and the oil companies that entered later. Also, many forests were cleared to create space for subsistence farmers like Cesar who started cattle ranching in the Amazon. Although ranching can be seen as a more productive activity than previous resource exploitations it nevertheless resulted in much deforestation. Many *colonos* were migrants who were not knowledgeable about the Amazon nor appropriate farming techniques.

A discourse of conservation was already having some influence in Sandoval be it through the introduction of rules by the central government and international agreements that prohibited pelt hunting. The first protected areas in Peru had in that time already been established. However, the conservation discourse

⁴ *Shiringa* is kind of rubber tree. It has been of major economic and historic importance of the Madre de Dios department as the milky latex which is extracted from the tree is the primary source of natural rubber. Often an distinction is made between *caucho* (*Castilla Elastica*) and *shiringa* (*Hevea Brasiliensis*) because they ways to extract the liquids from the trees are distinct and distribute various consequences.

was not of much importance in Sandoval yet because there were no local actors advocating for the conservation of natural resources.



4.2 SHIFT I (1975 – 1990)

In the following paragraphs a first important shift in the Policy Arrangement of Sandoval will be described, one that occurred in 1975 with the entrance of a new actor. In that year, the first tourism company began to offer tours to Sandoval from their lodges. They were advocates of conserving natural resources in Sandoval, as they depended on them for nature-based tourism. This entailed the appearance of another discourse in the Policy Arrangement. Moreover, they not only cooperated with the international scientific conservation community but also established a coalition with the García family in Sandoval. Conveniently for the company, Sandoval also becomes the habitat of a family of otters, which become the primary tourist attraction for the lake. The otters also attracted conservationists, as they were listed as a vulnerable species after their populations had declined from pelt hunting.

NEW ACTORS: TOUR OPERATORS AND OTTER FAMILY

In 1975, a new actor entered Sandoval who introduced organized tourism to the lake. The company Cusco Amazónico (currently operating under the name Inkaterra) opened a lodge at the northern riverbank of the Madre de Dios river, called Reserva Amazónico. They were one of the pioneering *ecotourism* companies in Peru, and became the first to organize tours to Sandoval. Up to this day, they remain one of the principal users of the lake.

In 1979 Cusco Amazónico also acquired the land of Fundo Concepción. The former cacao and rubber plantation turned medical catholic mission centre had fallen into decay after Dr. Gonzales’ death and the company transformed it into a lodge called Hacienda Concepcion (Inkaterra, 2014). This lodge was strategically located within a five kilometre walking distance of Lake Sandoval.

At the same time of the arrival of Cusco Amazónico a giant river otter family finds a suitable home in Sandoval, who typically live in Amazons *oxbow lakes* where they make their dens at its shores and feed on its fish. Giant river otter count with certain characteristics which makes them especially attractive for the pursuit of nature-based tourism. They are very social animals as they live in groups. They are active during daytime with fishing and use of a rich array of vocalizations to communicate with other group members. In fact tourists often call the observation of otters as the highlight and goal of their trip. Local tour agents are aware of the impact of viewing otters on tourism satisfaction and have actively promoted the otter as the principle attraction of lake Sandoval. Besides, their territory of choice, the *oxbow lake*, an open space, make it far more easier to locate the animals compared to other animals who dwell in the dense forests of the jungle (Staib & Schenck, 1994).

COALITION WITH FAMILY: GUARDING AND OFFERING BASIC TOURISM SERVICES

Soon after the arrival of Cusco-Amazónico at Lake Sandoval, Cesar García made an agreement with the company and started to offer some tourism services:

“Cusco-Amazónico came here and they knew [Cesar García]. He started, selling beers, drinks, little by little, food, little by little talking they started to develop a friendship.” (INH4)

However, Cusco-Amazónico was offering luxury tourism and thus the cooperation remained fairly limited; the facilities of the Garcías were not up to their standards. One of the more important elements of the cooperation was taking care of the company's boats (by cleaning them or take out the water when it had rained) which they used to take tourists out on the lake:

“The tourists didn't stay to sleep there. The cooperation was more to protect the boats. There was not any kind of infrastructure. And what the family García had was very basic. It was not on the level that Inkaterra wanted.” (TUR3)

At this time that the Garcías presence became an important resource; they were approached by various actors for cooperation and prescribed the role of guardians of Sandoval. Not only did the tour company and various freelance guides make use of their presence at Sandoval, the government also reaped benefit from their proximity to the lake for a fish farm pilot project launched in 1979 to provide alternative forms of protein for human consumption. About a thousand paiches were introduced into Lago Sandoval and Cesar García received the task to look after this research station. However the project did not prosper as the fish escaped. After the Madre de Dios river flooded during a particularly heavy rainy season, the rising water reached the aquaculture ponds and the fish escaped to the broader watershed. In 1980s *paiches* were reported outside lagoons in Peru and beginning in the 1990s was even found in Bolivia.

“They got out and then they populated all over lakes and rivers downriver from Sandoval. Again, that is an ecological problem that was generated as result of bad management in Sandoval at that time.” (EXP1)

The project was abandoned and the government withdrew from its involvement in the management and development of Sandoval for the next two decades.

TOURISM ENTREPRENEURSHIP FAMILY, COALITION LOCAL GUIDES AND FAMILY

While the paiche project was only benefitted the family in the short term, tourism provided them with more prolonged benefits. Besides the tourists from the company, the family also received tourists from four or five freelance guides.

“The tourist came in for free, and my father received them, the tourist came with their guides, there were various that brought tourists. These were empirical guides. They brought them and then they stayed a day or two days. I was working here with my mom, cooking etc. My brothers and the guides showed them the animals.” (INH1)

The few people that were visiting the southern jungle often wanted to stay overnight at Sandoval because the trip from Puerto Maldonado alone took about six hours. Sometimes the visitors camped on the García family's land, but later, at the end of the 1970s, Cesar's son constructed small, simple huts for tourists. This was the first accommodation for tourists in Sandoval:

“We started to get to know the inhabitants. Before, in the past, [Miguel] was the first that started to make rooms for tourists. We [first] came with tents, there was not a specific place we just camped somewhere. The family that was living there was very enthusiastic in the beginning, they helped us or they made some food for the tourists that we paid for.” (TUR5)

NEW DISCOURSE: TOURISM FOR CONSERVATION OR CONSERVATION FOR TOURISM?

The company Cusco-Amazónico was founded by José Koechlin, who arrived with a single mission: making conservation profitable. In many ways, Cusco Amazónico's business strategy was innovative - especially for the time - and therefore often held up as one of the early success stories in tourism-driven conservation (Yu, Hendrickson, & Castillo, 1997a). In their business model, tourism is used as a vehicle for conservation. From the financial resources generated by luxury tourism they support conservation and research. Not only did they earn international recognition through this approach, but they also acquired knowledge about local ecosystems, a resource they would later use for promotion purposes and for developing educational tourism products.

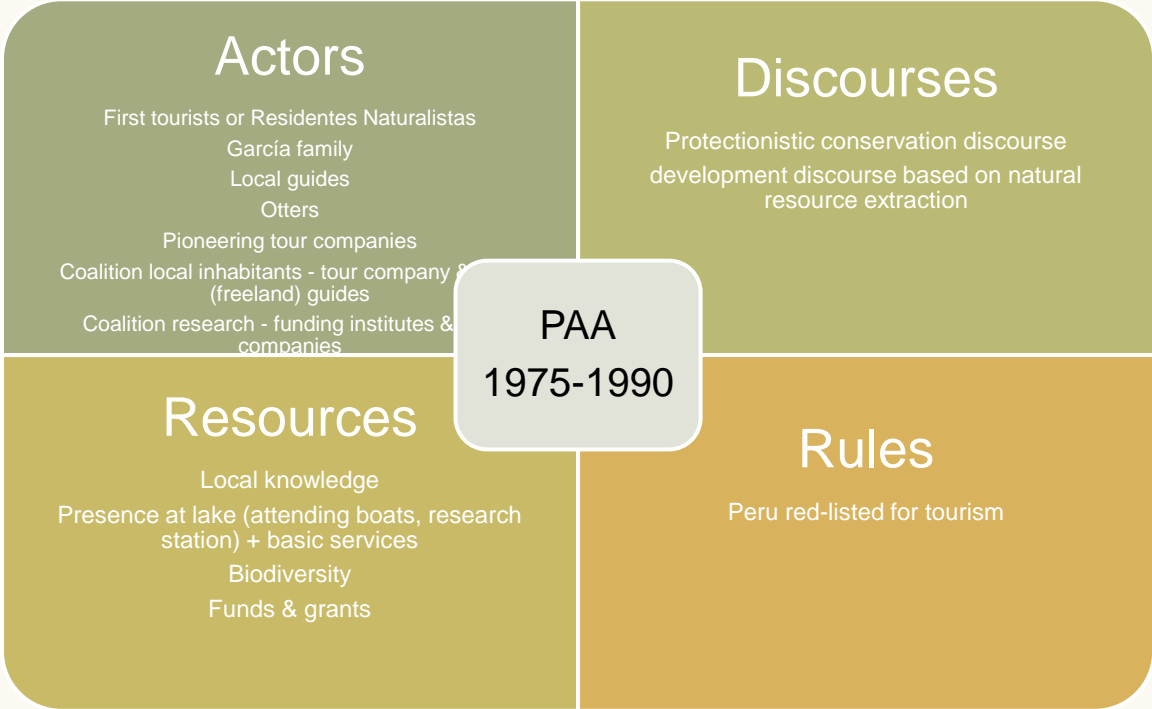
The company roughly works along four lines of action: 1) offering luxury tourism, 2) research on biodiversity; 3) contributing to the development of legal frameworks relevant for conservation, allowing private sector management of natural reserves; and 4) conservation of Cusco-Amazónico natural reserves.

An example of the third line of action is the development of a legal proposal to establish a private conservation area by urging for institutional innovation of the state's legal system. In 1979, Cusco-Amazónico managed to persuade the government to grant a ten-year concession for establishing the 10.000 hectare private conservation area REPCA through negotiations with the Minister of Agriculture. This was a first in Peru (Richter & Tveteras, 2012). However, at the end of the eighties the protected area system was overhauled (Shepard et al., 2010). Consequently the status of REPCA was revoked in 1987 because the institution in charge did not want the legal anomaly to be repeated and risk creating precedent (Richter & Tveteras, 2012). (Shepard et al., 2010)

Cusco Amazónico have profiled themselves as a company for scientific based tourism and have sought to encourage and support scientific research and conservation of the Amazon. Its focus on conservation and preservation as well as its close relationship with the scientific community have been instrumental in developing a model of sustainable tourism in this region. Cusco-Amazónico also used their strategical alliance with the scientific community to retrieve various funds.

Inkaterra invited fully paid researchers from various universities to use its private reserve to conduct field studies or pilot projects, and continues its strategy of inviting researchers and maintaining collaborations with a number of prestigious universities, botanical gardens and other institutions to the present day. The careful documentation of its work on conservation, through various publications, has set Inkaterra apart from many of its competitors helped it gain credibility within the scientific community (Richter & Tvetaras, 2012). By 1990, the Cusco-Amazónico Lodge was attracting 3000 visitors per year and hosted a major research expedition called BIOTROP (Yu, Hendrickson, & Castillo, 1997b)(Yu et al., 1997a). Consequently, many international scientists arrived to conduct research. While they can be seen in some respects as tourists, they also took on roles as tour guides - which will be explained further in the next chapter.

Not long after Cusco-Amazónico started their operations new lodges were established that were located at the riverbed of the Madre de Dios river and started to organize excursions to Sandoval, such as Tambo Lodge and Wasaí. These first companies of Sandoval also placed their own boats at Lake Sandoval of which one *morador* took care. Their early presence in Lake Sandoval continues to give them certain advantages compared to more newly established companies. For instance, they secured permits to put boats out on the lake, which are difficult to acquire for younger companies. An absence of regulation and competition in these early years allowed the older companies to expand their operations more easily.



4.3 SHIFT II (1990 – 2000)

During this phase, five major interrelated events occurred that distributed changes in the Policy Arrangement of Sandoval: 1) growth of tourism, 2) concern about tourism as a threat to conservation, 3) García family members pursue land entitlement due to fear of losing access to resources, 4) cooperation between a foreign entrepreneur and the local García family, enabling the establishment of a luxury lodge in Sandoval, 5) the new discourse about making large profits from tourism in protected areas becomes more prominent

TOURIST NUMBERS RISE

While the airport of Puerto Maldonado was established in 1982, it was only from the nineties onward that tourism numbers began to grow. In the eighties, Peru was still a scene of terrorism and social unrest. The country was red-listed in terms of tourism, resulting in a complete collapse of the industry (Desforges, 2000). Under the rule of president Fujimori (1990-2000) Peru returned to stability, allowing the revival of the tourism sector. In Puerto Maldonado the numbers of foreign tourists went up rapidly. Due to this new demand, various lodges sprung up along the Tambopata and Madre de Dios rivers.

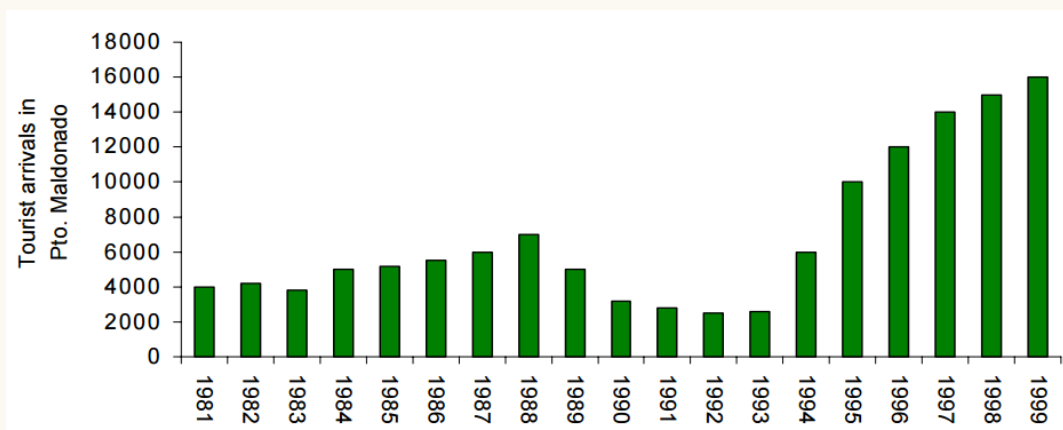


Figure 3: Foreign tourist arrivals in Puerto Maldonado, Peru between 1981 and 1999 (C. A. Kirkby et al., 2000)

In addition, there was an influx of international scientists who were invited by lodges like Cusco-Amazónico to conduct research. Upon their arrival, the scientists and lodges formed a coalition and shared resources. The scientists stayed at the lodge for free, and in return they would guide the tourists from the lodge. Their knowledge about the plants and animals was an attractive resource for the lodges that offered nature-based tourism. These international scientists were called *residentes naturalistas (RN)*, and were often accompanied by local people who escorted them to places such as Sandoval where they did their research.

“In 1999 I went as motorbiker to help the guides, who were in these times RNs, Residentes Naturalistas. They were people like you, from France or the United States, or from Germany, that came to do a thesis for their PhD or I don’t know. A lot of them were biologists or forest engineers and they came to do studies. In those times, there was an exchange between the RN and the lodge. They were staying at a lodge and got food and a bed, but in exchange they had to guide the groups of tourists that came.” (TUR8)

The people that helped them were called *conocedores* or *acompañantes*, local people who were very acquainted with the area. They often knew places such as Sandoval well from going there to hunt or fish. These field experts were the first local *empirical guides* as they helped research expeditions by renting boats and showing them around.

Speaking English was an asset and in the future even became a requirement for guiding; some of the guides were able to learn it from their cooperation with foreigners.

“I met a biologist that liked birds, and she needed an assistant in the field. And Wasaí told her to come to me. But I said I cannot speak English and she didn’t speak Spanish. But I just had to note the birds and look good at the birds. Ok, nothing more necessary. I helped her, and meanwhile she started to teach me English.” (TUR8)

Besides helping the researchers, the *conocedores* also showed various tourists groups around. Although during the nineties there were still very few guides - even fewer of them local - as tourism numbers grew more people became guides. In these days tourism was still very informal; no entrance tickets were needed and the guides would arrange the whole trip for the tourists, including transport: *“There were many transporters, with their famous ‘peke peke’ boats⁵ but there was nothing professional. It was not formal.” (TUR2)*

A new conservation oriented discourse began to settle in Sandoval with the arrival of more nature-focused tourists and researchers. The same resources that were exploited now needed to be conserved. However, while the conservation discourse was becoming more prominent, the new Policy Arrangement of Sandoval was still affected by the resource exploitation attitude of the previous period:

“When I entered in 2000, or 1995, 1997, 1998 to Lago Sandoval we could not see the monkeys. For example the Howler monkey you could not see, it was because before we entered, but we did not enter to look at them we entered to hunt them, to eat a monkey. And if you enter Lago Sandoval, you do not enter to watch the otters, you enter to go fishing, and if you saw a beautiful curassow for example in Lago Sandoval you had a sure meal, it was to kill it and to eat it.” (TUR2)

Besides international tourists, many school children also started to visit Sandoval. During those years, tourism was disordered and people entered through difference entrance points:

“Before tourism was very disordered, in this area. There were special offers coming for the colleges/ schools of many schools of Puerto Maldonado and the people say: yes one day in the field, and all the girls and boys come it was a disorder, total disorder, they left garbage, damaged the trees, there was no authority”

The people used different roads to enter Sandoval, as there were many different entrance points. The only people that were present and able to control were the García family, although the domain of their control did not reach further than their territory at the lake.

⁵ long wooden dugout canoe

NGO INVOLVEMENT AND CONCERN ABOUT TOURISM DEVELOPMENTS THREATENING THE OTTER

In 1990 the German NGO Frankfurt Zoological Society – Help for Threatened Wildlife (FZS) initiated and financed the project ‘Status, habitat, behaviour and conservation of Giant Otters in Peru’. With its otter family, Sandoval became one of the principal research sites for the project. While the period of hunting otters had ended, their populations remained small and still faced various other threats. The goals of the project were to acquire more knowledge about the otter and also to raise awareness and contribute towards their conservation by developing comprehensive plans (this last goal will be discussed in detail in the next chapter). Soon after the project was launched, FZS began its Peru Programme with a small group of mainly international biologists. They established two local offices: one close to Manu National Park and another one in Puerto Maldonado, near other protected areas like Tambopata.

The Peru Programme also maintained close relations with the IUCN Otter Specialist Group and published the results of their studies in its bulletin. Studies were produced for the project report about various new endangering factors: habitat loss, overfishing, the contamination of water systems by mercury in areas of gold mining (which lead to mercury bio-accumulation of prey fish), illegal hunting, possible infections with diseases of domestic animals and finally - tourism (Groenendijk & Hajek, 2002).

Through the involvement of FZS in Sandoval a second new discourse entered the Policy Arrangement of Sandoval. Rather than seeing tourism as a tool for conservation, or as a means of subsistence (e.g. the family García), it saw tourism as a threat. In one of their studies, the researchers mention that: *“The tourism potential of Lake Sandoval has long been recognised and exploited”* (Schenck, Groenendijk, & Hajek, 1999). They reported that the disturbance of otters occurred frequently occurring in Lake Sandoval and identified several causes:

- More than 400 students may visit the lake at any one time, and are allowed free reign, swimming in the lake, scattering garbage and playing loud music.
- Local ‘guides’, inadequately trained and inexperienced, bring groups of tourists independently to the lake and camp on its shores, often with complete disregard of the presence of Giant Otters. On several occasions, they have set up their camp, log fire and music system in the immediate vicinity of a Giant Otter den.
- Illegal fishing is practiced.
- Local landowners are clearing plots and paths, and one family has been running a lodge for many years, attracting low budget tourists as well as the afore-mentioned school field trips from Puerto Maldonado (Schenck et al., 1999).

Since the group of researchers were concerned about tourism development and the otters, they soon began to investigate the impact of ecotourism in more detail. Articles were published summarizing the research findings, which mention the following additional threats:

- The boats approach the otters too close
- Warning snorts wrong interpreted
- Risks that otter will leave the area
- Tourists know nothing about otter (Staib & Schenck, 1994).

- A new lodge has been constructed on one of the lake shores without official permission.
- An increased and unregulated number of tourist and lodge boats/catamarans depart during the day (up to six canoes have been observed on the lake at any one time).
- Another tourist organisation is reportedly attempting to build a lodge on the opposite bank, having already constructed a walkway through the palm swamp forest for which more than 100 palm trees were cut down.
- Conflicts have arisen between the tourist companies and little effort is made to communicate or reach a compromise (Schenck et al., 1999)

The following map was added to the report to map out the problems:

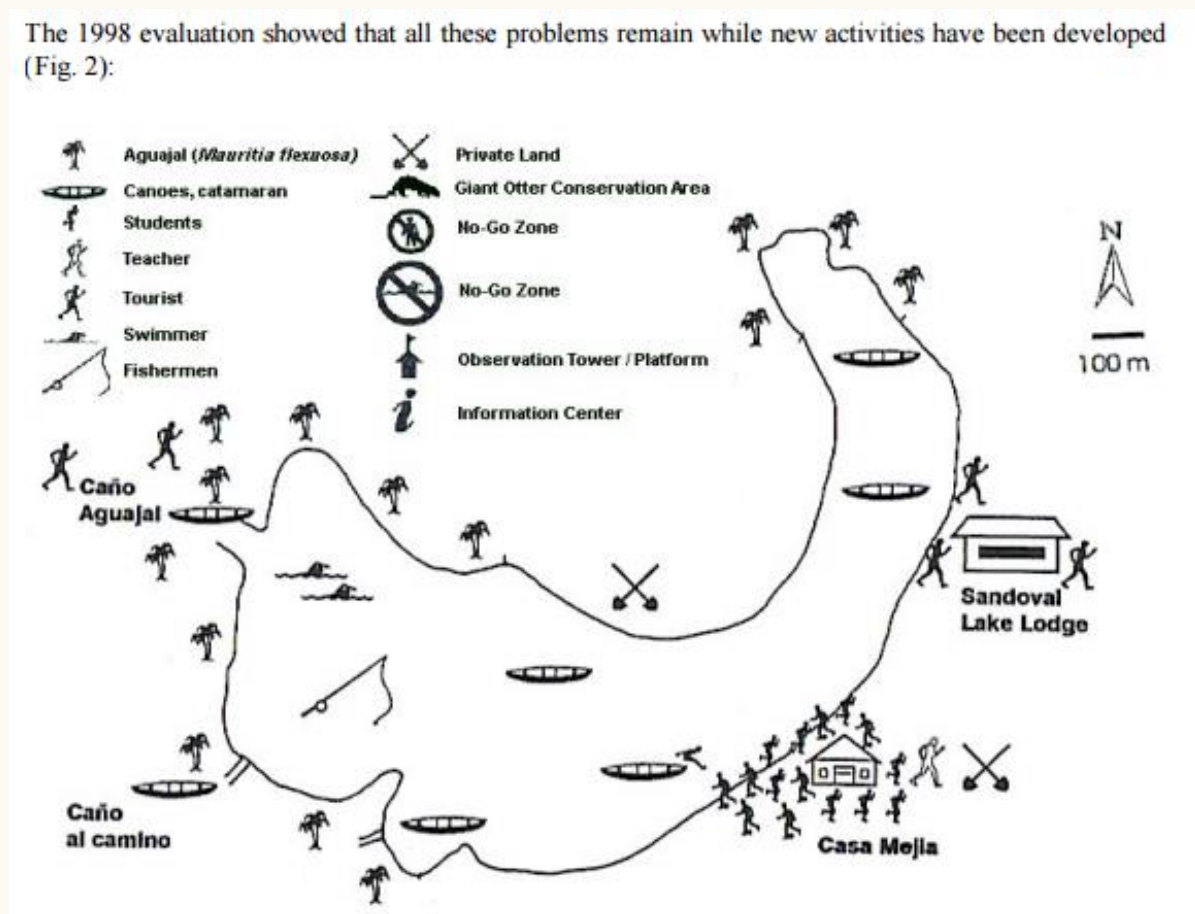


Figure 4: Problems identified by the group of researchers (Schenck et al., 1999).

While in the beginning the project was research oriented, by the late 90's the team of researchers also became active in proposing various rules and guidelines to regulate activities at the lake. INRENA had requested the organization to make policy recommendations, resulting in the development of a concrete management plan as will discussed in the next chapter (Schenck et al., 1999).

THE BIRTH OF TERRITORY: RESERVED ZONE CANDAMO TAMBOPATA

As Peru's development bank declared bankruptcy, plans to develop the Amazon forests in Madre de Dios by means of mining, agriculture and ranching were halted, giving way to the conservation movement. Sandoval fell under the jurisdiction of the 1.5 million hectare Candamo Tambopata Reserved Zone (TCRZ) that was expanded in 1990 and promoted by many conservationists. Among them were Conservation International (CI), the Peruvian NGO Asociación por la Conservación de la Selva Sur (ACSS) established by Cusco-Amazónico and the UK-based Tambopata Reserve Society (TReeS). In the initial designation procedure many local inhabitants of this area were not consulted. SINANPE (Peru's new protected area system governed by the state) defined Reserved Zones as transitory zones awaiting definitive categorization and delineation. During the Reserved Zone phase, there is space to negotiate and carry out ecological assessments for making the delineations permanent (Ricalde, 1989 Naughton-Treves, 2007).

As various groups had an interest in the TCRZ areas - such as indigenous groups, miners, agriculturalists, tourism agencies, loggers, oil companies and conservationists - zoning negotiations that preceded the enormous expansion of the TCRZ that occurred in 1990 had been going on for a considerable amount of time and prompted various legal boundary changes (see Appendix V). After the TCRZ was established, it took another 10 years before the permanent land use categorization and corresponding level of protection was established (Young & Rodríguez, 2006). In many cases, this long suspension led to colonization of certain areas from land speculation.

FAMILY DIVISION

In Sandoval, Cesar García was also opposed to the creation of the TCRZ as he feared it would limit his activities and that the state would ask money for the services he was offering. He went to court with INRENA, but on his own did not stand much of a chance to be cut out of the reserve: *"He was always fighting against it, but the state always has to win, because it's the state,"* (INH1) When it became clear that an complete exclusion from the TCRZ was not feasible, Cesar (like many other settlers) tried to get his land legally recognized by the state.

While people in general had tended to delay getting their land titled due to the costs involved, they now proceeded because of the newly imminent threat of losing access to land and resources. Sometimes they were assisted by Peruvian NGOs (that had the financial support of USAID and the MacArthur Foundation) who tried to facilitate the land entitlement process in the TCRZ by cooperating with state agencies. During this time some of the members of the García family managed to have their property recognized. The García family originally had a small plot of land, but the family strategically spread out over a larger area to secure more land:

"Well the García family had a small plot of land, but they said ok there are six members of the family let's say, instead of all of us staying here [in Puerto Maldonado], this family member is going over here, this family member over here, this one over here, so they all get there piece of land quickly." (EXP1)

Fear of losing access to resources led the García family to pursuit entitlement, but they were also encouraged by Cusco-Amazónico, who had a vested interest in Sandoval to develop a lodge:

“In the case of Sandoval Lake Lodge, they went through a process of forcibly encouraging the locals to get titles, really encouraging them to get titles, for the lands they have been using and living on for many many years. Because here the tendency is not to do anything until there is a risk to lose your land, so no one would go out actively and title there land because it costs them money, until there is a treat that there land will be taken away from them.”
(EXP1)

Not only did the family spread out in order to acquire more land, but internal family dynamics made it more desirable to divide the family members over the area. As Cesar’s children had reached adulthood and started their own families they preferred to move away from their parents’ house and settle on adjacent land to build their own houses. Veronica had her piece of land, as did Cristina and her husband José. Miguel was living in Sandoval and helping his father to run the family homestay, now that they had built infrastructure to accommodate the tourists they received from some of the freelance guides. Some other children had already moved to study or to live in Puerto Maldonado, like Maria who never lived in Sandoval. After Cesar's land was distributed among his children, it was their own responsibility to arrange the establishment of a title.

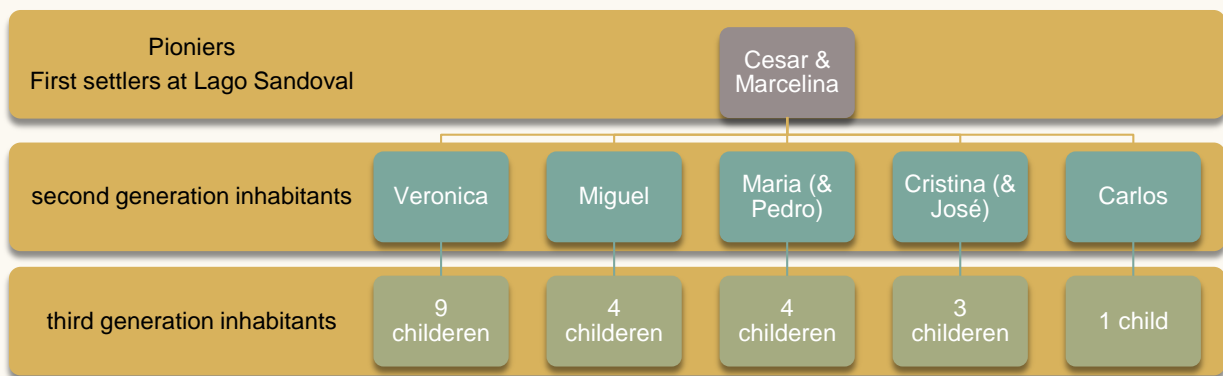


Figure 5: Family tree García family

Not all of the children went through the procedure of getting a title. Peru is notorious for its lengthy and bureaucratic procedures for obtaining titles; as explained before, it is also a costly operation. Most people did not have the money:

“A title is the maximum level of a property. We only have certificate of possession because before to get a title was very expensive. Do you think that an agrarian can pay for the costs of procedures to obtain a legal title? No. Years ago nobody could do it. We did not have money. The people wait for the state or an institution to give us a title for free.” (INH1)

Eventually four titles were established - three of individual family members and the largest one by the Association of producers of Sandoval (Asociación de Productores del Lago Sandoval). There were four more properties that only had a certificate of possession, a lower form of land ownership that does not pass on through inheritance.

Nr.	Owner property	Size (hectares)	Date of entitlement
1	César García	100	Oct 1991
2	Pedro (ex)husband Maria	29	Jun 1994
3	Maria	22	Feb 1995
4	Association of Producers of Sandoval	136	Feb 1995

Figure 6: Distribution land entitlements García family(AIDER, 2010)

The family was not only separated physically, but also in their ideas about tourism. One of Cesar's grandchildren commented that: *"You cannot speak of "los moradores". The mentality depends on each inhabitant. They are different persons."* (INH2) After Cesar died, one of his sons started to administrate his holdings and the other family members all developed their own activities, such as working in agriculture, collecting Brazil nut and taking care of the boats; others were working in Puerto Maldonado

"We can not work together now, nor later, its a problem to work with your family. A lot of problems. There are 5 brothers and sisters yes? You are good, the other is good, the other more or less, and the last one is bad. See when you earn money, maybe this one wants to lend money... anyway this one is bad. Always one of the children is a bad one. A lot of the times, not only here in other countries aswell, when there is an inheritance, papa dies, mama dies, leaving the house, the car. Its to avoid problem.... Now each one of them is working always independently." (INH4)

NEW ACTORS, FIRST LODGE BUILD, PARTNERSHIP TOURISM

In the nineties, an important actor appeared who not only came with many resources but also with new ideas for the development of tourism in Sandoval - Charlie Mann:

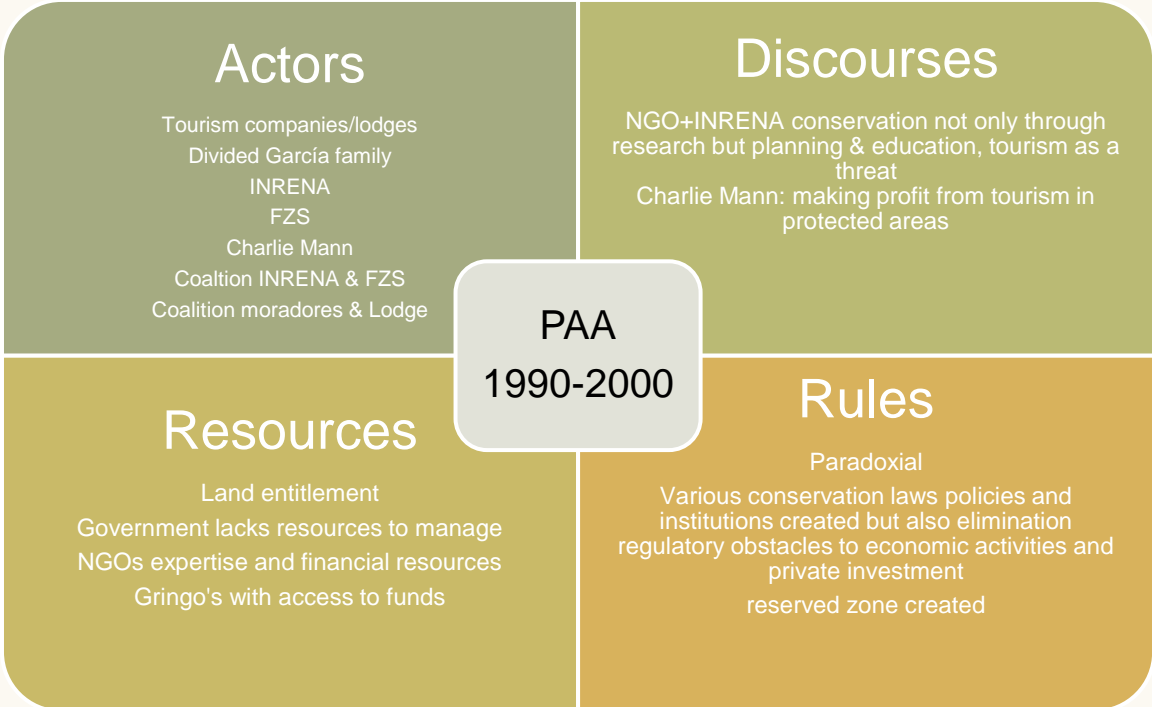
"Charlie Mann, he was a gringo, a white foreign biologist, he thought that Sandoval could be a tourism attraction if it would be conserved, or even that Sandoval could be conserved through tourism and that there could be one big business with tourism in protected areas. This idea was totally new. The people did not believe in it at first." (TUR3)

Charlie Mann was able to acquire land for building a lodge from José, the ex-husband of Cristina. Since José no longer wanted to be in Sandoval, he sold the land (40 hectares) to Mann for the establishment of a luxury lodge at Sandoval. In return, the company paid for his house in Puerto Maldonado. At this time, Miguel and Veronica were living at Sandoval, while José later returned to live on Cesar's land after his death and take care of the boats.

In 1997 Charlie Mann (who supplied the capital) started to build Sandoval Lake Lodge, together with Pedro and Maria García (daughter of Cesar). They started to cooperate with local inhabitants who were no longer allowed to work on their *chacra's* in anticipation of the definitive categorization of the reserved zone. A benefit distribution mechanism was created by which some of the family members became partners. According to the agreement they would receive a certain percentage of the profit of the company. With the profits they received at first the partner moradores were able to purchase boats.

When they started to build Sandoval Lake Lodge, there was no administration of INRENA. The newly created institute that would be given charge of natural resources and responsibility for the TCRZ was still in the process of creating their own policies for the management system of the area and its rules. In 2000, INRENA started to become more active and even tried to get rid of the lodge. The section of INRENA responsible for NPA management was heavily influenced by NGOs and their conservation oriented values. The organization did not receive any financial benefit from tourism activities, which also contributed to their negative stance towards tourism development at the lake.

While the family was able to continue to working on their *chacras* and fishing and farming for several years, as INRENA became more present at the lake they were forced to change their activities and follow the rules. Veronica started to work at Sandoval Lake Lodge and gained experience with providing services to tourists. Her brother Miguel continued managing the accommodation of Cesar, which was now receiving more tourists as well as frequent visits from groups of school children, as explained earlier.



4.4 SHIFT III (2000 - 2008)

During this shift various rules were introduced in Sandoval through the creation of the Tambopata National Reserve. While the rules were not obeyed in the beginning of INRENA's presence at the lake, they were eventually enforced with the support of NGOs who were becoming more involved in NPA management and shared a similar discourse with INRENA. Authority had arrived at the lake and rules began to be enforced.

INSTITUTIONAL CHANGE: CREATION OF NATIONAL RESERVE TAMBOPATA

In the year 2000, Sandoval became part of the Tambopata National Reserve (TNR) after a 14-year period under reserved zone status, during which it awaited definitive categorization. Now that Sandoval was part

of a national reserve, its level of protection increased and the activities taking place became subject to the various new planning and management tools that were soon introduced.

The *National Reserve* Protected Area category allows sustainable use of natural resources, as explicated in the NPA Act of 1997. *National Reserves* are defined as: “areas that are established for the conservation of biological diversity and the sustainable use of aquatic or terrestrial wildlife resources. Commercial use of natural resources is allowed under management plans, approved, supervised and monitored by the relevant national authority. They relate to IUCN category VI” (Solano, 2009).

In National Reserves, relatively more human intervention is allowed (see Figure 7). As opposed to the upper three categories, *National Reserves* allow direct use or extraction of resources, primarily for the benefit of local communities. Specific areas need to be appointed for this in the area’s management plan. Any other use or activity must be compatible with the area’s purposes.



Figure 7: NPA category and human intervention

In 2001 a buffer zone was added to the reserve, which also has implications for Sandoval as it is located at the riverbed of the Madre de Dios river where the boats dock to enter the reserve (see Appendix V). The legal ambiguity of the buffer zone is a problem of national scope, and would come to frustrate infrastructural developments in Sandoval at a later stage.

While there are no human settlements within the adjacent Bahuaja-Sonene National Park, the National Reserve does contain and allow some sparse settlements such as the one of the García family. More activities are allowed in the buffer zone. Notably, 11 of the 25 registered tourist lodges were located in the buffer zone. Only two lodges are in the reserve itself, Sandoval Lake Lodge and Hospedaje García.

Initially the establishment of the reserve did not entail many changes for tourism or the other activities at Lake Sandoval. INRENA was administering the area, but could not yet enforce any of the rules because there were no facilities for park guards (like a control post) close to Sandoval:

“Before when they created the reserve, including lake Sandoval there was no control, or to be more specific there was no control post. There was nobody managing the authorization. You did not pay an entrance fee. The reserve was already created, but not more than a name, a ‘paper park’... There wasn’t a study done yet about how and where to create the control post.” (TUR2)



Figure 8: National Reserve Tambopata and control posts (P.C.), control post absent at Sandoval Sector

During INRENA's absence from the lake, various plans and rules were developed. One crucial component was a *Master Plan*, which defines the strategy of a specific protected area, in this case for the TNR. The *Master Plan* covered the period from 2004 to 2008 and included a section dealing with tourism and recreation (INRENA, 2003). Various planning tools were stipulated for the management and spatial planning of tourism activities in the TNR, an important one of which was zoning.

According to the rules from the National Strategy for NPAs (the *Directive Plan*), NPAs can have various zones: strict protection zones, wilderness zones, tourism and recreation use zones, direct use zones, special use zone, recuperation zones and historical – cultural zones.

The Sandoval Sector was classified as a *Special Use Zone* (see: *Inreana, 2003, p. 141*) because the García family was living at the lake who made use of various resources and practised agriculture - which was permitted at a small scale under the *Special Use Zone* category. The zone did not however include the surface of the lake which was marked as a *Direct Use Zone*. Here, direct use of wild flora or fauna was allowed; this management category included uses such as fishing but also educational activities, research and recreation. The Master Plan also included various rules for each of the zoning categories. While the plan roughly sketched the planning and zoning of different activities for the TNR (see Appendix VI), it was not much tailored to the specific situation in Sandoval. As such, NGO's proposed to adopt a new *site plan* focusing only on the Sandoval Sector, however to execute it effectively they had to form a coalition with the reserve's authority, INRENA, which will be discussed in the next section.

ACTOR COALITION: FZS AND INRENA, RESOURCES & DISCOURSE

INRENA was almost entirely dependent on donations as a result of government downsizing and the accompanied budget cuts for public services, which included the environmental sector. The resulting lack of enforcement for protected areas meant that at first Tambopata National Reserve was nothing more than a 'paper park'. INRENA's poor financial and managerial capacity led to the involvement of FZS, a German conservation NGO, in the management of Sandoval. This was prompted by FZS' perception of threats to the local otter family. With the near absence of the state, there was room for NGOs to take over the state's task of managing protected areas.

In the nineties, conservationists were active in Sandoval mostly through conducting research that raised environmental concerns. From the next decade, they would take a more prominent role. Both the growth of tourism and the lack of control fostered their desire for a more specific local management tool for regulating tourism and other activities at Lake Sandoval. Also, the otter population dropped from eleven members in 1997 to four in 2000. In this same year the protection status of the giant otter was changed from 'vulnerable' to 'endangered' by the IUCN, lending more legitimation for involvement.

A management plan was developed especially for Sandoval. During the course of 2000, a group of otter specialists held meetings with reserve authorities and representatives from tourism companies, which resulted in a final version of the Lake Sandoval Management Plan (*Plan de Sitio Lago Sandoval*). (Groenendijk, Hajek, Isola, & Schenk, 2001). Yet developing a management plan alone was not considered sufficient; it also had to be enforced: *"...first you need to regulate the actions. You cannot enter with a management plan if there is no national authority in the place."* (NGO1) The implementation of the plan was financed by the FZS, and included the construction of a control post and interpretation center, along with monitoring activities and the construction of an observation tower.

As INRENA did not command many resources, the influence of NGOs on management was large. The coalition between FZS and INRENA was partly based on an exchange of resources. INRENA had the legal authority that was needed to regulate activities in Sandoval, which FZS lacked. FZS on the other hand contributed with the financial resources and expertise/knowledge that INRENA was missing.

Equally important for the cooperation was a shared discourse. In this time, FZS promulgated a discourse that viewed tourism as a threat - as explained in the previous chapter. Likewise, INRENA's discourse was also focused mainly on conservation: *"Conservation was the main idea. Conservation without thinking about business opportunities."* (EXP2) Sustaining the protected area through tourism revenues was not yet considered to be important:

"Yes there were [incomes from tourism]. But they [INRENA] thought they could manage only with foreign funds and that they could survive without tourism activity. But time showed that is not possible." (TUR6)

The coalition parties were both able to enhance their influence on the lake as through their cooperation they were able to implement the management plan that had been formulated and to construct the control

post. These developments had large implications for the practises performed at the lake which will be discussed in the next section.

CONSTRUCTION CONTROL POST, ENFORCEMENT

While the reserve status did not initially lead to many changes because of the absence of authority, the establishment of the control post and interpretation centre in 2002 drastically shifted power relations between the actors. Many rules could be enforced as the park guards of INRENA were now posted at the control post at the entrance path to the lake:

“When INRENA arrived to the lake, they came with new rules for everybody; for operators, for local people. First of all they had to pay a ticket, also no more than 2 boats on the lake. Before that if you wanted to you could bring 3 or 4 boats, but after that not anymore. No more than 7 travellers per guide. I remember in that time we received big groups, before 2002 you saw a guides with 40 people behind him, but not anymore, right now it’s just 7 per guide”. (EXP2)

The older tour companies who brought a lot of tourists to Sandoval were able to keep many (3 to 4) boats but new operators who did not receive many tourists were not allowed to place their own boats in the lake. This scarcity of boats led José to develop a business idea with his ex-wife, who lived in Puerto Maldonado. They planned to start up a boat renting company in the lake. The company started their operations in the next shift, at the same time also other moradores started their own tourism companies, which will be discussed in the next shift (4.5).

Besides the regulation of the boats and other tourism activities at the lake also entrance tickets now had to be paid for each tourist at the control post:

“The first time when INRENA [entered] was a kind of shock, but it is common, because it’s some kind of transition. Looking at each other checking their movements. But after less than a year the tour operators were agreeing with paying a ticket and regulation the activity in the lake.” (EXP2)

The local people, were forced to adhere to the rules of the National Reserve and the corresponding management. This led to much resistance because they were still performing their old forest practises and relied on the resource use to sustain their livelihoods:

“Also the local people in 2002, when INRENA start to build the Park ranger and Interpretation Center, they got ready to burn it down, because they were very disagreeing. Because when INRENA came to the lake, they came with a lot of rules, new rules for the local people, and you remember before that it was very easy for the local people to get your farm close to the lake, catch everything from the lake, hunt everything. But after INRENA, everything in the lake is going to be regulated, even for the local people.” (EXP2)

The activities of the *moradores* became heavily regulated. For hunting, fishing, gathering of nuts such as *castaña* and fruits like *aguaje* and also for logging they needed authorization from INRENA. INRENA had installed various rules regarding the moments collection was allowed, the number of species and other management standards. These authorizations were not only required for products destined for sales, like *castaña*, but they also had to be carried out for resources extracted for auto consumption. Fishing was another activity that became regulated. Intensive fishing was no longer allowed, and the other fishing activities became more coordinated to control fish stocks of tigerfish and cat fish. While the extensive agricultural practises had already been restricted in the 90s, the families were still allowed to raise free-range pigs, chickens, ducks and turkey both for consumption and for sale. They also maintained various fruit trees and cultivated vegetables on their property. Nonetheless the restrictions the inhabitants faced through the implementation of new rules and enforcement by INRENA were extensive. One of the local inhabitants recalls the difficult transition:

“In the beginning it was hard yes hard to adapt to the law. Understanding this: you live here, before [emphasis added] the law. Then INRENA comes, your house and your terrain stays of you, its yours, the law respects that. But they say: ‘from this day onwards you are going to respect these rules: you are not going to have a big chacra, only for your own consumption, you must ask admission to do these constructions for your house, not like before when you were cutting up anything to sell to the city, no. So you have to leave these things, they are stopped’. So it started. To make sure we do not get legal problems.” (INH4)

While the terrain of the *moradores* is recognized as a valuable resource in the lake, they do not have authority over how to use it. Rather, the state controls and evaluates whether activities are compatible with the reserve: *“There are some activities that can be allowed and some not...they present the project, and then it is evaluated – if it corresponds it will go through; if not, not.” (GOV3)*

As the *moradores* were no longer allowed to have their *chacra* and their extraction of forest resources became restricted, they had to look for other sources of income and became more involved in tourism. They started to develop their tourism business plans:

“For us [the transition] was not that good, there was no help, we could not have chacra anymore, but you still need to eat; mais, rice, birds, you want to kill them but you can't. So, there is no way. You have to avoid [problems], and look for another source [of income]. Create something, and when there is tourism, its better to comply and get involved in tourism. Then there is no problem in what they [INRENA] want. If you can not go further than the line [of the zero use zone in the lake], then you cannot do that anymore, you cannot. You have to comply to the law of the reserve. Of course we all do.” (INH4)

Nonetheless, the reserve’s management claims that the creation of the reserve has delivered various benefits to local inhabitants and that they are better off since its establishment:

“They have bigger benefits now than when it would not have been a protected area. They could establish a lot, there are [multiple] lodges... they have big income because it is protected area.” (GOV3)

The management authority did not and still doesn't agree that the creation of the reserve was limiting for the *moradores*. They argue from an economic viewpoint, that agriculture was not a very profitable activity and that with tourism they could generate much more income:

“It is through logic, the cost effectiveness of agriculture of this area doesn't reach 100 dollars per year. Instead one tourist can generate 100 dollar that produce a hectare. It is natural they change to the activity that earns more money. Bringing seeds and equipment etc. It is not sad that they cannot do agriculture but it is more efficient to work in tourism.” (GOV3)

However, from the viewpoint of the *moradores* this argument does not hold, as the family had already been working in tourism for 30 years. They argue that their involvement with tourism had not started because of the state's encouragement, but out of their own initiative. Moreover, agriculture and tourism are not mutually exclusive. In other words, they could have maintained their chacras and other activities while continuing to work in tourism:

In general, they feel inadequately supported by the state in the their livelihood change process. Much of the disagreement comes down to differing interpretations about what constitutes a benefit. What NPA management saw as benefits to local people, locals themselves saw as rights:

“For example if I have a tree that has fallen on my terrain I have the right to use it but I have to go to [INRENA] to ask a permission. This is ok, this is very good. Everything has to be under the legal framework. But this is not a 'benefit' for us, they [INRENA] are not 'helping' us with this. We are just carrying out our right... Another example is that If I need a boat in Sandoval, and of course I need a boat because my property is in the end and I need to take my load, my products to bring to the city. And for this I also need my authorization. I have to go to [INRENA] to ask for permit to enter with my boat. Do you understand? But I don't see that is 'help' from them, it is my right! It is my right! (INH2)

The establishment of INRENA in the National Reserve Tambopata and its control of activities in Sandoval had major impact both for tourism and the lives of local people. As explained before it would not have been possible without their coalition with FZS, who financed the construction of the control post, but who also designed the management plan (*Plan de Sitio*) for Sandoval

NEW RULES: MANAGEMENT PLAN SANDOVAL

Although Tambopata National Reserve, which includes Sandoval, had a *Master Plan*, it was not sufficient to regulate tourism activities at Sandoval on a micro-level. As indicated in the Master Plan itself, a more specific plan had to be developed. Through the initiative of FZS, a *Site Plan (Plan de Sitio)* was introduced in Sandoval in 2003. Sandoval's Site Plan was the first spatial planning of its kind in Peru. It was especially designed to regulate activities in areas with a high concentration of tourism (see Figure 1Appendix VII for overview of different planning levels and their corresponding management plans). An important tool of the Site Plan to organize the tourism activities is the establishment of micro-zones. Zero use zones, level one use zones, and level two use zones were established, which each allowed different type and intensities of activities. Zero use zones refer to critical areas for the reproduction or foraging for certain animals, in

these areas tourism activities are not allowed. Level 1 zones are for tourism, recreation and environmental education which have conform to specific codes of conduct. Level 2 zones allow infrastructural developments and offering tourism services. Also the properties of the moradores are inside the level 2 zones (See Appendix VIII for a map of the micro-zoning of Sandoval).

Some of the important measures introduced by the plan were:

- No activity of any kind should be permitted within the 'aguajales', which also provide important nesting sites for many species of birds as well as refuge for fish fry. No new paths should be cleared close to the shore line.
- No-go zones must be established in key areas favoured by Giant Otters, where they have been observed most frequently. By sectioning off these zones, the otters are offered a degree of seclusion and a possibility to 'escape' the attention of tourists.
- A distance of at least 50 metres should be maintained between the otter(s) and the canoe.
- Tourists must always be accompanied by a trained and/or licensed guide.
- A maximum of three boats should be allowed on the lake at any one time in order to minimise disturbance.
- Swimming should only be allowed directly in front of the existing lodges.
- The number of students which visit the lake should be limited to 40 individuals accompanied by at least two teachers / adults. School trips should be planned in advance and both the lodges as well as INRENA should be notified beforehand.
- All types of fishing should remain prohibited.
- An entrance fee could be charged to cover infrastructure improvements.



Figure 9: Map, left situation before, right situation according to the Site Plan

The Site Plan entailed substantial changes for the Policy Arrangement of Sandoval, mainly relying on zoning to regulate activities. The *aguajales* now became a *zero-use zone*. Also, a substantial part of the water surface was now off limits for boats. It was also no longer allowed to enter by boat from the northern section. Furthermore the northern terrestrial access route was closed, to ensure that everybody used the southern access and passed through the control post, where they had to show tickets.

The new rules introduced in Sandoval gave rise to an enduring conflict between the actor coalition (INRENA and NGO's) and the tour operators and guides who were much affected by the new rules and formed a new coalition. The tourism actors claimed that *"the word of the biologist is the word of god"* (TUR3) and that INRENA didn't take their viewpoints into consideration in the policies they developed for Sandoval. The tourism actors found certain rules proposed by the conservationists too strict, preventing them from providing tourists with a satisfying tour:

"(...)the biologists have a different view on conservation. They are very strict, too strict, more strict here in the Amazon. For example to see parrots in the Colpe de Guacamayos, they say we have stay at 80 meters. Yes this is what the biologist have put. So to see the parrots it is better to watch them on television, much closer in Discovery Channel." (TUR3)

Many actors feel excluded from the process of establishing the lake's rules and blame INRENA for only considering input from conservationists:

"In Lago Sandoval there are various actors involved, the local population, the flora and fauna, the tourists and operators and park guards. But [INRENA] doesn't take into account our comments with the experience we are having, only the comments of very young people biologist, very young that do not have a lot of experience." (TUR3)

As explained in the previous subchapter, the discourse of INRENA and FZS's coalition presented the view of *tourism as a threat* or of *conservation without thinking of economical sustainability*. The conflict between the coalition and the tourism sector also expressed this scientific-based conservation discourse. In INRENA's view, NPA management must be founded on scientific research and so they consulted primarily with different conservation organizations. Consequently, the role of other kinds of knowledge was negated. Even though guides spent many hours on the lake and had gained much experiential knowledge, only the scientific knowledge of researchers was seen as valid:

"But [INRENA] thinks a researcher is right, and a guide doesn't know anything and a researcher knows more. The rules and norms that they have made have been made because researchers suggest it to [INRENA] and they do it that way." (GUI2)

Tourism actors were unsatisfied with the work of the scientists and contested the scientific knowledge they produced. Not only did they express general doubt about the expertise of (often young) biologists, they also disregarded their methodologies. For instance, their monitoring activities were seen as inadequate because scientific groups (e.g. the otter monitoring group of FZS) visited Sandoval only a couple times

each year whereas the tour guides were present all the time. Regarding the influence on policy making they claim that “[INRENA] listens more than those people that come to do a monitoring for 3 or 5 days.” (GUI3)

INRENA’s close relationship with FZS also lead actors to question the autonomy of the management body, who was seen as too strongly influenced by foreign conservation actors:

In reality, the state [INRENA] doesn’t have a lot of knowledge about what is Lago Sandoval. Everything [they] know they owe to researchers, especially those financed by FZS and others that come to do projects. And then all the information goes to INRENA to which INRENA will say: ‘ahhh ok, if you say so, than it is good’. But a lot of the times those researchers are not from here but they are from other countries. (GUI2)

One point of critique the tourism actors mention is the restricted zero use zone for Giant River Otters that was installed based on the scientific studies of WWF and FZS (TUR5). However, some actors of the tourism coalition claim that in all their years going to the lake they had never once seen otters nest in the delineated area:

“I completely disagree with the way they have treated the lake, they discarded one of the most beautiful parts of the lake because I don’t understand, but they put it as a zone of nesting [participant shows drawing]. This [the zero-use zone of the lake] part is closed. And here they say there are dens, but there is no single dens there....We have to take the point of view from the tourist more into account.” (TUR3)

Also, the reasons given for the rule forbidding guides to fish for piranha (often caught because tourists want to try them) was criticized by the guides. According to the tourism plan, fishing was banned for the protection of the Giant River Otter. In accordance with FZS, INRENA implemented the ban because the otters were the most important tourist attraction; if fishing were allowed, they said, a hook might be left in the piranha's mouth after which an otter might eat the fish and swallow the hook, causing it to die. The guides were upset because they found this reasoning illogical and it was difficult to drop fishing activities so suddenly. Furthermore, guides had special equipment for preventing injury. One former empirical guide explains: “We bought the guitar strings, and the piranha cannot bite the line, and also we did catch and release, because the piranha is not that tasty, it has a lot of fish bones but sometimes yes, the tourist wants to try one.” (TUR8) Another guide does not believe the fishhook even poses a real threat to otter: “For us it seems very illogical, because the Giant River Otter eats fish with a lot of spines. And he knows very well to eat the flesh and throw away the other stuff. He won’t eat a hook because he will think it’s a spine. It was very stupid. But ok, the state puts the rule.” (GUI2)

FORMALIZATION OF GUIDES

In addition to the tour operators and moradores, the implementation of the control post also resulted in consequences for tour guides. INRENA began to enforce a new regulation which limited access for guides; only guides with a diploma from an educational institute were given licenses to guide in Sandoval, introducing such diplomas as a valuable new resource. INRENA implemented the rule in response to certain misconduct that was occurring on the lake:

“Because a lot of times the empirical guides don’t work with professional ethics. They talk very loud to their tourist, and sometimes they rob their own tourists, like cameras and other personal belongings. And nobody could sanction them because they are not registered. Or sometimes the guides are drunk but you cannot do anything because they are not registered. For this reasons we do it now that everybody needs to register, who they are, how many there are, so everybody has authorization and if you make an offence, you get sanctioned.”
(GUI2)

The formalization of guides was coupled to the involvement of another important institution in Sandoval – DIRCETUR, the Regional Foreign Trade and Tourism Direction, with whom INRENA cooperates. Guides now had to be registered at DIRCETUR. DIRCETUR then would confirm that the person had a degree as a tourism guide and was in possession of a title. DIRCETUR shares the list of registered guides with INRENA, who check at the entrance if guides are on the list. If a guide commits an offense INRENA also informs DIRCETUR, who have the authority to sanction the guide. Consequent to the new rules many of the empirical guides that had been going to Lake Sandoval for years were denied access. Consequently, the guides split into two groups: *empirical (unofficial) guides* without the correct paperwork, and *official guides* who had been schooled in guiding from an institute that started to offer this study.

However, at the time when the empirical guides started working, when older companies such as Inkaterra, Wasaí, Corto Maltez started to receive many tourists, there was not yet an institute offering such trainings. Only in the end of the nineties was a formal study offered in Puerto Maldonado by SENATI through which one could become a tour guide. The new guides that entered Sandoval after completing their studies were often very young, in their early twenties. In the first cohort there were about 120 students, although only a small percentage continued to work in the tourism sector. They formed an association called AGOTUR (Asociacion Guía Oficiales Turismo)

The unofficial guides had also started an association to defend their interests, called AGITUR (Asociacion Guía Inoficiales Turismo). To accommodate the drawbacks for empirical guides they managed to arrange a fast-track study by which an empirical guide could obtain a title in two instead of three years.

Many of the empirical guides were discontent, as they had been guiding for years and claimed that they did not learn anything new. They often worked during the week, as some were able to continue working as guides after making an agreement with DIRCETUR where a tour company would guarantee they were good guides. As they had to go to the institute in the weekends, many did not complete the programme. Other empirical guides refrained from schooling entirely, as they were well into their thirties and had responsibilities towards their families.

“There still were a lot of illegal guides, before they implemented the control. But they had no other option but to quit their job. They couldn’t enter any more. The park guard was giving them problems, they had to formalize. And many of them already had families; they couldn’t go studying because they needed to work to support their families.” (GUI2)

Consequently, empirical guides had to pursue other forms of livelihood. A few started their own tourism companies, such as travel agencies or offering boat transport services. Some of the other empirical guides left with one of the foreign *residentes naturalistas* they had met.

However, as the empirical guides were no longer able to enter or were busy with the formalization process, tour companies began to hire the official guides who had completed their education. Furthermore lodges had also been hiring guides from Lima and Cusco, where many of the bigger companies had their head offices.

Different groups of guides all had their own shortcomings. The guides from Cusco lacked knowledge about the jungle:

“They are experienced but they lack knowledge about nature. But they have permit, license and have experience in guiding.” (TUR5)

The young guides that came straight from school often lacked the experience of the empirical guides. Most of the empirical guides were older than 30 and had been guiding for several years while the guides that finished school were often in the beginning of their 20s, not having any experience. The quality of education was also poor and they did not get much practical experience as internships were lacking.

Tour operators were more inclined to hire younger guides or guides from Cusco that they could pay less. However, the younger guides were more inclined to violate the rules. They were paid poorly, which could lead them to try impressing tourists for a tip.

“There are now new guides that have just finished their studies and they don’t have a lot of knowledge and nor group management of tourists and they do those things that I mentioned... and when they get paid only 50 soles, they do a bad job. There are a lot of guides of 22, 24 years or less, that do not have sufficient experience, and they do the things I told you like capturing caiman, fishing, or they make a lot of noise.” (GUI2)

While the guides went through formalization, various problems still occurred on the lake and rules were broken:

“The problem was that a lot of guides did not have knowledge about the limitations and zoning of the reserve. The reserve has restricted zones and tourism use zones. When they were going in this way there was no control.” (TUR5)

Also the inhabitants often witnessed misconducts on the lake:

“yes sometimes there are guides that affect the Giant river otters a lot, or approach the monkeys too much or close to the shore or I hear them they are cutting through the forest.” (INH2)

The patrol at the lake was however still limited as there were only two park guards established which also had to stay at the control post to check the tickets. The inhabitants and guides often refrained from telling

INRENA about misconducts of a guide or illegal activities at the lake because the informal rules did not allow talking behind someone's back, sometimes doing this would create a conflict and they could lose a friendship:

"You can say to the park guard what you have seen. But first the guide is asked what he is doing. And if he makes another mistake he gets a sanction. But some think that when you inform the guide you are called 'chismoso'." (INH3)

Although the tour operations did acknowledge that some of the activities needed regulation, they had a very different idea than INRENA and FZS about their role in conserving Sandoval. Rather than threatening conservation they believed they were one of the principle partners of conservation, which will be discussed in the next section.

COUNTER DISCOURSE

Many actors did not share the ideas of INRENA and FZS, ideas that treated tourism mainly as a threat and which were coupled with strict regulations at the lake. In particular, certain tour operators formulated and expressed a counter-narrative advocating that tourism actors should also be understood as important conservation actors:

"What we offer... is nature, so we are friends of conservationists. We are friends to be able to conserve all this place. We are the guardians and at the same time we are allies of the ones that fight for the conservation of the natural environment." (TUR2)

Some of the operators claim that they, unlike the generally foreign biologists who came to conduct studies, are dependent for their livelihoods on the conservation of the NPAs, implying that they care about it more:

"The operators are living from the fauna and the animals. We want more than the biologist that we maintain this, the biologist doesn't care if we maintain it or do not maintain it." (TUR3)

Some of the tour operators demonstrate a strong anti NGO stance. Exemplary is the statement of one operator:

"Organisation famous like WWF, to do their monitoring of parrots they had to capture parrots and put a collar. They had the permission of SERNANP and they go to the 'Colpe de Guacamayos' and capture. How? With a canon with a net and they put the collars, very modern. You can do this two, three times, but after that the parrots see people and they know they have to disappear. They do not trust it, this is damaging our business. They do not give us this information." (TUR3)

An notable point of discussion is whether tourist interactions with the wild animals in Sandoval (especially with the Giant River Otter) is leading to *habituation*, a process that occurs when animals adapt to certain stimuli - in this case with tourism.

Biologists believe that tourism has had a negative impact on wildlife:

“Now tourism has increased I cannot see the animals in the frequency of before. I have done a study before when I worked at another organization I have seen these form for the sighting of fauna (which they implanted as part of the plan de sitio). To see how it is going with the fauna.” (NGO2)

Especially sensitive animals like the river otter who won't adapt are threatened:

“In the case of the river otter, they say the otter is getting used to people, but in one of the last talks of SFZ when they went monitoring in Lago Sandoval, they mention that they escape, go away.” (NGO2)

The tourism actors on the other hand, disagree. One of the tour operators claims that biologists rarely research the relation between tourism and animals, and that there is no evidence supporting their claim that tourism has a negative impact on fauna. The few studies that do investigate these links are seen to have misinterpreted their results. Instead, hunting is mentioned as an important factor influencing the animals' habituation process. As long as hunting is performed, the animals will not get completely used to the presence of humans:

“But apparently something special happened with the nature, the animals and with us humans. Over the years walking by before, for example, 1997-1998, you would see a group of squirrel monkeys and you see them at 100 meters distance, and you try to go there. They go further away every time more. But currently, you are walking, and they cross almost with the help of your cap and they go a bit further away. You know why? What is the experience I have? What is the change? Because before we were fixed humans, myself including I'm also human, we entered to ill-treat/to damage them, to kill them, in a less words. To hunt them and eat them. But nowadays no, now we enter with rules, with education, we go to look at them without touching them. And so they have gone to this place, this space in the world, this space in the nature, they take us as another little animal, that does not hurt them and so these animals can be together with you, can coexist with you.” (TUR2)

Although hunting has been regulated, the conservation discourse that became part of Sandoval did not pervade every part of the jungle. In many places the mentality of the people has been and still is that of extraction, as in Sandoval's early years. The Madre de Dios region of Peru is a place where wildlife is severely threatened - especially outside of the protected areas - not only through habit destruction but also from subsistence hunting. Many operators compare the situation to Costa Rica, where tourism is recognized as an important economic and conservation activity, unlike Peru where *“it was two companies, or three, that saw tourism as a tool for conservation and for employment generation and wealth. Not the country, the country doesn't have this perspective.” (TUR3)* Not only is the political climate is very different to Peru and the levels of environmental education much higher, Costa Rica also abolished hunting entirely, which according to them led to a complete habituation of wildlife:

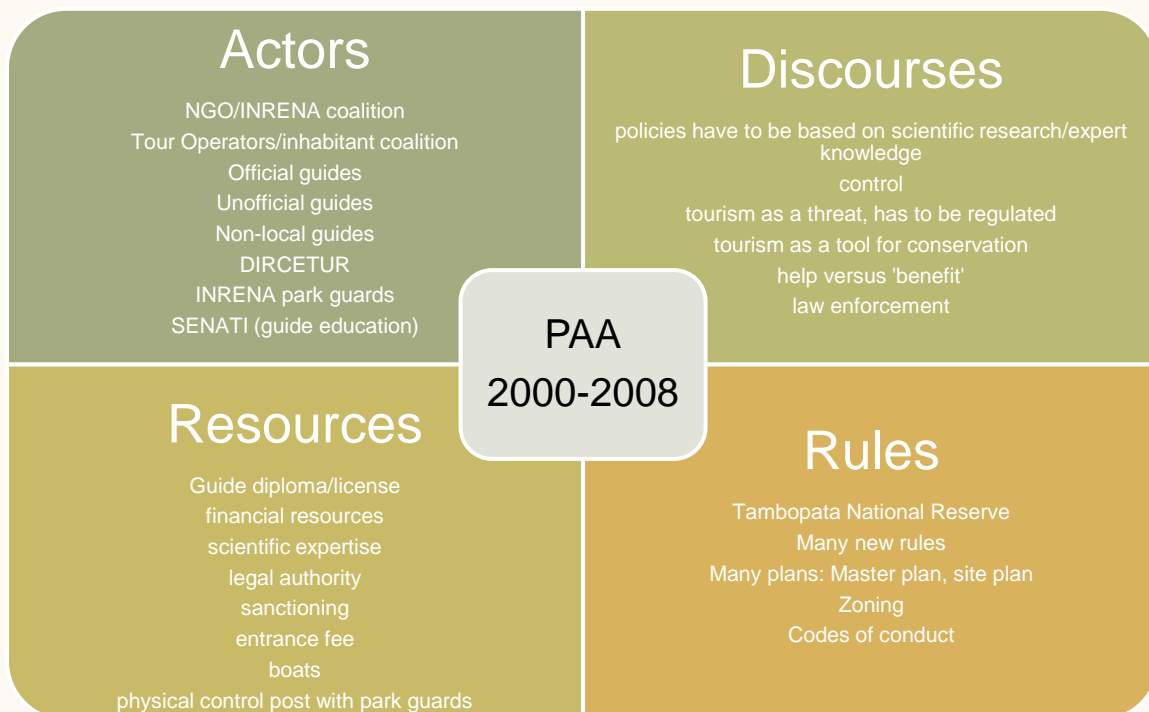
“The big problem is agriculture and mining. The people until today kill the animals to live from. In Costa Rica it is forbidden to hunt! There doesn't exist hunting for own consumption like it is occurring here. Subsistence hunting, that is a category, a permit to hunt animals but only for the people that are living here, for the population. In Costa Rica they do not hunt... In no part of the country exists sport hunting, it is forbidden. That is a big difference from Peru. I think that it is one of the things that makes the difference.” (TUR3)

However, one NGO staff member recognizes that animals can adapt to human presence but thinks that it is not desirable:

“For example in Costa Rica you can have more contact with environment, they can eat from your hand, but that is not the idea of ecotourism I think, that is not nature.” (NGO2)

Besides the ‘habituation’ discussion, another important element of the tourism sector’s counter-discourse is that sustainability and conservation also have a significant economic dimension. From this point of view, the tourism industry contributes to conservation because it generates income for the reserve, which is then used to manage various NPAs. They also claim they are providing alternative economic activities for the people of Puerto Maldonado, which is needed to stop the local population’s extractive activities such as gold mining.

The moradores were also critical of NGO practices. *It is a mafia, the NGOs.* Mistrust, they are only making money from all these investigations and consultancies.



4.5 SHIFT IV (2008 - 2014)

With this shift tourism development became more professionalized, formalization took place, and spatial planning became more defined. A new centralized management body was installed, and questions were raised about its autonomy. The management body slowly adopted a less conservation-oriented discourse and became more in line with the tour operators. Consequent to the construction of a highway - which improved the region's connection to other parts of Peru - new actors showed up, including more backpackers and domestic tourists who entered the policy arrangement and led to new tour operators who focussing on this segment. Also, the moradores became more entrepreneurial. They began to offer more low quality, cheap accommodations and cooperate with the new tour operators.

PARTNERSHIPS, LOCAL PEOPLE BECOME MORE LIKE ENTREPRENEURS

Sandoval saw an increase in the backpacker and low-budget tourism segment, after road construction improved access with the tourist hub Cusco. Where in the past it could take four to seven days to reach Madre de Dios, now the Southern Amazon could be reached in a day. Many tourists were also increasingly interested in visiting the protected areas in the Amazon. In the past, visiting the Southern Peruvian Amazon was more reserved for the high-end ecotourism segment, but new cheap bus services running between Puerto Maldonado and Cusco made the destination more affordable. Besides international backpackers, domestic low-budget tourists also found their way to the jungle as the Peruvian middle class grew. A visit to Sandoval was especially attractive for these tourists, as Sandoval is the closest *oxbow lake* from Puerto Maldonado and the tours offered are relatively cheap⁶.

Responding to these developments, new tour operators started businesses, especially *ex-empirical guides*. Where the older, bigger companies that were focussing on high-end segment often had foreign owners, the new companies were more often owned by locals, such as the ex-empirical guides. Also, a popular hostel was opened in Puerto Maldonado, which had their own tour company to take backpackers on excursions to Sandoval.

Within Sandoval however, the only possibility for an overnight stay suitable for these tourists was at the *hospedaje* García, as Sandoval Lake Lodge charged very high prices. Because some of the operators were unsatisfied with the services of *hospedaje* García, one of them approached one of the other moradores – Veronica - for cooperation. Although Veronica had been living in Sandoval for a long time, she had been struggling to develop some other livelihood than agriculture. Her land was not entitled and therefore she could not obtain a loan from the bank - neither could she apply for many project funds. The owner of the hostel and tour agency decided to lend her money to construct tourist accommodation on her land. As she had experience working in Sandoval Lake Lodge, her treatment of tourists was considered better than her brother's. The operator could now provide better service and accommodation to his clients, and also made certain recommendations to the morador. She also received help from her children, who had studied tourism or worked in conservation. Other moradores also started businesses catering to tourists.

⁶ Lake Sandoval is the closest oxbow lake from Puerto Maldonado, few gasoline for the boat transport is needed compared to destination which require longer boat trips. Because gasoline is fuelling the mining sector of the Madre de Dios region and the government has sought to control the consumption of gasoline the prices are high.

Veronica's son in law, Carlos, built a restaurant on the patch of land he lends from Veronica. Maria, a third morador, began construction of a lodge on her property.

The new tour operators now had choice with whom they are going to cooperate: Miguel, Maria, Veronica or Sandoval Lake Lodge. There has been some conflict in recent years over the family's benefit distribution agreement with Sandoval Lake Lodge. They claim that they have not received any money from the lodge, while the managers are driving fancy cars. The director of the lodge says that they are receiving less guests than before because of the poor condition of the road. Some of the inhabitants have initiated a lawsuit against Sandoval Lake Lodge. One wonders whether the lawsuit is a response to unjust benefit distribution or a play against competition, now that they run their own lodges. Not all the inhabitants are taking part in this law suit; Veronica for instance, who has always had stronger ties with Sandoval Lake Lodge (she has worked there, her son still works there, the employees play soccer on her field) has abstained.

Furthermore José and his ex-wife Cristina also got approval to start their own boat renting company in Lake Sandoval. They rent boats to smaller companies who were not allowed to have boats on the lake if they did not reach a certain amount of tourists each year. José and Cristina were able to get money from a project and also got a loan from the bank, as there land was entitled.

Now that the moradores started to receive more benefits from tourism and set up their businesses they also got a more positive outlook on the creation of the reserve and its management: *“now I understand that I live from this reserve, and that I have to show it to the tourist. Before I was working on my chakra, agriculture, and I was cutting up all the forest, but now not anymore.” (INH1)*

INSTITUTIONAL CHANGE – INRENA TO SERNANP (CENTRALIZATION)

In 2008 INRENA was dissolved after the Ministry of Environment was created along with the National Service of Protected Natural Areas by the State (SERNANP); a new specialized management body in charge of Peru's protected areas. This shift brought various consequences to the Policy Arrangement in Sandoval. First of all, it implies a shift in power - as not only the regional government but also an institute affiliated with the national government had authority over the area. However, this shift raised questions about the autonomy to decide about regulation and financial matters. It also saw the gradual dominance of a new discourse focusing on ecosystem services.

Before SERNANP, the management of the TNR was the responsibility of INRENA. INRENA came to the fore in 1992 as a decentralized body⁷ of the Ministry of Agriculture, meaning that the power was located with the regional government⁸ of Madre de Dios. Among many parties, INRENA had the reputation of being corrupt, especially concerning the handling of forest concessions. INRENA was characterized by a cumbersome organizational structure with various dependencies. It also had overly complicated documentation requirements, which weakened transparency. Additionally, INRENA's staff was underpaid due to a lack of financial resources, which made it vulnerable to corruption. Most fraud and corruption

⁷ Previously, parks had been managed by a small department of Forestry and Fauna within the Ministry of Agriculture.

⁸ After the creation of the regional governments in 2002, several competencies for the management of land and natural resources were decentralised, such as land-use planning.

took place through its concession system, by which illegitimate concessions were granted and illegal logging was facilitated. The change to SERNANP was therefore viewed as an improvement by many actors:

“There was a lot of corruption. In the old times, when there was INRENA within the Ministry of Agriculture, which had various [emphasis added] sections, and there you saw a lot of corruption. But this changed with the creation of the Ministry of Environment; it dropped its clothes and changed the image, because it was very different to present yourself as INRENA: ‘Oh you are INRENA, INRENA protected areas, INRENA forestry...’ and in INRENA forestry in the theme of wood was the only one with corruption. ‘You are INRENA, corrupted! All of them are corrupt.’ But with the change to SERNANP it became much easier to work, better management than before.” (NGO1)

The purview of SERNANP was more limited compared to that of INRENA. SERNANP was only in charge of NPA management, while INRENA had also overseen forestry, agriculture, and mining. The new focus was viewed as an important explanatory factor for the reduced corruption:

“SERNANP is less corrupt, they only focus on protected areas. INRENA was in charge of all the natural resources, also wood, etc. It was less transparent, it was easier. Permits for something with a bit money. And for SERNANP there are not many people interested in what they are doing aside from the biologists and tour operators. I think there is not much, like in INRENA.” (TUR3)

In the region of Madre de Dios, where diverse interests are concentrated, this has led to the very problematic situation of overlapping concessions - which up to this day remain threats for conservation and tourism development. Logging concessions overlap with mining permits, which in turn might overlap with areas designated for agriculture, Brazil nut harvest, indigenous community reserves or ecotourism concessions. Indeed, some ecotourism and conservation concessions granted by the government on state lands have fallen prey to land speculators, who take advantage of the lack of a coordinated system for tracking land rights granted by different government agencies. Consequently, conservation concessions close to Lake Sandoval have also been invaded by illegal loggers. Due to these problems, land-use planning has played a key role in recent developments. Ownership of land has in turn become of vital importance, and consequently many people have started to pursue entitlement.

The centralization of NPA management as SERNANP fell under the newly created Ministry of Environment (MINAM) was also viewed as an improvement. Considering the political climate of Madre de Dios in which regional government with an exploitative vision flourished, conservationists and tourism operators could not trust them with the task of protecting natural areas:

“There was talk originally about decentralizing the protected area network so that the regional governments would manage their own protected areas. But luckily that didn’t happen, because everyone was predicting that if region had president who didn’t like protected areas, then very quickly the protected areas could have been damaged. It was a good policy to keep SERNANP centralized rather than decentralized. We may have another

mining focused president again here in Madre de Dios. He is very open in public and says: 'I will get rid of the Tambopata Reserve'." (EXP1)

Aligning SERNANP with MINAM also led to more stability, as regional political bodies changed often and led to problems of continuity in INRENA as the organization went through various reforms. INRENA frequently had to call upon NGOs for information, such as accurate maps of protected areas, underscoring its lack of stability and institutional continuity. MINAM was also viewed as a competent Ministry that held a different discourse than the regional government:

"There is a better vision. It is now a different ministry in charge. It is a prestigious ministry. The leaders of the ministry are very well-qualified people and very correct in the way they act. It started in 2008 and we have only had two ministers, the other Ministries - Energy and Mining - they change their minister every four months at the central government." (NGO1)

The creation of SERNANP also contributed to a gradual discursive change in Sandoval in which the original conservation discourse was replaced with a discourse more oriented towards 'ecosystem services' - as is explicitly mentioned in the institute's mission statement: *"Leading the Natural Protected Areas System of Peru with an ecosystem, integrated and participatory perspective, in order to sustainably manage its biodiversity and maintain ecosystem services that provide benefits to society"* (SERNANP, n.d.-a). Ecosystem services are defined as the economic, social and environmental benefits (both direct and indirect) that people obtain as a result of the proper functioning of ecosystems (SERNANP, n.d.-b). For the NPA management of Sandoval this discourse also implied a heightened acknowledgement of the economic dimensions. SERNANP realized that their protected area system could not be financed by foreign donors alone, but that revenue from tourism was also necessary.

AUTONOMY SERNANP QUESTIONED

With the change to SERNANP, management of Sandoval became centralized. On the one hand this was considered a positive transition for the actors of Sandoval, as the regional government of Madre de Dios had not shown interest in the NPA other than for exploitable resources such as gold. On the other hand, it raised questions about SERNANP's autonomy to make decisions and control the funds they received.

SERNANP has a management body for each of the protected areas - such as SERNANP TNR located in Puerto Maldonado - which is overseen by their headquarters in Lima (SERNANP HQ). Many actors however believe that SERNANP is too hierarchically structured and that SERNANP HQ wields too much power over SERNANP TNR. Before SERNANP TNR makes a decision, it must be approved by HQ in Lima.

"In this [the micro-zoning of the lake] case SERNANP has [contracted] some engineers who have been to the field and then they can decide about the micro-zoning, but finally the last word is in Lima, [SERNANP TNR] sends everything to Lima, and in Lima they say 'I agree or I disagree'." (EXP2)

Similarly, there are doubts about the independence and capabilities of the head of the reserve:

“He is some kind of connector between SERNANP Lima and SERNANP Tambopata. He just receives some indication from Lima and he transmits all that SERNANP Lima want in this area. I’m not sure if he has a lot of influence on this area. I’m sure that all the rules come from Lima.” (EXP2)

Specifically, SERNANP TNR's lack of control over the revenues generated by the area are found problematic. In 2013 Sandoval alone generated about 700.000 soles through entrance fees and tourism concessions. However not all of these revenues return to the area. The revenues generated are not just used for maintaining TNR but also to support the whole protected area system (SINANPE). Some other areas do not receive any tourists, but still have management costs. This strategy was chosen because only a few areas are actively generating income. There are about 14 out of 75 areas that have the facilities to receive tourists. Of those areas, TNR is an important contributor as it generates 16.2% of the total tourist revenue.

Sandoval receives about 60% of the visitors to the National Reserve Tambopata, making it the most important nature tourism destination of south-east Peru. While Sandoval is responsible for a large proportion of the income generated by the TNR, little of this money is returning to SERNANP TNR, leaving it without sufficient funds to respond to local development problems. Some actors claim that in areas where there is more tourism there also need to be more investment. It feels unfair to them, especially for the tour operators that they do not get any services returned from SERNANP. Lack of maintenance for infrastructure has become a prominent problem.

The actors of SERNANP Tambopata also seem to be frustrated; they are stuck in the sense that express a desire to solve the problems at Sandoval but have a limited budget, management capacity and authority:

“I have a lot relations also with SERNANP but the problem is not here the problem is in Lima. Do you think they are going to understand us? We have sent them letters.” (INH2)

Representatives from Lima only come once a year, and are not familiar with the situation on the ground. Some actors in tourism are frustrated because SERNANP has not been active in fixing the problems at Sandoval. In this sense there has been a change (some say a shock), but also some continuity.

DEVELOPMENTAL IMPASSE, THE ACCESS ROAD TO SANDOVAL

As the numbers of tourists to Sandoval have been growing exponentially, the strain on infrastructure has also increased. In particular, the road from the riverbed to the lake has suffered from excess traffic. During the rainy season road conditions are especially poor. However the development needed to cope with the growing numbers have been absent for many years, leading to frustration among the tourism actors and moradores:

“You are going to see the reality of what is Sandoval, which has not changed since years until now, you are going to see the road that is full of mud, you are going to see the bridges that have collapsed...” (INH2)

Guides explain the unfortunate situations that have resulted from the poor infrastructure, and how the control post lacks basic first aid equipment:

“A lot of elderly people have fallen, they have broken their leg halfway on the road. And the control post should be well equipped. A guide should be able to get a stretcher to evacuate a person, but there is nothing. There have been various accidents. It is a shame for the tourist that is paying an entry ticket, that it does not have backing when something happens.”
(TUR5)

Although the situation does impact tourists, it is believed that tourist numbers are not much impacted by the poor road conditions. *“Yes it is understood that although the trail is in poor conditions there is a high flow of tourism, and it is increasing with 8% each year. According to the results of the visitor satisfaction sheets, they reach 80 or 90% even though it is in this condition”.* (GOV3)

For the guides, who are especially frequent users of the road, the conditions are difficult as they face problems in executing their jobs:

“I have to take them by the hand. My job is to make sure they enjoy and look for animals and listen to sounds. But I cannot do that because I’m busy with making sure the tourists are not going to fall. At the same time my work is making me more tired, four times as much.”
(GUI2)

The road has already been a problem for several years and continues to worsen, without any solution being found. SERNANP blames its lack of autonomy over tourist revenue for their incapability to solve the problems. They only have money to pay the park guards, leaving none left for infrastructural development. Various actors have sought to solve this by proposing projects to improve the road, even showing willingness to make financial investments, but have been constrained by SERNANP:

“In some projects they restrain us. Projects that were supposed to secure a better development of the reserve. Like [when we] proposed to implement a rail system with little carts, monorail, to bring tourists and supplies. And it would have been 520.000 dollar that we would have paid for. But they said no, it will affect the area, it will disturb the ecosystem, so it stopped.” (TUR6)

Projects of the private sector must be first assessed and approved by SERNANP. One tour operator expresses his frustration with their requirements:

“(…)to construct you need to ask permission from SERNANP. And then they say: ‘we are going to analyse it, we are going to do a study’, yeah right! Don’t mess with me, it is only going to be a bridge and it’s going to be an improvement for the whole world...” (TUR8)

The conflict between the private sector and SERNANP can also be understood as a discursive struggle between the technically oriented SERNANP and more practically oriented tour operator coalition. Tour operators are frustrated by impact assessment studies:

“for me it seems to be terribly stupid... which impact!? If there is already one. The only things that is going to happen is to improve the old one for a new one. Where is the impact!? Are you kidding me?” (TUR8)

SERNANP’s lack of cooperation with private parties to find a solution to the road makes some actors suspicious about whether SERNANP really wants to solve the issue at all. Some of the tour operators blame the NGOs, who want to limit tourism numbers, of frustrating the process:

That is what FZS is saying, they do not want to have a better road, because when there will be a good road there will come more tourists. This is what FZS say - they do not want to have a dry, paved road. They say the road has to be ‘natural’. But that is harmful for the tourists, that is also what the companies are saying. But FZS and all the NGOs say ‘no it has to be natural, the road’. (TUR5)

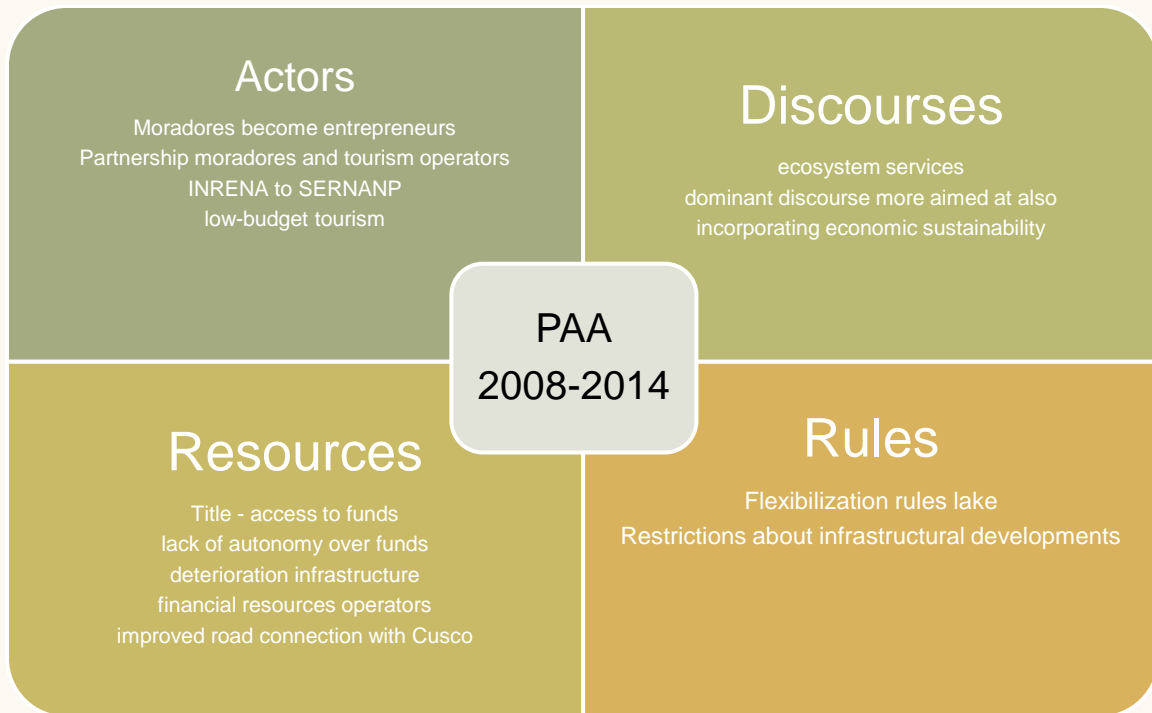
An expert in the field said that they might be stalling the project to have more time to develop a good visitor management system on the lake:

“If you improve the road you are going to get lots of people wanting to go to Sandoval and then you are going to get the problem of how you deal with all the tourists on the lake. So there are some people that say we won’t touch the road, we will let the road stay really bad because that is going to limit the amount of tourists who go to the lake and we have time to develop a system of managing tourism on the lake, which is, in a way, it could make sense. But... we are already ruining the image of Sandoval because of the road, the part to the lake is atrocious really. So the question is how are you going to deal with these issues making sure you don’t reach the environmental capacity of the lake.” (EXP1)

SERNANP however claims that they are not responsible for the impasse. Instead, they claim the problem lies with other institutions involved – *“ think it is lack of willpower of those persons.” (GOV3)*. They state that a large part of the road is located in the buffer-zone and that they do not have authority over these areas.

Furthermore, the magnitude of the project requires a lot of funds, and SERNANP lacks these resources as the revenues are going to Lima:

“We need to the resources of 3 or 4 years. We want to solve it but we do not have the money, it will take 3 or 4 years of all our budget to be able to construct it. Just this road is the topic that makes us divorce with the operators. They think it is our responsibility to fix it. But because of the budget dimension it is of regional or national character. We cannot, we cannot.” (GOV3)



5. CONCLUSIONS & DISCUSSION

The first section of this chapter (5.1) contains the conclusion of the study by answering the research question that guided this study. The next section contains the discussion (5.2). It places the findings of this study in the wider debates and also critically examines the adoption of the PAA. In the final paragraph recommendations for further research will be given.

5.1 CONCLUSIONS

This conclusion section returns to the research questions, addressing them in terms of certain patterns that emerged from the results. Tourism development in Sandoval has proceeded in a complex - often nonlinear - fashion, and understanding the origins of its current situation is not always a matter of simple cause and effect relationships. At the same time, the analysis of how the Policy Arrangement has changed over time reveals that the influence of its constituent elements (actors, discourse, rules, resources) are not distributed randomly. Rather, particular formations recur - for instance the asymmetrical influence exerted by state actors and foreign NGOs. As such, the conclusions deal largely with the identification of continuity in the midst of apparent change.

The first research question dealt with the four elements of the Policy Arrangement Approach: actors, discourse, rules and resources. Here generalizations are made regarding how each of these elements functioned within the policy arrangement over the forty year period in question.

Actors – As mentioned above, state actors and foreign NGOs have consistently been the most influential actors. After their entrance in the 1990s, Sandoval's policy arrangement has largely been shaped by their efforts, especially with the formation of a coalition between INRENA and FZS. While the specific actors may have changed, this coalition of government regulatory bodies and foreign conservation-based NGOs has remained constant. Together, they have overseen a process of institutionalization – formalizing the regulatory framework for land use. Local actors (*moradores*, guides), on the other hand, have been consistently marginalized, having little say in guiding the direction of tourism development. As such, they forced to continually *adapt* to shifting conditions initiated by other actors and to *legitimize* themselves and their practices (through contracts, licenses, land titles, etc). In response, these actors have adopted strategies such as forming their own coalitions – like that of the local inhabitants with the tourism sector – in order to assert more power.

Discourse – The discourse of nature conservation has been the most influential in determining the trajectory of Sandoval's tourism development. It has also been tightly coupled to a discourse of scientific authority, one that privileges knowledge from university-trained biologists over local knowledge. The kinship of these two discourses has meant that decisions about what is best for conservation are determined by recourse to (mostly foreign) experts, necessitating the involvement of foreign conservation NGOs. Dominance of scientific discourse also gives advantage to those tour operators who have connections to the natural science community. The conservation discourse also constrains the range of possible solutions to problems, by defining (discursively and legally) the region as a 'protected area', to be protected through zoning and monitoring policies. As the classical conservation discourse posits human

activity as a ‘disturbance’ to natural ecosystems, it defined tourism as a threat to conservation and antagonized the tourism sector rather than see them potential collaborators. In recent years, the discursive terrain has shifted once more with the introduction of a sustainable tourism discourse. Here, tourism is taken as a possible source of revenue for funding conservation projects, with tourism and conservation maintaining an uneasy alliance. The sustainable tourism discourse is less well-defined than that of conservation, and it is sometimes unclear whether it sees tourism as a way of supporting conservation or if the entire complex is oriented towards the larger goal of economic growth.

Rules – Rules have mainly been important through processes of institutionalization. The primacy of actors who were geographically distant from Sandoval (i.e. government agencies and foreign NGOs) and adhered to a discourse of conservation meant that formal, bureaucratic regulation of land use was instituted on top of the informal rules that actors developed in the early years of tourism. Such formal rules included the formalization of requirements for guides and the progressive categorization of Sandoval first as reserved zone and then as national reserve. One sees very clearly the positive feedback between different elements of the PAA, as the financial resources of FZS gave it power to establish a conservation discourse that favoured scientific knowledge in the establishment of rules. These rules then limited the possibilities for marginal actors like the *moradores* and empirical guides, further reducing their influence over the policy arrangement. Unsurprisingly, because local actors' voices were often absent from decision making processes, new rules and regulations are poorly adapted to local practices, resulting in conflict or marginalization. With the shift from INRENA to SERNANP, the tendency towards formalization of rules has relaxed somewhat. Whereas bureaucratic institutionalization peaked with INRENA, noted for its needlessly complicated procedures, SERNANP has regulated with more flexibility. However, local actors remain very much subject to rules determined at a distance.

Resources – Since the 19th century, human activity at Sandoval has largely been defined by the relationship of forest resources to external markets. The specific resources themselves have changed, from multiple rubber booms, to pelts, to cattle ranching and finally to the natural heritage of biodiversity. However, the field of relations within which these resources are embedded has remained stable in many ways; they remain oriented towards foreign and elite domestic markets. While not necessarily ‘extractivist’ in the sense of the rubber boom, the discourse of sustainable tourism still considers the forest as an economic resource, and its recent ascendancy has begun to displace the view from conservation biology where the protection of biodiversity is an end in itself. Thus we can describe the role of forest resources as a loop – from commodity (rubber/pelt extraction) to means of subsistence (by the local family) to protected nature (classical conservation) and back to commodity (neoliberal conservation/sustainable tourism) – one largely determined by how foreign markets define resources. Yet, even during the peak of the conservation discourse in the 1990s, foreign capital was still a major determining factor. Resources refers not just to forest products, but also to the financial resources of foreign NGOs (e.g. FZS funding of reserve infrastructure) and investment capital of foreign entrepreneurs to build lodges and establish tourism operations. Local actors have little access to such resources, and must align themselves with foreign capital instead of starting their own tourism businesses. Likewise, the regional division of SERNANP is reliant on funds from the national headquarters in Lima. This dependency on external resources has continued to limit the autonomy of local actors in complex ways.

While the first research question approached tourism development from a chronological perspective, the second used a more synchronous lens, provoking an exploration of how new institutions are overlaid on top of already-existing practices and institutions (both formal and informal). This process of *layering* can be analysed in terms of congruency – how well do introductions align with the arrangements that already exist on the ground? Incongruence is often a source of conflict, but also invites the possibility of positive change. As in the response to the first research question, here I also seek to extract general patterns from the data: in what ways are newly introduced institutions consistently congruent with the existing policy arrangement field? In what ways are they consistently incongruent?

For one, new institutions were often incongruent with *locally-embedded practices*. The development of policy arrangements was usually driven by external actors and informed by their interests. Because local people were less visible, their practices were likewise not taken into account. This led to situations like the formalization of licenses for guides, which had the effect of displacing older, experienced guides and replacing them with younger guides who were licensed but also less competent. Likewise, rules for wildlife conservation often were incongruent with the local ecology, as they were based on short research visits rather than extended observation or consulting local guides. Such cases of incongruency, resulting from institutional changes uninformed by local dynamics, often resulted in negative outcomes of conflict and mistrust.

The incongruency with existing practices stands in contrast to the strong congruency displayed in terms of *power relations*. As new institutions are layered upon existing arrangements, they generally reinforce the distribution of which actors have power to influence policy arrangements and which do not. For instance, conservation NGOs managed to create institutions (e.g. wildlife monitoring programs) that validated their own position. Larger tour companies who could more easily network with trained biologists also benefited from the rise of a scientific discourse, as such connections could be leveraged into funding opportunities. Stricter regulation also made it more difficult for new entrants into the tourism sector, as the older companies enjoyed certain privileges such as the right to use boats on the lake. On the one hand, this reinforcement of power relations might seem obvious – those actors who have power could be assumed to steer development towards their own interests. Still, it seems worth paying attention to, as it implies a certain *path dependency* that challenges common narratives of fixed, linear and mutually beneficial development.

5.2 DISCUSSION

This section first reflects on the strengths and weaknesses of the Policy Arrangement Approach as adopted in this study. The discussion is oriented towards the role of informal arrangements and the concept of ‘institutional bricolage’ is considered. Secondly the findings are interpreted through the lens of other theoretical approaches. Third, the understanding of development as a linear trajectory is critiqued.

THE APPLICATION OF THE POLICY ARRANGEMENT APPROACH

This thesis supposes there is a certain link between old and new arrangements. New policy arrangements do not appear out of the blue but are shaped by the social and ecological legacies of previous arrangement.

The four interrelated dimensions (discourses, actors, resources and rules) as distinguished by the Policy Arrangement Approach has clarified and oriented the analysis in this study. It provided much needed analytical tools to bring order to understandings of Policy Arrangements. Its midway stance in the structure – agency debate resulted in a balanced analysis that did not overemphasize the role of actors; neither did it privilege institutions in understanding changes in the policy field of Sandoval. As such, it proved quite effective in answering the first research question, identifying the key factors that drove tourism development.

At the same time, the approach was found less appropriate for responding to the second research question, which dealt with the congruency of newly introduced institutions to earlier arrangements. The case of Sandoval provides abundant evidence that institutional changes are not instituted in a vacuum; rather, they are “layered” upon a field of previous arrangements and socially-embedded practices. The PAA provided little guidance in understanding what happens when institutions are introduced on the ground - how are institutions realized and interpreted within local practises?

It might therefore be fruitful to supplement the PAA with a more practise-based approach. Cleaver’s theory on *institutional bricolage* (Cleaver, 2001, 2002, 2012) could be useful to enrich the Policy Arrangement Approach with its focus on how local actors respond in practice to institutional change. The concept originates from the field of post-institutionalism, which emphasizes the local historical and social embeddedness of institutions (Mehta et al., 1999). The term is derived from Levi-Strauss’s intellectual bricolage, which Douglas elaborated and developed into *institutional bricolage* (Douglas, 1987). Institutional bricolage offers a new perspective on the interface between actors and institutions. Where Giddens (1984, see also Long 1999) recognizes the agency of actors in shaping institutions. Douglas’ understanding places more emphasis on the role of culture. Moreover, she claims that institutions are metaphorically connected and that meaning is able to transfer between institutions, a process she refers to as *institutional leakage*. Institutional bricolage is viewed as an ongoing process through which actors are actively composing institutional elements as rules, norms and beliefs together. According to De Koning (2011, p. 28) institutional bricolage is “*a concept emphasising the need to consider the nature and process of institutional formation and adaptation at the local level.*”

In this case study, a classical separation between formal and informal institutions was adopted. The *institutional bricolage* theory criticizes such as division, and gives a more nuanced view which could further help the analysis of institutional development at Sandoval. Cleaver (2002) argues that such rigid categorization does not acknowledge the vague and messy institutional processes that occur in the field of natural resources management. Over time, formal institutions can become socially embedded, whereas informal arrangements such as traditions can take on a more formalized character (De Koning, 2011). Through *institutional bricolage*, elements of institutions are borrowed and adapted, which results in a blurring of the boundary between formal and informal (or traditional and modern) institutions. An alternative offered by Cleaver is the use of *bureaucratic institutions* and *socially embedded institutions*. Bureaucratic institutions are characterized by arrangements based on specific organisational structures, contracts and legal rights, and are typically introduced by governmental organisations or development

agencies. Socially embedded institutions, on the other hand, are based on culture, traditions, social organisation and daily practises. They are often older arrangements.

Cleaver notes that the process of institutional bricolage often takes place in a “wider arena than that defined by the visible structures of bureaucratic resource management institutions”, where “norms and practices, and the relationships of trust and cooperation which underlie them, are...generated and negotiated” (2002, p. 18). The Policy Arrangement Approach adopted in this study focuses on the more visible, formal institutions that appear inside the Policy Arrangement, and pays less attention to the spaces where bureaucratic institutions and socially embedded institutions meet each other. To analyse what happens when the bureaucratic institutions introduced in Sandoval, de Koning’s (n.d.) typology of institutional bricolage outcomes can be used. She proposes that institutional bricolage takes three forms: (1) aggregation, (2) alteration and (3) articulation.

Aggregation describes a process in which bureaucratic institutions are combined with socially embedded institutions and assembled into a new, balanced arrangement. In the case of Sandoval this was seen (albeit in a delayed form) as conservation and tourism aggregated into the assemblage of sustainable tourism. When conservation practices were first institutionalized, the embedded practices of tourism were seen primarily as threat, and marginalized. However, as Cleaver (2002) notes, single purpose institutions generally have short life-spans, and eventually government recognized the importance of tourism in raising funds for conservation. Multiple purpose institutions, like that of sustainable tourism, are characteristic of such aggregation processes.

Alteration refers to a process whereby institutions undergo ‘tweaking and tinkering’ to better fit local practises and livelihoods. It also refers to the process whereby socially embedded institutions are adapted to newly introduced institutions. Many examples of this process can be found in the institutional evolution of Sandoval. A good example of alteration is when fishing was prohibited, but an exception was made for local inhabitants who had been practising subsistence fishing for decades.

Articulation is the rejection of institutions on the basis of identity or culture. Although de Koning portrays articulation as bureaucratic institutions “*bounc[ing] off a shield of local perceptions of traditions and identity*”, she adds that it is “*as much visible in the actual practices as it is in discursive practices*” (De Koning, n.d., p. 3). Because the current inhabitants of Sandoval have only been settled for one or two generations, cultural institutions are less strongly embedded in tradition and history than in the cases studied by de Koning. Therefore, resistance or outright rejection of institutions is not as visible. However, there are cases of local actors rejecting institutional regulations on a practical basis, for instance when empirical guides denied from working managed to enter the reserve through other routes.

THE DEVELOPMENTAL TRAJECTORY OF SANDOVAL

A second limitation in this study was its application of the PAA approach took a neutral stance towards the various actors involved in shaping policy arrangements. That is, it understood power as the capacity to influence the policy arrangement (either through mobilizing resources or shaping discourse), or power *to*. However, it did not take into account a second dimension of power, namely power *over* other actors

(Dowding, 1996). As such, the PAA approach is of limited usefulness in critically evaluating the implications of institutional changes.

From my findings, it is clear that policy arrangements have not affected all actors in a balanced way. Rather, an asymmetrical pattern emerges in Sandoval that is weighted towards conservation NGO's, state actors and those tourism enterprises owned by and oriented to foreigners. Not only do such actors exert the greatest influence over policy arrangements, but they also receive the majority of the income generated by tourism development. In contrast, local inhabitants and guides have had perennially had little say in policy outcomes and so have been forced to continually adapt to changing conditions. Despite a rhetoric of benefit sharing, in practice very little of the money brought in from tourism has been distributed to them.

In some ways, the current situation resembles that of the mid-20th century, when Sandoval was characterized by relations of commodity extraction. Whereas rubber and pelts were the chief commodities in that period, recent years have seen the forest itself brought into the commodity form. In this arrangement, conservation of biodiversity is taken less as an end in itself and increasingly as an engine of economic growth – Nature redefined as natural capital. As the tourism industry grows, so does the constellation of institutions and organizations that enable and are benefited by it; for instance, the NGO's hired for scientific consultancy. The discourse of sustainable tourism is scientific and technocratic, privileging the knowledge of foreign biologists over local expertise. Such elements are mutually reinforcing and reproduce existing power relations – certain tour operators more easily network with universities and research institutes, making them appear more credible and thus able to attract international funding. One wonders if the amount of capital now generated by tourism and its alignment with relations of power will make the current arrangement more stable than those in the past. As is often the case with capitalist development, contradictions are also present; gold mining in the region follows the same logic of commodity extraction, yet has recently led to pollution of rivers that halted tourism in Sandoval entirely.

This picture of tourism development in Sandoval – one where the 'winners' and 'losers' of institutional changes are recognized – bears resemblance to a broader literature from disciplines such as political ecology that question the win-win narratives presented by advocates of sustainable tourism development. Counter-narratives from political ecology highlight conservation outcomes in which foreign and powerful domestic actors are the principal drivers and beneficiaries (Neumann, 1998). Therefore it seems that the institutionalization of tourism in Sandoval is not a unique case. Furthermore, the situation in Sandoval resonates with critiques of what is referred to as 'neoliberal conservation'. Here, scholars note that conservation practices are being enclosed within a broader framework of capitalism, in which the conservation of Nature is significant chiefly in how it stimulates economic growth. Neoliberalism is defined here as the 'political ideology that aims to subject political, social, and ecological affairs to capitalist market dynamics' (Büscher, Sullivan, Neves, Igoe, & Brockington, 2012). The development trajectory of Sandoval might usefully be viewed as a process by which the biodiversity of the forest itself (rather than individual forest products) has become subject to the capitalist market.

CONSIDERATIONS FOR FURTHER RESEARCH

As discussed above, the PAA employed throughout this research has been limiting in two distinct yet interrelated ways – (1) the lack of a systematic approach for analysing the response of local actors to developments at the level of formal institutions, and (2) a ‘neutral’ approach that does not critically evaluate the effects of policy arrangements in terms of power relations. Reflecting on fieldwork with local actors, such elements do indeed appear significant in the case of Sandoval, but the theoretical framework did conceptualize power in terms of resource access, while paying less attention to the discursive and other dimensions of power imbalances. Further research might develop a richer understanding of the situation by explicitly taking these factors into account.

By incorporating the concept of institutional bricolage, future researchers might investigate the diversity of ways that institutional changes interface with socially-embedded lifeways, contributing towards a broader perspective on the processes of institutionalization. Likewise, a political ecology approach would bring a critical angle and unpack the process that I have generalized as the ‘commodification of biodiversity’.

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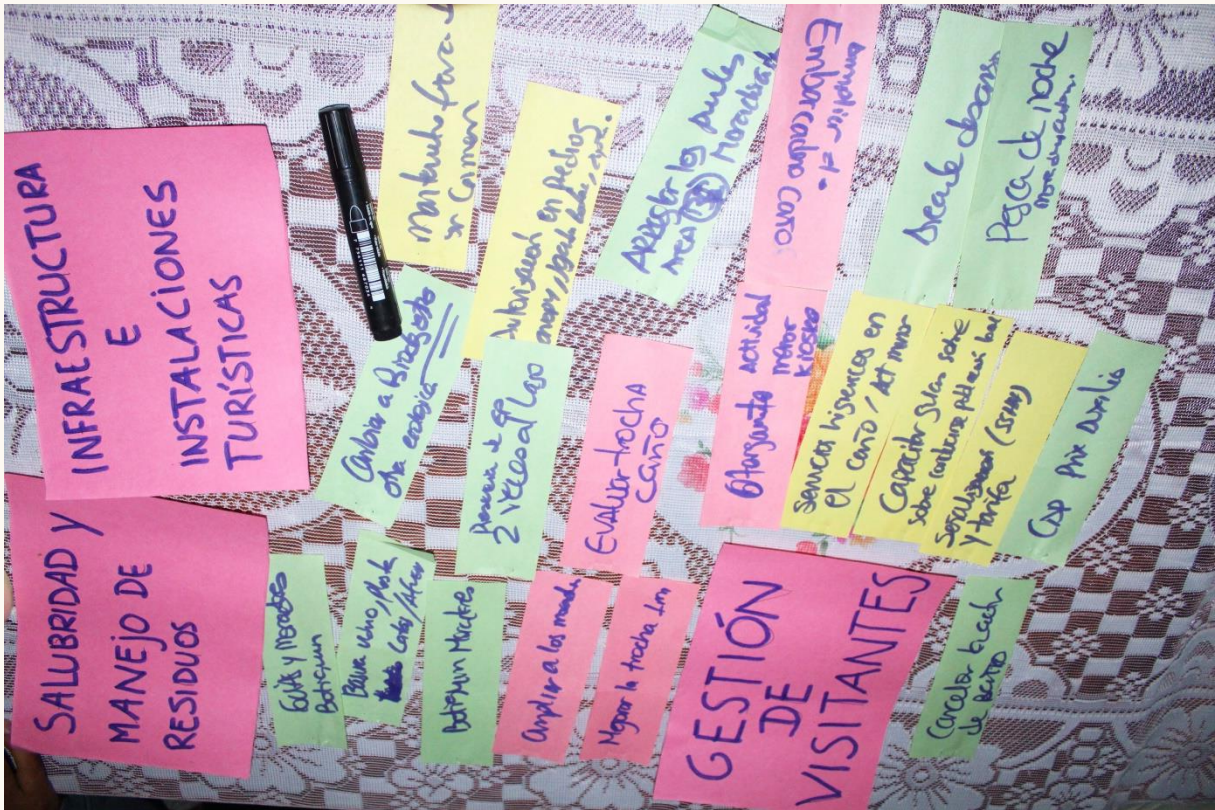
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APPENDICES

APPENDIX I: FOCUS GROUPS
MORADORES







GENERAL

- ❖ Can you tell me more about yourself and what you (your group/organization) do?
Me puede decir más sobre usted y qué hace su organización/grupo?
- ❖ Can you tell me how and why you came to be involved in Lago Sandoval?
 - When was it exactly?
 - What kind of motives did you have?
- ❖ Puedes decir cómo y por qué usted se involucró en el Lago Sandoval?
 - Cuando era?
 - Qué tipo de motivos tenía?
- ❖ Can you briefly describe what are the biggest changes you have witnessed in Lago Sandoval?
 - Regarding actors involved, policy changes, changes in relationships, institutional changes
 - How is the situation different than before?
- ❖ Puede describir cual cambias mayores que se han ocurrido en Lago Sandoval?
 - Con respecto a los actores involucrados, cambios políticas, cambios en las relaciones, cambios institucionales
 - Como está la situación diferente que antes?

ACTORS/COALITIONS

- ❖ Can you explain me the situation when you started to be involved with Lago Sandoval?
 - Who were the key players in the management and use of Lago Sandoval?
 - Why are they involved? Which motives?
 - Can you explain me the roles of different actors the relationships between them?
 - What are their interest? Goals?
 - How are they different or similar to your interests?
 - With whom did they cooperate? Which coalitions can be identified and on what base?
 - How do you describe the relations between your institution, the different operators and the community, the regional government, sernanp
- ❖ Me puede explicar la situación cuando comenzó a trabajar en Lago Sandoval?
 - Quienes fueron los actores clave en la gestión y uso del Lago Sandoval?
 - Por qué ellos estaban involucrados? Cual motivos?
 - Me Puedes explicar los papeles de diferentes actores y la relaciones entre ellos?
 - Cuáles son sus intereses?
 - Como son diferentes o similares a sus intereses?
 - Con quienes cooperan? Que coaliciones se pueden identificar y sobre qué base?

- Como describe las relaciones entre su institución, los diferentes operadores, los moradores, el gobierno regional, el SERNANP?
- ❖ Which new actors entered? How did they change the relations, what happened with the stability?
- ❖ Que nuevos actores entraron? Como cambian las relaciones, que paso con la estabilidad?
- ❖ Did your role or position change? What do you think about that?
- ❖ Cambió su papel? Qué piensa usted de eso?
- ❖ Do you experience groupings of actors with similar interests or who bring in a particular resource? If so, what advantages, benefits do the group members wish to get form the group?
 - What effect does this have?
- ❖ Experimenta agrupaciones de actores con intereses similares o que traen recurso en particular? Si es así qué ventajas y beneficios los miembros del grupo desea obtener?
 - Qué efecto tiene esto?
- ❖ Can you distinguish several phases in managing/steering the tourism development of Lago Sandoval?
 - How did the relations between market, state, and civil society changed?
- ❖ Puede distinguir varias fases en la gestión/dirección de desarrollo turístico del Lago Sandoval?
 - Como las relaciones entre estado, mercado y sociedad civil ha cambiado?

RULES

- ❖ Which important events (of the last 40 years) happened that changed the policy direction?
 - political, economic changes in Peru?
 - Who determined those changes?
- ❖ Que eventos importantes pasaron (de los pasados 40 años) que cambió la dirección de la política por Lago Sandoval?
 - Algún cambio político, económico de Peru
 - Quien determina esos cambios?
- ❖ What kind of policies where there on sustainable tourism?
- ❖ Qué tipo de políticas sobre turismo sostenible hay?
- ❖ What were the most important reforms?
 - Which policy changes had a mayor influence on your operations?
 - What effect did they have?
 - Who designed them?
 - Who supported them, who didn't?
 - What new rules/laws developed and how do these new rules benefit the stakeholders?

- What changed after the implementation?
- Did the actors follow the rules?
- ❖ Cuáles son las reformas más importantes?
 - Que cambios políticas tuvo una mayor influencia en sus operaciones?
 - Cual efecto tenían?
 - Quien los diseñó?
 - Quien los apoyo? Quien no?
 - Cual nuevos reglas/leyes elaboradas y como benefician estas nuevas reglas a los actores?
 - Que cambió después de la implementación?
 - Los actores siguen las reglas?
- ❖ Which informal rules can you identify in Sandoval? How did they interact with the formal rules?
- ❖ Cual reglas informales se puede identificar en Sandoval? ¿Cómo interactúan con las reglas formales?
- ❖ What are the core principles that that guide, restrict or control actions of actors involved in lago Sandoval?
- ❖ Cuáles son los principios básicos que guía, limitar o controlar las acciones de los actores involucrados en Lago Sandoval?
- ❖ What are the norms, guidelines and regulations that dictate how actors can become involved in tourism at Lago Sandoval?
- ❖ Cuáles son las normas, directrices y reglamentos que dictan como los actores pueden participar en el turismo en Lago Sandoval?
- ❖ What material/documents are recognized by the legal structures?
- ❖ Que material/documentos son reconocidos por las estructuras legales?
- ❖ How are decisions made about new policies?
 - How do you feel about that?
- ❖ Cómo se hacen decisiones sobre nuevas políticas?
 - Como se siente al respecto? Que piensas de eso?
- ❖ Which type of policy instruments are used in the management of Sandoval?

Qué tipo de instrumentos de política se utilizan en la gestión de Sandoval?

RESOURCES, POWER & INFLUENCE

- ❖ How would you describe your access, possession or ability to mobilize resources?
 - Money, knowledge, skills, land, religious, contacts, lobbypower
 - And that of other actors?
 - How are the resources shared among the stakeholders?

- How are the resources distributed? Who owns them?
- How do they use these resources to pursue their interests?
- ❖ Cómo describiría su acceso, posesión o capacidad de movilizar recursos?
 - Dinero, conocimiento, habilidades, terreno o propiedad, otros derechos, religiosos, contactos, poder de hacer lobby?
 - Y de otros actores?
 - Como se comparten los recursos entre los involucrados?
 - Como se distribuyen los recursos? Quien es el propietario?
 - Como usan estos recursos?
- ❖ How influential are the different actors and yourself?
 - What do you think about that?
 - Who determines policy outcomes and how?
 - What influence do other parties have over policy changes?
 - Has the influence/involvement changed over the years?
- ❖ Que influencia tienen los diferentes actores y tu mismo?
 - Que piensa sobre eso?
 - Quien determina los resultados de las políticas y cómo?
 - Que influencia tienen otros partidos sobre los cambios de política?
 - Ha cambiado la influencia/participación durante los años?
- ❖ How are responsibilities distributed?
- ❖ Como se distribuyen las responsabilidades del conservación y manejo de Sandoval?
- ❖ Can you describe the autonomy and dependency of actors?
- ❖ Puede describir la autonomía y la dependencia de los actores?
- ❖ Have new resources been developed?
- ❖ Se han desarrollado nuevos recursos?
- ❖ What do actors do to achieve their personal strategic objectives?
 - How influential are they?
 - on what basis?
- ❖ Que hacen los actores para lograr sus objetivos estratégicos?
 - Cual influencia tienen ellos
 - En qué base?

DISCOURSES

- ❖ Can you explain me again about the policies that were designed?
 - Why were these policies designed?
 - What were the main ideas behind the policies and policy goals?

- ❖ Me puede explicar otra vez sobre las políticas que fueron diseñadas?
 - Por qué se diseñaron estas políticas?
 - Cuáles eran las ideas principales que subyacen a las políticas?

- ❖ What were the dominant ideas? What other ideas were there?
 - What were the ideas about tourism/conservation/development specifically? New concepts? Perceptions?
- ❖ Cuáles eran las ideas dominantes? Que otras ideas hay?
 - Cuáles eran las ideas sobre turismo, conservación, desarrollo específicamente? Nuevos conceptos? Percepciones?

- ❖ Where did these ideas come from?
 - Global agenda's?/political context peru?
- ❖ De donde vienen estas ideas?
 - Agendas global, regionales, locales

- ❖ Who share the same ideas?
 - Who agreed with these ideas/policies and who didn't? Why?
- ❖ Quienes comparten las mismas ideas?
 - Quien estuvo de acuerdo con estas ideas/políticas y quién no? Por qué?

- ❖ Which ideas influenced and changed the policies?
- ❖ Cuales ideas guio el proceso de cambio?

- ❖ Which/who's interests were served by these policies?
- ❖ Cual o quienes intereses son intereses han sido servidos por estas políticas?

APPENDIX III: INTERVIEWEES

RESPONDENT NR.	CODE	GROUP
1	INH1	
2	INH2	INHABITANTS
3	INH3	(including second and third generation)
4	INH4	
5	INH5	
6	GOV1	
7	GOV2	GOVERNMENT
8	GOV3	(DIRCETUR, SERANP)
9	NGO1	
10	NGO2	NGOs
11	NGO3	(FZS, AIDER, SE Peru)
12	TUR1	
13	TUR2	
14	TUR3	
15	TUR4	
16	TUR5	TOURISM SECTOR
17	TUR6	(including new and older lodges, tour operators, travel agencies, associations)
18	TUR7	
19	TUR8	
20	TUR8	
21	TUR9	
22	TUR10	
23	TUR11	
24	TUR12	
25	GUI1	GUIDES
26	GUI2	(including representatives of the association of guides)
27	GUI3	
28	EXP1	EXPERTS
29	EXP2	(including professors and consultants)

2. Identificación de la Atención Brindada

Descripción: A las autoridades, responsables por el desarrollo del turismo en la zona de Dios: Uds. deberían sentir vergüenza y renunciar a sus cargos por incompetentes. Esto es la tercera vez que visito el lago Semucchajal y cada vez encuentro peor e infranqueable el camino al lago. A caso un camino elevado de tables elevando el dinero. Como Uds. así van a contra-restar la economía, ni siquiera logrando un adecuado acceso al lugar turístico más visitado del departamento. Que pena!

Firma del Usuario

3. Acciones adoptadas por la Entidad

Detalle:

2. Identificación de la Atención Brindada

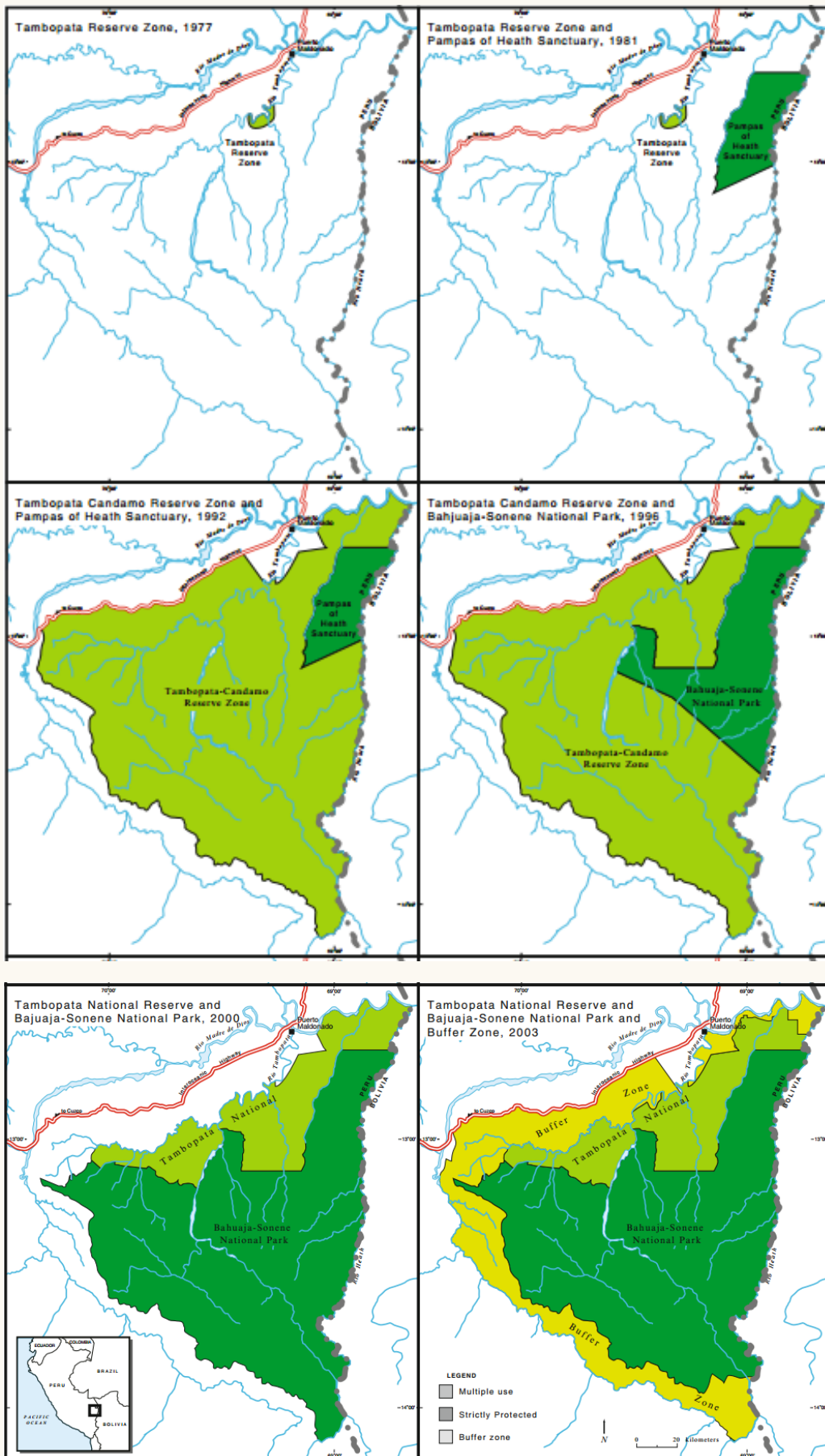
Descripción: En estos últimos años la trocha hacia el más visitado lago de la Reserva Tambopata, está en condiciones lamentables muchos huecos, no existe un camino seco, pequeñas lluvias dejan con extremo barro, muy resbaloso y altamente peligroso para viajeros de edad o con sobre peso, todos los días se nos caen y lastiman viajeros, esto tiene q' mejorar porque no es nada q' siendo un lago tan visitado

Firma del Usuario

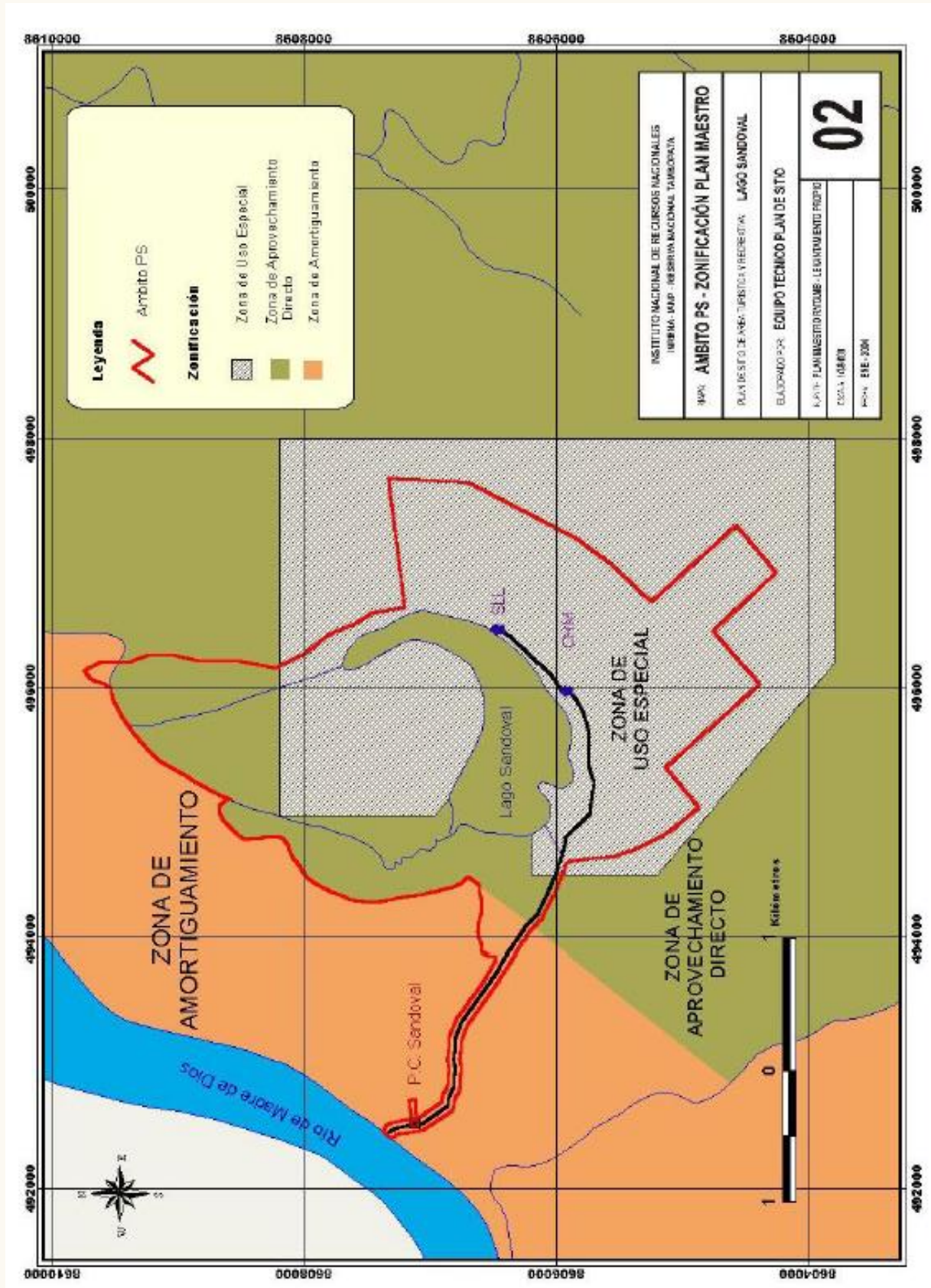
3. Acciones adoptadas por la Entidad

Detalle:

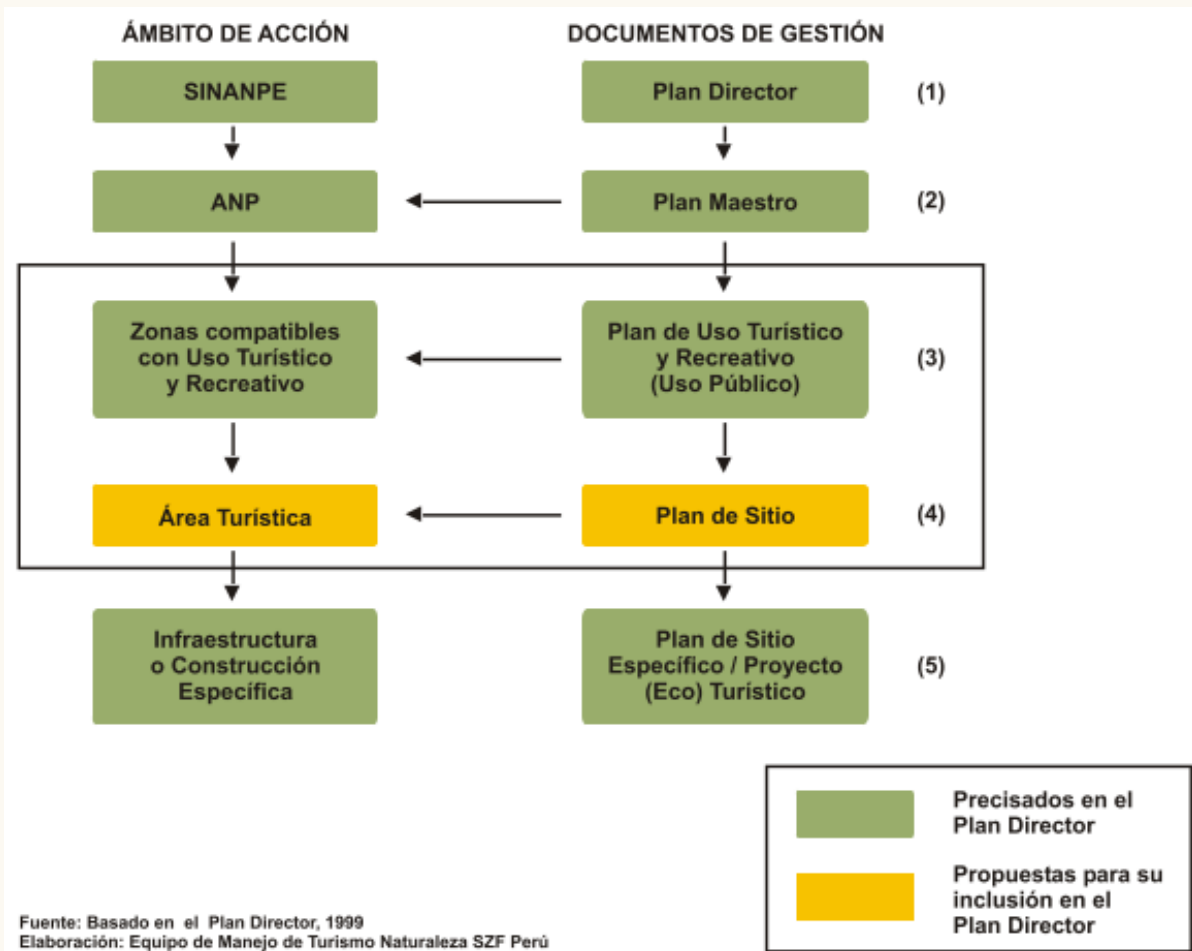
APPENDIX V: ZONING PROCESS OF THE TAMBOPATA NATIONAL RESERVE



APPENDIX VI: ZONING OF SECTOR SANDOVAL IN MASTER PLAN 2004-2008



APPENDIX VII: PLANNING LEVELS AND CORRESPONDING MANAGEMENT PLANS



APPENDIX VIII: ZONING OF SECTOR SANDOVAL IN PLAN DE SITIO

