

Fuelling the tragedy of the commons in  
Indigenous Community Conserved Areas:  
A case study from the Southern Isthmus,  
Mexico.

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# Summary

This dissertation presents the first evaluation of a VCA in terms of its multi-scalar governance approach with reference to the principles of the ICCAs category and the CPR principles for institutional arrangements for sustainable natural resource management. The research techniques applied to develop this research included: (1) document revision on national legislation for protected establishment and management; (2) forty four semi-structured interviews with conservation practitioners at different administrative levels, as well as (3) direct observations, 32 semi-structured and unstructured interviews to conform an in-depth case study of the VCA of El Reten, in San Miguel Chimalapa, Oaxaca, Mexico.

Devolution processes in El Reten were analysed in terms of the bundles of rights or powers that local community holds for natural resource management after the certification of El Reten and during its early implementation. The issues examined by these dissertation have explored for the first time who is entitled to “give” which powers back to local communities; the actual procedures that allow these approaches to be called community-driven when ICCAs can only retain “power” by conforming to externally defined criteria, and finally, if devolution is happening, the way “bundles of rights” - or powers - (Ribot and Peluso 2003) interact with external criteria for conservation. The case study of El Reten provides clear examples of the implications of the formalisation of a VCA over local governance structures. These decentralised approaches for conservation are also subject to elite capture and the trade-offs between the availability of economic resources and local autonomy, as well as between administrative efficiency and equity and legitimacy. The VCA in El Reten represents the ideal scenario for the tragedy of the commons (Hardin 1968), where the establishment of a VCA, the arrival of economic incentives and the overlooking of the local political context by conservation agencies is fuelling the tragedy instead of alleviating it. This dissertation shows this explicitly in the context of the newly developed VCA category in Mexico for the first time.

# Section I: Introduction, Theoretical Background and Research Design

## Chapter 1. Introduction

### 1.1 Introduction

Since more than a hundred years ago and to the present day, the most common form of conservation is the establishment of protected areas (Adams et al. 2004). From that point on, biodiversity conservation has been related to “pristine nature” (Adams and Hutton 2007) free from human influence, and multiple efforts and resources have been invested by states and numerous agencies to keep it that way. Even though this model was originally applied in landscapes where human populations were overseen by colonisation processes, this conception does not fit the reality of the majority of protected areas around the world. As a result, centralised, top-down conservation has provided short-lived results and have further marginalised rural people through exclusion and coercion (Adams and Hutton 2007; Armitage et al. 2012; Colchester 2004; Pimbert and Pretty 1995). Hence, despite of their importance in maintaining forests cover and numerous species around the world, protected areas face a number of challenges and criticisms due to their negative effects on local people and livelihoods.

Since the 1980s, it has been increasingly recognised that most forested areas in the world that are now considered priorities for conservation have been inhabited and managed by local people through centuries (Adams and Hulme 2001; Andrew-Eissen and Bisong 2009; Boege 2008; Lele et al. 2010; Nagendra et al. 2009; Toledo 2003). Today, after numerous examples of how both the state and the private companies have not achieved to reduce forest cover loss nor to manage natural resources sustainably (Andam et al. 2008; Barber et al. 2011; Ellis and Porter-Bolland 2008), the link between local institutions and the achievement of conservation and social justice is increasingly acknowledged (Agrawal and Gibson 1999; Dietz et al. 2003). Along with the increasing understanding of social-ecological systems, a copious literature and conservation practitioners have called for a change and transformation in science, philosophy and ecology itself in order

to pursue environmental justice (Pimbert and Pretty 1995; Andrew-Essien and Bisong 2009; Bishop et al. 1995; Brockington and Igoe 2006; Brockington et al. 2008: 93; Colchester 2004; Dowie 2005; Duffy 2005; Fairhead and Leach 1996; Pujadas and Castillo 2007; West et al. 2006). This has opened the door to the recognition of the importance of local people for conservation and the development of rights-based approaches that aim to make biodiversity conservation compatible with local livelihoods, cultural practices and self-determination. Nowadays, policy-makers and practitioners acknowledge that the design, establishment and implementation of protected areas' networks should consider the local cultural practices for natural resources management as well as local peoples' rights to be involved in the decisions that directly affect their livelihoods.

Human and indigenous rights concerns have been some of the main drivers for the development of policy that acknowledges indigenous peoples and local communities as key actors for biodiversity conservation and sustainable development. This is reflected in international policy instruments such as article 8j of the CBD and the COP after Río (CBD/COP 1992), which states that every signatory country is obliged to integrate, to respect and to preserve the knowledge, innovation and practices as well as the lifestyles relevant to biodiversity conservation and sustainable use into national legislation. Similarly, the IUCN's Fifth World Parks Congress in Durban (2003) and the CBD CoP7 in Kuala Lumpur (2004) have been two milestones in the current typology of protected areas governance arrangements, based on who acts as the recipient of authority and responsibility and who is held accountable (Berkes 2009, Borrini-Feyerabend et al. 2004, IUCN/CEESP 2012). The new IUCN typology enhances the acknowledgement of local community's rights (e.g. human rights) to meet their socio-economic and cultural needs as well as their role in protecting ecosystems around the globe (Pujadas and Castillo 2007). Hence, the latest policy initiative on this regard is that of the formal recognition of Indigenous and Community Conserved Areas (ICCAs), which are defined as:

*“natural and/or modified ecosystems containing significant biodiversity values, ecological services and cultural values, voluntarily conserved by*



*indigenous peoples and local communities, both sedentary and mobile, through customary laws or other effective means.” (IUCN 2011)*

Although they are the oldest conservation practice, ICCAs are also the least understood. Currently, governance arrangements for ICCAs are facing several challenges since legal, institutional and procedural frameworks are not adapted to effectively support them (Borrini-Feyerabend et al. 2010). As a new form of governance, ICCAs are argued to rely on increasingly self-regulating social systems. Hence, the power distribution tends to be less direct and based on incentives as well as on more informal institutional control than state-managed protected areas. Although multi-scale governance arrangements, such as ICCAs, seem to be less hierarchical, they pose new complexities as well.

Therefore, this thesis examines issues of multi-scalar governance in relation to ICCAs. ICCAs are distinguished principally by the role of the local community as the main power-holder – the “major player” in decision-making and implementation – and the category is intended to provide a mechanism for external recognition of and support for local community contributions to the global conservation project. In the context of developing countries, this often includes a return of powers to indigenous and traditional communities over their lands and resources. However this raises a number of unexamined theoretical and practical questions in relation to concepts of power and governance. For example, who is entitled to “give” which powers back to local communities? In what sense can local communities be said to remain the main power-holders in ICCAs if they can only retain “power” by conforming to externally defined criteria? Furthermore, if such a process is possible, how can devolution of a “bundle of rights” - or powers - (Ribot and Peluso 2003) be reconciled with external criteria specifically related to conservation outcomes?

These issues will be examined in detail for the first time using an in-depth case study of an ICCA in the Southern Isthmus region of Mexico known as El Cordon del Reten. Mexico was chosen as the site for the case study because it is considered one of the countries with the most developed legal frameworks to formally acknowledge ICCAs and has an extensive inventory of them (Martin et al. 2010;

2011). The theoretical framework relevant for this analysis is concerned with the very nature of power, exploring the actual possibilities for power devolution from the state to local communities through participatory efforts. This thesis draws on the critiques that the development and political ecology literature have developed about the issue of participation, starting from the different interpretations of what participation actually means, what purposes it serves to, and its implications in terms of equity and legitimacy. As it is often the case, without a careful reflection, it could be that participatory approaches to conservation are replicating hierarchical schemes and legitimizing official discourses, ways to know and realities with new facades. In this sense, it is relevant to analyse how the legal frameworks for protected areas governance, with emphasis on the notions of devolution and scale are inclusive or not of other worldviews and the actual role that local structures for natural resources management play in the overall process, as well as the dangers for new forms of elite capture. Finally, all these arrangements and the “*messiness of policy in practice*” (Leach et al. 2007) happen over territories and natural resources managed by indigenous or rural communities. Therefore, the caveats when working at the community level and the common-pool resource theory are helpful to explain the simplifications made by policy-makers and practitioners and their relation to the principles that are likely to define the outcomes of such efforts in terms of legitimacy, equity and sustainability in the Mexican interpretation of ICCAs.

The Southern Isthmus region of Mexico provides the empirical background for this research. The diverse land tenure arrangements of indigenous communities, *ejidos*, private owners and state managed protected areas have created a mosaic of governance arrangements with different outcomes in social and biodiversity conservation terms. In order to return decision-making powers to communities and private owners, national and regional policies have been developed to support the creation of voluntary conserved areas at national and regional level. These policies also aim to enhance multi-scalar conservation initiatives within biological corridors. The trend has been reflected in the on-going establishment of non-state managed Indigenous Community Conserved Areas (ICCAs) and private reserves through voluntary conservation certifications provided by the

government; by ecological easements (civil contracts) between landowners and NGOs, and other legal mechanisms available. These certifications and ecological easements can help the landowners to gain social recognition and economic benefits such as those from ecotourism and Payments for Environmental Services (PES), as well as access to development programmes. However, in the local context, power over land and access to natural resources, decision-making and its enforcement are highly contested.

## **1.2 Thesis aims and structure**

The aim of this research is to explore in depth for the first time, issues of power and governance in relation to the recent policy concept of ICCAs and the practical implications for multi-scalar governance arrangements. Through an in-depth case study of El Cordon del Reten, in the Southern Isthmus region of Mexico, and attending to the multi-scalar governance nature of the subject, the research was divided in three parts, representing different scales of governance, namely:

- (1) The national level: A review of Mexican national protected areas legislation.
- (2) The regional level: an exploration of the perspectives of conservation professionals working in the Southern Isthmus region of Mexico concerning community participation and governance.
- (3) The local level: an in-depth local case study of the implementation of one ICCA through a multi-scalar governance arrangement.

The structure of the thesis has been framed according to these three different levels. Chapter 2 presents the theoretical framework that informed the data collection and analysis; it also justifies the focus of the research on the Southern Isthmus region of Mexico, the most bio-culturally diverse of the country. Then, Chapter 3 describes the research design, the study area and briefly presents some methodological reflections from the fieldwork and their likely effect on the research itself. The following sections disentangle the different scales involved in protected areas management in the region. In Section II, Chapter 4 explores the

national and regional aspects of conservation governance, defining the legal frameworks relevant for conservation governance in the region. Chapter 5 explores the organisational frameworks for conservation governance through the experiences of conservation practitioners in the region.

Section III (Chapters 6 and 7) analyses the implementation of a multi-scalar governance arrangement and the implications for relevant governance aspects of conservation processes. It does so through an in-depth case study of the ICCA El Cordon del Reten (El Reten, hereafter), in the South-Isthmus region. Chapter 6 defines the history and background of El Reten, while exploring the formal governance structures and issues of scale and decision-making in the community of San Miguel Chimalapa, where El Reten is located. Chapter 7 analyses the issues and challenges found in El Reten in relation to multi-scalar governance arrangements in conservation practice for benefit-sharing, accountability, transparency, equity and legitimacy. Finally, Section IV presents the discussion and conclusions of this research in terms of: (1) the issues encountered in terms of multi-scalar governance structures, decision-making, benefit-sharing; (2) the implications of this so-called devolution (Ribot and Peluso 2003) in terms of the equity, legitimacy and sustainability in community-managed landscapes, according to the CPR literature, and (3) the implications of formalisation of ICCAs for local governance structures for natural resources management.

## **Chapter 2. Theoretical Background**

### **2.1 Protected areas governance and multi-scalar arrangements: complex arrangements to fit reality**

#### **2.1.1 Bittersweet effects and shifting paradigms in protected areas**

Almost every human society identifies areas subject to protection or limited access, either for the public good or for the benefit of the elite (Bishop et al. 1995). The importance of protected areas is recognised for safeguarding biological diversity and ecological processes, as well as providing shelter to ecological systems. Furthermore, protected areas allow the development of activities to fulfil scientific, educational, recreational and spiritual needs (Brandon et al. 2005). The protected areas approach widespread since the late 19th century is based on the division between “natural” and “human”, and emerged from Western thought, which places nature as something pristine and apart from humans (Adams and Hutton 2007). Ecology, also as a result of Western thought, has long provided the arguments for exclusionary approaches for conservation. Therefore, on an ecological basis, some conservation practitioners still call for the creation, when possible, of areas subject to state protection with few or no people inside (Wilshusen et al. 2002). The argument is that these areas are more desirable for long-term species conservation and the maintenance of ecological and evolutionary processes (Terborgh 1999).

Despite their ecological importance, protected areas are a much questioned approach to biodiversity conservation and face a number of challenges. The pressures of human population growth and the constant expansion of economic activities that enhance land use change makes protected areas increasingly isolated and confined to the most inaccessible lands (Nagendra 2009; Naughton-Treves et al. 2005; Oldfield et al. 2004; Robson 2007). In ecological terms, by overlooking the wider landscape dynamics, many protected areas are affected by the fact that ecosystem processes and environmental degradation cannot be limited by artificial boundaries. In management terms, protected areas can cover multiple ecological and administrative scales and have overlapping designations, making planning, implementation and adaptation difficult for the agencies in

charge. Furthermore, park managers and staff often lack capacities, resources and legal faculties to carry out management and enforcement duties (Wells and McShane 2004). Also politically, protected areas represent use restrictions and require bureaucratic and often lengthy negotiation processes for their designation. During this process, when economic and political interests are considered, levels of protection tend to be minimised (Bishop et al. 1995). Therefore, protected areas agencies and managers around the world face constant ecological, management, and political challenges to achieve conservation targets.

Protected area effectiveness is another source of debate. In a constant effort to identify the “best” and “most cost-effective” approaches for biodiversity conservation, numerous researchers are engaged in measuring protected areas effectiveness (Andam et al. 2008; Naughton-Treves et al. 2005; Nagendra 2009; Porter-Bolland et al. 2012). Yet, consistent evaluations are elusive due to the multiplicity of factors that affect conservation outcomes as well as the selection of parameters and indicators evaluated. Thus, whether a particular category of protected area is considered effective or not greatly depends on the scale, parameters and indicators selected by researchers. In terms of halting deforestation for example, Andam et al. (2008) argue that protected areas globally have reduced deforestation by 10%. This estimation was made after considering the different covariates that have an effect on the impact of conservation efforts and allowed researchers to refute previous estimates that calculated protected areas avoided deforestation by 65%. Despite the lack of consensus about their effectiveness, even the most conservative measures acknowledge that the poor performance of state-managed protected areas is often explained by the mismatch between conservation objectives and development policies, agricultural expansion, infrastructure and population growth (Bathari and Hammig 1998; Porter-Bolland et al. 2012; Wells and McShane 2004; Wilshusen et al. 2002). Nevertheless, as *“[i]ncreasingly powerful economic and political forces shape conservation knowledge, discourses, funding and practices”* (Pimbert and Pretty 1995), the establishment of protected areas remains the main conservation strategy at the international policy level. This is reflected in the current CBD target

for global conservation in which signatory countries have committed to have a 17% cover of their land surface set as protected areas by 2020 (CBD, Aichi 2010).

Notwithstanding the importance of the limitations mentioned above, the biggest criticism that top-down, centralised conservation faces is that which emerges from its effects on local people and livelihoods. The transition from total exclusion to grass-roots conservation efforts has a trajectory that started more than a hundred years ago in the United States (Adams and Hutton 2007). Since then, the establishment of protected areas around the world followed a model that has invested efforts and resources to maintain human-free and “pristine” landscapes (Andrade and Rhodes 2012). As a result of this perspective, the design and establishment of protected areas have not traditionally considered social issues such as land tenure, access to natural resources or conflicts about them (Adams and Hutton 2007; Cowling et al. 2003). Protected areas’ policies and practices have long neglected local knowledge, value and management systems, local institutions as well as discouraged any active local participation. They have also made use of expropriation, displacement, exclusion and restriction of traditional and vital natural resource uses, leading to disempowerment, cultural erosion, human rights infringements and contravention of international laws (Andrew-Essien and Bisong 2009; Armitage et al. 2012; Bishop et al. 1995; Brockington and Igoe 2006; Brockington et al. 2008: 93; Colchester 2004; Dowie 2005; Duffy 2005; Fairhead and Leach 1996; Pimbert and Pretty 1995; Pujadas and Castillo 2007; West et al. 2006). Therefore, even though protected areas offer benefits at the global level, centralised, top-down conservation governance has often succeeded to supply partial and short-term results by disrupting local livelihoods and creating conflicts between managers and the people living within and around protected areas (Andrade and Rhodes 2012; Armitage et al. 2012; Brandon et al. 2005).

### **2.1.2 Acknowledging the roles of local and indigenous peoples in protected areas governance**

Since 1962, when the United Nations began the standardisation of protected areas, the International Union for the Conservation of Nature (IUCN) has been

continuously developing a categorisation of protected areas according to their management approach (Adams and Hutton 2007). Current IUCN categories range from I. Strict protected areas and II. National Parks (completely exclusionary), to VI. Managed Resource Protected Areas that allow human societies to make use of resources or services that ecosystems provide (Borrini-Feyerabend et al. 2010). Additionally to these protected areas categories, since 1970s, UNESCO developed the concept of Biosphere Reserve, which combines different management categories from strict conservation areas, called core zones, to influence areas where human settlements and natural resources use are allowed but regulated, generally by the state (Adams and Hutton 2007).

By 1980s, as a result of the widespread criticism towards exclusionary categories and the need to embrace wider landscape dynamics, the discourse of protected areas had changed to inclusive approaches (Adams and Hulme 2001). Since then, conservation and natural resources management initiatives have gradually shifted accordingly towards decentralised natural resources management (Blom et al. 2010; Ribot et al. 2006). As draconian approaches for conservation are no-longer openly accepted, there is also a wide agreement about the fact that performance of protected areas management is the result of the interplay between international and national policies, local institutional arrangements and the networks developed for implementation (Adger 2001; Armitage et al. 2012; Berkes 2007, 2009; Ostrom et al. 1999). Furthermore, local community participation in the decision-making process is the only variable that significantly relates to compliance with the regulations in protected areas (Andrade and Rhodes 2012). According to this understanding, the current IUCN categorisation has included governance as another dimension in the management matrix explained before. The governance dimension acknowledges that other actors than the state, such as private owners and local communities, can establish and interact with each other to run protected areas. The term “governance” has been defined as:

*“...the interactions among institutions, processes [social, ecological and technological] and traditions that determine how power is exercised, how decisions are taken on issues of public and often private concern,*



*and how citizens or other stakeholders have their say” (Abrams et al. 2003).*

Since the late 1980's, when the concept of governance was carved, until today, new governance arrangements have been applied in different subjects such as public administration, social policy, economics, development and, relevant for this research, biodiversity conservation and protected areas management. Conservation management and governance are different; the former refers to operational decisions targeting specific conservation results, while the latter implies broad processes, institutions and decision-making affecting the environment (Armitage et al. 2012). Governance is present wherever there are self-organised people – formally and informally– pursuing their goals through the development of rules and relationships with each other (Abrams et al. 2003). The term emerged within the development disciplines after the classical model of government/civil society proved to be inefficient when implementing plans and programmes. It was also a response to social movements campaigning for the devolution of decision-making power (Abrams et al. 2003). Governance is relevant at different aspects of the social-ecological systems. The definition of common goals, how the environment is perceived; which perception prevails, and what features of the system are maintained, are all subjective issues related to governance (Fischer et al. 2007; Leach et al. 2007).

The increasing recognition of the importance of such interactions has enhanced a transition from centralized governance to the emergence of governance arrangements with diversified networks for the different stages of protected areas management through institutional collaboration, implying delegation of authority and devolutionary processes (Lockwood 2010). Hence, in order to define who holds the decision-making power as well as who is accountable, protected areas governance has been clustered into four main categories (Borrini-Feyerabend et al. 2002; Borrini-Feyerabend et al. 2010):

- A. Governance led by government. State agencies are the principal recipient of authority, responsibility and accountability. The level of government may vary and the state may or not have the legal

obligation to consult management decisions.

- B. Shared governance, where formal authority, responsibility and accountability still rest principally in one agency but there is substantial collaboration among two different “agencies” that recognize each other as legitimate to share the decision-making process.
- C. Private governance. Authority, responsibility and accountability rest primarily in corporations, private owners or are delegated by the legal owner to one or more organisations.
- D. Governance by indigenous peoples and local communities where these groups or their representatives hold the principal authority, responsibility and accountability of the areas and resources that they have usually inhabited and co-evolved with. It is the customs around the area that define its conservation management objective (categories I to VI, see Fig. 2.1).

Current conservation policies and practitioners tend to embrace a vision where the diversity of land uses, local livelihoods, human rights and access capacities should be acknowledged and considered in management decisions at a landscape level (Bray et al. 2008; Naughton-Treves et al. 2005; Porter-Bolland et al. 2012). Accordingly, the categorisation of protected areas governance clearly acknowledges the role that local communities and indigenous peoples have as well as the multi-stake holders’ arrangements that can take place in natural resources management (Borrini-Feyerabend et al. 2002; Kothari et al. 2012), but these categories fall into the trap of viewing governance as a single entity rather than a series of interactions.

Governance Types	A. Governance by government			B. Shared governance			C. Private governance			D. Governance by indigenous peoples and local communities	
	Federal or national ministry or agency	Sub-national ministry or agency	Government- delegated management	Trans-boundary management	Collaborative management (pluralistic influence)	Joint management (Pluralistic board)	Declared and run by individual land-owner	... by non-profit organisation	...by for profit organisation	Indigenous bio-cultural areas and territories- declared and run by indigenous peoples	Community conserved areas- declared and run by local communities
Ia- Strict Nature Reserve											
Ib- Wilderness area											
II- National Park											
III- Natural Monument											
IV- Habitat / Species Management											
V- Protected Landscape											
VI- Managed Resource Protected Area											

**Figure 2.1. Governance and Management IUCN Categories from IUCN/CEESP (2010).**

The process of implementation has been and still is a learning curve leading to the emergence of a number of inclusive and participatory approaches aimed to conciliate conservation goals with local rights, needs and aspirations (Blom et al. 2010; Pujadas and Castillo 2007). As a result, a wide range of policy and sited-based initiatives has emerged under different names such as integrated conservation and development projects, community-based natural resources management, community-managed forests, community-based conservation, eco-development, eco-tourism, communal areas management programme for natural resources (CAMPFIRE) among others (Wells and McShane 2004). These approaches have emerged on the founding assumption that people whose livelihoods directly depend on the natural resources have more interest in sustainable use than state authorities and corporations (Li 2002). For example, Integrated Conservation and Development Projects are one approach that departed from the assumption that poor forest dependent people were the biggest pressure to forests. Hence, through adaptive management, vertical integration and

site-level work these efforts have aimed to provide alternatives for income and to build local support to protected areas by sharing social and economic benefits (Blom et al. 2010; Wells and McShane 2004). Simultaneously, these efforts aim also to contribute to national and international conservation goals, increasing the land surface under some kind of protection or management but with consideration of their local contexts. Nevertheless, the link between poverty and conservation is not as straightforward as the approach originally suggested (Adams et al. 2004), leading to ambiguous results, disappointment and criticism of ICDPs. Yet, the search for alternatives to top-down, centralised conservation has enhanced a constant exploration to more locally appropriate approaches.

### **2.1.3 Indigenous and Community Conserved Areas (ICCAs): multi-scalar governance arrangements for conservation**

Many priority areas for conservation are located within lands managed by indigenous and traditional peoples, which in many circumstances have contributed meaningfully to the sustainable use and conservation of ecosystems globally (Andrew-Eissen and Bisong 2009; Boege 2008; Toledo 2003). It has been estimated that the forested area conserved by communities may cover as much as that covered by state protected areas around the globe (12% of terrestrial surface, Molnar et al. 2004). After IUCN's Fifth World Parks Congress in Durban (2003), IUCN adopted the new governance typology that acknowledges the importance of Indigenous and Community Conserved Areas (ICCAs), defined as:

*"...natural and modified ecosystems including significant biodiversity, geological diversity, ecological services and cultural values voluntarily conserved by indigenous peoples and local communities, both sedentary and mobile, through customary laws or other effective means."* (IUCN 2011)

Despite the broad of the term, ICCAs have three key features that characterise them (adapted from Kothari et al. 2012):

- (1) *“A well-defined people or community possesses a close and profound relation with an equally well-defined site and/or species; this is a relation rooted in culture, sense of identity and/or dependence for livelihood and well-being.*
- (2) *The people or community is the major player in decision-making and implementation regarding the governance and management of the site and/or species, implying that local institutions have the de facto and/or the de jure capacity to develop and enforce decisions. Other right-holders and stakeholders may collaborate as partners—especially when the land is owned by the state—but the local decisions and management efforts are predominant.*
- (3) *The people’s or community’s management decisions and efforts lead to the conservation of habitats, species, genetic diversity, ecological functions/benefits and associated cultural values, even when the conscious objectives of management are not conservation alone or per se.”*

As a rights-based approach, ICCAs are interlinked with local livelihoods and the spiritual and material values of local cultures, as well as satisfying the needs of many peoples around the world for water, nutrition, medicine, shelter, livelihoods, recreation and spiritual needs. These values, perceptions and practices developed through time in a wide range of specific social and ecological situations, and such diversity constitutes the main asset of ICCAs (Borrini-Feyerabend et al. 2010). Besides, ICCAs are argued to protect wildlife; to sustain ecosystems and connectivity between ecosystem services and users, and to provide shelter for agro-biodiversity and the cultural practices associated to it in areas outside of the official protected area systems (Abrams et al. 2003; Borrini-Feyerabend et al. 2010).

The ICCA concept implies the devolution of decision-making power to local communities in natural resource management and conservation efforts. The decentralisation of protected areas and natural resource management from the state to local actors is being supported by literature and practitioners that emphasise the importance of community-based conservation. The supporting

literature is mainly focused on the local institutional arrangements for natural resource management that sometimes evolved before the term “protected area” was carved (Berkes 2009; Bray et al. 2003; Borrini-Feyerabend et al. 2004; Cooke and Kothari 2001; Merino-Perez 2001; Ostrom 2002; Papp and Alcorn 2013; Porter-Bolland et al. 2012; Pimbert and Pretty 1995). Furthermore, recent research argues that community-based management can be as effective as protected areas on the long-term conservation of forest cover in the tropics (Porter-Bolland et al. 2012). Their results show that community managed forests, as a cluster, have lower deforestation rates and respond better to development and other pressures thanks to local institutional arrangements for natural resource management (Ellis and Porter-Bolland 2008).

ICCAs are, thus, the oldest conservation practice but also the least understood. As previously mentioned, mainstream conservation and development policies have largely neglected and undermined local arrangements for natural resource access and management over the past two centuries. Furthermore, ideal governance types can be so general and contain so little detailed and meaningful content (Dietz et al. 2003; Ostrom and Cox 2010). Nowadays, legal, institutional and procedural frameworks are not adapted to effectively support the devolution of decision-making power to local and indigenous communities (Borrini-Feyerabend et al. 2004; Borrini-Feyerabend et al. 2010). Moreover, customary rules and organisations managing natural resources often possess no statutory legal recognition or sanctioning power (Borrini-Feyerabend et al. 2004). In many cases, customary institutions have been replaced or transformed, affecting the governance systems and the community’s capacity to manage their resources sustainably, making genuine ICCAs increasingly threatened (Borrini-Feyerabend et al. 2004; ICCA forum 2010). Furthermore, as indigenous peoples, communities, knowledge and practices increasingly blend with different and external knowledge, values, practices and technologies, ICCAs face the challenge to cope with the changes and rhythms that multi-scalar arrangements promote (Borrini-Feyerabend et al. 2010). Finally, the effects that land struggles, the pressure of large-scale industries and infrastructure such as mono-cultures (McCarthy and Cramb 2009), mining and hydro-electrical dams have over indigenous and local

territories (UN, Anaya 2013) further complicate the survival of ICCAs. Thus, the integration of ICCAs to protected areas systems requires a shift at all administrative scales to have an enhanced appreciation towards local capacities, knowledge and institutions and the multiple faces ICCAs can display (Berkes 2009).

In other cases, however, ICCAs have been able to make use of the new conditions, to establish new alliances to adapt and to continue existing (Borrini-Feyerabend et al. 2010). Therefore, ICCAs management can also involve diverse agents and institutions in multi-scalar arrangements but with the distinctive fact that indigenous and local communities are the main decision-makers in the process (Berkes 2009). In fact, most ICCAs could be classified as shared-management, since there is always some degree of involvement of the nation-state and others, such as academics and CSOs (Berkes 2009). Hence, the multiple scales, objectives and practices involved in ICCAs governance require administrative and operational structures to be responsive at the appropriate scales for the allocation of rights, access, benefits, responsibilities, impacts and reinforcement (Adger 2001; Ribot and Peluso 2003). Despite an increasing relevance in governance on international policy and research realms, the analysis of multi-scalar governance arrangements required for ICCAs' operation has yet to develop.

#### **2.1.4 Issues of scale and power devolution in protected areas governance**

The notions of governance and scale have evolved with a number of parallels with the increasing importance of multi-scalar relations. However, scaling has a longer history within research than governance (Neuman 2007). Cash et al. (2006) defined scale as "*the spatial, temporal, quantitative, or analytical dimension used to measure and study any phenomena*". Accordingly, levels are defined as "*the units of analysis that are located at different positions on a scale*" (Cash et al. 2006). The notion of scale is based on Hierarchy Theory that considers that the lower the level, the faster and smaller structures are, and that these levels are constrained by higher levels, with slower and broader structures (Buizer et al. 2011). Cash et al. (2006) acknowledged a diversity of scales beyond the spatial and the temporal,

namely: jurisdictional, institutional, management, network and knowledge scales. Thus, Hierarchy Theory has influenced various disciplines, such as management, where dynamic realities, politics and power struggles within complex systems have been artificially represented into discrete scales and levels (Armitage 2008; Buizer et al. 2011). Accordingly, in management terms, scaling is usually related to the distribution of responsibilities and functions in appropriate institutional levels, relating to processes of coordination, decentralization, devolution and subsidiarity (Neuman 2007).

Protected areas management has not been an exception to this approach, and policy efforts have focused on a better understanding of protected areas management and the challenges they face at multiple scales as new actors, roles and dimensions emerge (Armitage et al. 2012; Chapin III et al. 2010). Considerations of scale have been considered essential in the implementation of any protected area category and on-site projects in order to evaluate the trade-offs between conservation and development, the impacts of human use over ecological processes and to identify the critical combination of scales and actions to achieve the desired management outcomes (Wells and McShane 2004). However, despite their wide use, the implicit assumptions and applications of the terms “scale” and “level”, have been subject to extensive debates (Armitage 2008; Buizer et al. 2011).

Critics of hierarchical approaches argue that notions of “scale” and “level” have assumed that phenomena occupy discrete temporal and spatial scales which are considered real entities when, in fact, they are social constructions, constantly re-defined by scientists, society, politicians and nature itself (Buizer et al. 2011). On the other hand, the Panarchy theory provides an alternative explanation to the Hierarchy one. It considers that while there are levels and scales, all levels have an influence on each other and that these dynamics produce a less hierarchical system, where cross-scale and multi-level dynamics are possible (Buizer et al. 2011). Thus, although the notions of scale and level have proved to be useful to establish points of reference, allowing for relative comparisons (Neuman 2007), the nested hierarchy on which the terms are based is increasingly considered as part of the “politics of scale” (Buizer et al. 2011). Thus, common metaphors to



describe the relationship between scales such as “Russian dolls” are no longer sufficient. The consideration of a broad range of scales constantly influencing each other moves away from more hierarchical and simplistic explanations of the structure of systems, allowing for better understanding of the processes. This is particularly relevant for the analysis of environmental governance arrangements.

A multi-scalar governance perspective observes government and governance as a range of systems of governing in which each non-state actor has its own role and influence over the structure (Buizer et al. 2011; Bulkeley 2005). Even though these approaches can have their own limitations –such as lack of clear boundaries and extensive procedure times-, governance analyses and approaches have benefitted from a re-consideration of the politics of scale and the role of the state and other actors into wider networks. The importance of scale increases as multi-scalar governance arrangements, from global to local, are now acknowledged as defining the design, implementation and outcomes of conservation discourses, practices and funding around the world (Pimbert and Pretty 1995).

Research has often focused on particular levels, setting aside the interactions between levels of phenomena (Cash et al. 2006). Different disciplines such as development, anthropology, geography and conservation science have recently turned their attention towards the interactions of the multiple factors and scales determining the motivations, development and consequences of public policy and implementation around the globe (Adger et al. 2005; Buizer et al. 2011; Cash et al. 2006; Gibbs et al. 2002; Neuman 2007; Wyborn and Bixler 2013). In order to capture the complex relations of multiple networks at multiple scales with a growing distance from notions of hierarchy, new perspectives portray arrangements as networks with nodes and centres with flows between them (Neuman 2007). These new scopes have enhanced a broad literature that relates to the multiple dimensions of complex systems such as those involved in protected areas governance (Abrams et al. 2003; Armitage et al. 2012; Lockwood 2010; Papp and Alcorn 2013). Research in governance and conservation requires an accurate focus to understand the processes that involve not only the state but multiple actors, levels and power relations, as well as their implications for marginalised people “*acknowledging the messiness of politics-in-practice*” for

public policy-making (Leach et al. 2007). The insights achieved through this research point out the way processes of scaling are entwined with struggles for control and dominance (Bulkeley 2005). These power interactions are often asymmetric and are linked to political issues in which markets and the state are two strong agents (Adams and Hutton 2007; Adger et al. 2005; Lebel et al. 2006; Rhodes 1997).

Currently, along with the emergence of multi-scalar governance arrangements for conservation, there is also an increased understanding about the challenges that the interactions between the different scales of a system represent. The problems that multi-scalar interactions and arrangements face are mostly related to ignorance, mismatch and plurality (Buizer et al. 2011). Ignorance alludes to the limited understanding about the unintended effects that actions at a particular scale may have in other scales or levels. According to Cash et al. (2006), mismatch refers to the lack of consistency between ecological processes and the coverage of institutions and apparatus to tackle ecological problems. Managerial mismatches in plans and strategies are also related to scale, not to do with spatial scale but with the scale of management. The challenge regarding plurality means that not a single scale or level can be representative of the entire system, hence, there is not a best level or scale to focus on, but managers should focus on the appropriate combination of scales to deliver the desired outcomes (Buizer et al. 2011; Wells and McShane 2004). To this challenge, power asymmetries add another dimension to be considered when analysing multi-scalar governance arrangements. Such approach is particularly relevant for the research on ICCAs, where the potentials and policy implications have just started to be documented (Berkes 2009; Martin et al. 2010; 2011).

### **2.1.5 Participatory governance and political ecology: decentralization, notions of power and critiques of participatory approaches**

Multi-scalar governance approaches for protected areas and the implied decision-making power devolution to local institutions for natural resources management hold a great potential for environmental justice. Nevertheless, multi-scalar governance and devolution processes also have a number of caveats in terms of

legitimacy, transparency and equity. The formal recognition of governance approaches that portray devolution of power to local communities by international policy does imply a shift in the discourse from a state-led conservation to community-led conservation. Yet, despite all the efforts, democratic decentralisation is rarely achieved (Ribot et al. 2010), since local people have little effect on management decision through local authorities that do not represent them. Like with development, the use of the term of conservation can be translated in a tremendous loss of diversity (Sachs 2010) of management practices and traditional knowledge in order to give way to homogenized dominant discourses and management practices legitimised by the dominant “*ways of knowing*”. The ICCA term is thus related first of all to the meaning of community, then to democratic decentralization or devolution, participation, legitimacy, equity, and ultimately, to power. All these subjects have been thoroughly addressed within the development and political ecology literature and, therefore, the critiques to such approaches are explored in this section.

#### **2.1.5.1 Decentralization and the obstacles of central governments**

Advocates for decentralization of natural resources management argue that decentralized management is as effective in attaining forest cover as the state management, but a much lower cost (Somanathan et al. 2009). While the promise of lower transaction costs, improved efficiency and increased incentives for local populations to protect local resources have been powerful incentives for states to launch decentralization initiatives around the world, the fundamental goal of decentralization remains elusive (Ribot et al. 2006). The aim of decentralization is the transfer of “*power closer to those who are most affected by the exercise of power*” (Ribot et al. 2006: 1866). Nevertheless, despite the rhetorical claims of decentralization, its effects on the ground remain limited due to inappropriate institutional arrangements and a lack of faith in local capacities from central government officials. Central governments slow decentralization by limiting the kinds of powers to be transferred and choosing local institutions that are likely to serve central interests (Ribot et al. 2006). Furthermore, although effective decentralization requires accountable institutions at all levels (Ribot et al. 2006),

accountability of natural resources management remains flowing from bottom to top while “downwardly” accountability is practically non-existent (Ribot et al. 2010).

### **2.1.5.2 Policy simplifications**

The term community conservation is both conceptually and practically a challenge. Having communities as the unit of participation has important assumptions that define to a great extent the outcomes of such efforts. Community-based approaches, out of which ICCAs are the most recent policy development, rely on simplified definitions of community. Such simplifications have the strategic value of reducing complex realities to a few, clear axioms that help to get messages through the policy arena (Li 1996). As a result, nowadays, complex terms such as community, participation, empowerment and sustainability are common language for conservation, donor and government agencies (Li 1996; Pimbert and Pretty 1995). Notwithstanding the importance of such achievements, community-based approaches have been criticized since realities are more complex than the models on which policies are based. In practice, the allocation of local natural resource access is negotiated in processes where particular images and values of “community” define the rules and their legitimacy (Li 1996). Therefore, the policy simplifications of the term “community” have meant that interventions often portray communities as an equivalent of harmony, tradition and balance, undermining the attention towards local heterogeneity and inequities (Colchester 2004; Li 1996, 2001; Mosse 2004). Community conservation is often linked to decentralization processes where whole communities are the target, which tend to homogenise inequities and differences within such communities (McDermott and Schreckenberg 2009). In order to overcome this simplification, as Li (2001:9) pointed out: “*The use of the concept of community needs to be seen as a political association shaped through politics, culture and the generation of meanings*”. Hence, perceptions towards communities need to remain aware of the fact that communities are representations in policy, ethnographies and struggles within particular historical

and discursive contexts (Li 1996). These community images also have implications for representation, since it cannot be assumed that communities are homogeneous and often representatives will not speak for every minority group within a community, holding the potential to reproduce and to strengthen socio-political inequalities if internal community dynamics are ignored (Hayward et al. 2004).

The next problematic term is that of participation. According to Abrams et al. (2003), participatory governance arrangements for protected areas have been increasingly applied due to the current acknowledgement that decision-making processes should involve those stakeholders that are directly involved or affected by the process. It is argued that as more stakeholders are increasingly and directly involved in the processes affecting their livelihoods, the more likely they are to engage, trust, support and legitimate the implementing organisations and their aims. Participatory approaches are also portrayed to help stakeholders to become more aware of the rights and responsibilities of each of the actors involved (Abrams et al. 2003). Therefore, participation in mainstream conservation, as well as in the development disciplines, has been seen as a process of empowerment that implies a shift in power and development of management skills of local relevant actors in order to make decisions to pursue a common goal (Hayward et al. 2004; Pimbert and Pretty 1995). Participation models imply that people's knowledge and involvement can transform top-down bureaucratic systems (Cooke and Kothari 2001), and argue that sustainable conservation requires functional participation, that is when people's ideas and knowledge are valued, and power is given to them to make decisions independently of external agencies (Pimbert and Pretty 1995). Still, despite the use of participatory rhetoric, the general concern in protected areas governance literature is for effectiveness in management, naïvely overlooking the power relations implied (Cooke and Kothari 2001), as true participation often requires taking positions that go against the interest of powerful groups (Mansuri and Rao 2004).

Participation processes (sharing knowledge, negotiating power relationships, political activism) "*can both conceal and reinforce oppressions and injustices in their various manifestations*" (Cooke and Kothari 2001: 13). The realm of rural

development has a long history implementing participatory approaches, and there have been numerous attempts to incorporate local people in planning and implementation, leading to two schools of thought. One school sees participation as a means to get local support and increase efficiency; while for the second, community participation is a right and a process for empowerment and capacity building (Cooke and Kothari 2001; Pimbert and Pretty 1995). In consequence, a common interpretation of the term participation has led to the creation of dependency through the exchange of local labour for cash, food or materials. This exchange creates the image that locals are supportive of external interventions, and once paternalism is in place, the sustainability of the project will be limited to the availability of funds (Pimbert and Pretty 1995). Similarly, in protected areas management, participation has often been applied as a “tool” and a discourse to achieve the voluntary submission of people to protected areas schemes and achieve externally designed goals (Pimbert and Pretty 1995; Walker et al. 2007). In other instances, a participatory process can be seen merely as a consultation, which does not require a shift in power relationships. Projects still influence the way “local needs” are constructed and legitimised, and if teams spend too much time in the process, their performance is questioned by both project and communities. Thus, the needs expressed by local people and those registered by the teams aim to match the administrative constraints, i.e. people ask what can be easily delivered (Cooke and Kothari 2001: 24).

Participatory approaches tend to remain structured by project models, rather than transforming them (Cooke and Kothari 2001). However, the popularity of the term participation and its adoption in international policy are based on three main assumptions: *“that participation is intrinsically a “good thing” (especially for the participants); that a focus on “getting the techniques right” is the principal way of ensuring the success of such approaches, and that considerations of power and politics on whole should be avoided as being divisive and obstructive”* (Cooke and Kothari 2001:26). In practice, this means that local people are often asked or persuaded to participate in processes in which they have no interest or where their claims will find little if any room, *“in the very name of participation”* (Rahnema, 1992). Also, the constant demands of projects for participation that do not consider the commitments and constraints of the members of the community

often lead to a “*consultation fatigue*” (Hayward et al. 2004). Therefore, while non-participation can be an indicator for social exclusion, it can be also a question of personal choice, the driver of which is not always obvious, making participation a potentially misleading indicator for social inclusion (Hayward et al. 2004). Finally, once communities have been made readable for the state and other actors (Li 1996), the data can be used to inform, legitimise agendas and to negotiate the terms of the processes with other stakeholders (Cooke and Kothari 2001; Mosse 2001). The naivety about the motivations and power struggles and their effect on how decisions are made and whose values prevail in conservation efforts tend to sustain inequalities and injustices, both local and global (Cooke and Kothari 2001; McDermott and Schreckenberg 2009).

Currently, in many community-based conservation approaches, local communities may set resource allocation (primarily but not exclusively), while the sustainability is evaluated and enforced by standards set by the state (Li 2002). Such standards do not usually represent supportive elements for culture and local capacity-building, limiting the capacities of government officers to become real partners to local communities (McDermott and Schreckenberg 2009). Furthermore, community-conservation has been conceived as a means of re-negotiation of the rights and responsibilities of citizens. Communities may want to be an active part of the administrative structures and be effectively considered as citizens and clients, instead of being inclined to oppose the state. This also empowers them to contest projects in ways they could not previously (Li 2002; Agrawal 2001). Nevertheless, the recognition of the needs of marginalised people does not mean that inequalities regarding natural resources allocation and other underlying issues have actually changed (McDermott 2001). Indeed, community-based approaches have often helped to the process of definition, regularisation and control according to state-defined regulations and procedures through the extension of institutions and bureaucratic procedures “...*enmeshing them [communities] more firmly as state clients*” (Li 2002:9). Thus, despite the labels and contrary to the original objectives, community-based natural resources management and conservation have tended to intensify the control that states have over not only resources but lives and livelihoods as well (Li 2002). Furthermore, the participatory rhetoric, popular as it is, has been found to impose

environmental agendas increasing the economic and political vulnerability of rural populations and with little concern over rights (Fairhead and Leach, 1996; Li 2002). Thus, the potential for radical social transformation of the term has been simplified as a means to achieve cost-effective objectives (Mansuri and Rao 2004).

A third subject is that of devolution and scales. Analyses on governance have typically had assumptions of space and scale that implicitly involve notions of hierarchy (Bulkeley 2005). Such approaches have often overseen the fact that analyses themselves are part of political processes, where the state has largely remained as the “container” of social and economic life, undermining bottom-up initiatives (Bulkeley 2005). Consequently, there is a growing body of research aiming to overcome previous limitations and focusing on the role of the diversity of agents across scales for natural resources and protected areas management. Current research and theory on natural resource management is moving forward from the analyses focused mainly on the state towards embracing and analysing the multiplicity of actors, institutions, values, capacities and landscape features that have an influence on current governance arrangements (Bulkeley 2005; Papp and Alcorn 2013; Wyborn and Bixler 2013). In such perspective, sovereignty, authority, command and control are not exclusive to a certain agent in the governance arrangement (Karkkainen 2004). For the protected areas management literature, the key problems rely on identifying and analysing the different levels involved in the appropriate assemblages of scales (Adger 2001; Buizer et al. 2011; Ostrom 2009: 420; Papp and Alcorn 2013). Nevertheless, the problem seems to be deeper and more complex as effective power devolution from the state to local and indigenous communities has proved to be elusive. Furthermore, it remains as a question whether the devolution of a “*bundle of rights*” (Ribot and Peluso 2003) is enough to support communities in recovering the local-level governance arrangements that evolved in stable and isolated communities, sustaining natural resource use, but undermined through leading conservation and development policies over the last two centuries (Borrini-Feyerabend et al. 2010).



### **2.1.5.3 Power and its devolution for protected areas management**

The notion of power devolution embedded in Indigenous Community Conserved Areas implies that power is an entity to be displayed and delivered by an actor to another through a conscious decision and intention. According to this perception of power, management and governance specialists focus on deliberating about the kinds of power that can be devolved (Abrams et al. 2003), the multiple scales involved (Bulkeley 2005), and the many ways in which such devolution can take place. The terms participatory approaches, co-management and democratic decentralisation are popular terms in the policy arena (Ribot et al. 2010) and the fields of study are many and yet, democratic decentralisation is rarely achieved since the state has great discretion in the allocation of access while policies and laws often fail to clearly define powers and rights, enhancing conflicts (Ribot 1999; Ribot and Peluso 2003; McDermott and Schreckenberg 2009; Ribot et al. 2010; Worah 2002). The amount and kinds of power to be allocated to whom remains, the political and legislative frameworks, the implementation agencies and the diversity of local outcomes remain a discussion (McDermott and Schreckenberg 2009; Ribot et al. 2010). It has been argued there are little incentives for true power devolution (Ribot et al. 2010), however, a deeper look into the very concept of power and the work of philosophers and sociologists about it, gives another light to the explanation of why power devolution is so elusive, though. “[P]ower is everywhere” (Foucault 1980: 188), and processes for natural resources management and biodiversity conservation are not an exemption. Since the argument of this thesis is based on the actual possibilities and implications of power devolution to local and indigenous communities for biodiversity conservation, clarity about what is meant by power becomes of most relevance for this research. The literature on power has been developed mainly in the fields of sociology, anthropology and development studies. Renowned authors including Karl Marx, Max Weber, Antonio Gramsci, Michel Foucault and Anthony Giddens have all dedicated a significant proportion of their work defining power and its manifestations in society from different perspectives. Thus, albeit each of these authors would deserve entire volumes to make justice to their works, this section refers to the notions of power these authors have developed to make

emphasis on those elements, which I consider, are the most appropriate for a better understanding of power interactions in protected areas and natural resource management.

One of the most influential works on power is that of Karl Marx. From a Marxist perspective, power is embedded in values and beliefs that define the positions in the reproduction of class relations (Lukes 1974). Power relations, consequently, are expressed in terms of domination and subordination of social classes through, mainly but not only, relations of production. Marx recognized that economic exploitation was only one of the manifestations of these struggles, which are re-enforced through class ideas and values. These elaborations are the root for the “invisible power” or “false consciousness” theory that argues that the false consciousness reproduced through class values and ideas prevents members of the working class from recognizing and rejecting their oppression (Eyben 2004). For Weber, on the other hand, power is the capacity to control individuals, circumstances or resources through different forms of domination or means to get legitimacy and to establish discipline, understood as routine obedience (Weber 2005: 43). According to Weber, there are three categories of domination, namely: legal-rational domination, based on the legitimacy of the formal authority; traditional domination, based on the legitimacy of the moral or traditional authority, and charismatic domination, where leaders gain legitimacy through leadership or heroism (Weber 2007:65). For Weber, culture is a place for social consolidation, where individuals can also find partners and solidarity on which alternatives can be generated (Weber 2007:172).

Gramsci builds upon Weber’s contributions on the role of violence in domination and culture. For Gramsci, the state is also a compound of social relations that represents the domination of a social group over others. He developed a model where dominant groups sustain their position through a combination of coercion and hegemony. Coercion is executed by what he calls the “political society” (police, taxation offices, social security, etc.), or the state apparatus in charge of enforcing “discipline” when efforts to get consent fail (Gramsci, 2003:12). Hegemony is the complement to coercion in Gramsci’s arrangement of power. It is the consent of subordinate groups (civil society) to domination actively constructed by

institutions, cultural practices, social interactions and different processes leading society to develop the ideologies consequent to what the dominant classes want (Kenway 1990). For Gramsci, civil society is a versatile space where hegemony is created, reproduced and contested. Culture and ideologies constitute the field where hegemony is reproduced by encouraging certain accepted behaviours through mechanisms for the voluntary adoption of values and norms, and discouraging behaviours that do not correspond to the goals of the dominant class or challenge them. However, ideology is also the space where hegemony can be resisted through the identification of social problems related to the hegemonic system of values as well as the mechanisms in which the hegemonic system of values are reinforced. Therefore, power is not located in a central apparatus; instead, there is a relationship between all the points of the social totality (Kenway 1990). This understanding opens the possibility for the generation of a radical change in values that generate alternative institutions and ways of thinking, constituting the counter-hegemony (Gramsci 2007:168).

Each of these authors places emphasis on different aspects, Marx on relations of production, Weber on domination and Gramsci on the means through which hegemony is created, sustained, adapted and embraced (Kenway 1990). However, all of them share the notion that power is something to be held, aspired, taken or given, while power relations involve the conflict between the social class or individuals who hold the power and those who lack it. Michel Foucault, on the other hand, proposed a different perspective on power. For Foucault, power *“comes from everywhere”* and it is not an institution, structure or possession. Power is diffused instead of concentrated and it is manifested or *“embodied”* in discourse, knowledge and *“regimes of truth”*, constituting agents rather than being possessed, merely coercive and deployed by agents (Foucault 1980; Rabinow 1991). Power is beyond politics and it is a phenomenon embodied and socialised in everyday life, being the reason why often, power struggles do not lead to a change in social order (Gaventa 2003). According to Foucault, the production of knowledge requires a *“system of communication, records, accumulation and displacement which is in itself a form of power”* linked to other forms of power. Simultaneously, power requires the *“appropriation, distribution or retention of knowledge”* in order to be exercised (Foucault 1980: 283). Power is manifested in

each society through regimes of truth, which are the discourses that are accepted and functioning as the legitimate truth (Rabinow 1991). "*Regimes of truth*" are a result of scientific discourse and institutions and are reinforced, negotiated and redefined through the educational system, the media and the interactions of economic and political ideologies, constituting a source of discipline and conformity (Gaventa 2003). The "*metapower*" or "*regime of truth*" is constantly flowing and being negotiated in society through the accepted forms of knowledge constituting the term "*power-knowledge*". Another relevant term is "*Archaeology of knowledge*", which refers to the rules that define what can and can't be said within a specific discourse. The organisation of a discourse, controlling what can be said and the right to speak becomes the exercise of power, building objects and social meanings, producing and maintaining subjectivity (Foucault 1980). Thus, discourses can be both an instrument and an effect of power, producing and reinforcing it. Nevertheless, discourses can also expose power, undermine it, find its fragility and ways to counteract it (Foucault 1998: 100-101).

One of Foucault's key contributions was that he used the mechanisms for surveillance in prisons, hospitals and schools to point out a "*disciplinary power*" that no longer needed to be coercive as people learned to discipline themselves and behave according to the system's expectations. This way, even bodies are subjugated through what he called "*bio-power*" which is a discourse or regime of truth that separates what is normal and acceptable from what is not, although these definitions are in constant flux (Rabinow 1991). Therefore, norms can be embedded beyond our perception making us behave as expected without the need of coercion from outside agents (Gaventa 2003). Foucault also used the term "*dispositive*" referring to the group of institutions, discourses, agents, etc. that serve the overall objective of normalisation, even though the individual elements seem contradictory. Thus, "*power is not intentional*" as even when individuals "*fail in their own stated intentions, they may still be part of a wider, successful strategy*" for control (Gaventa 2003). The Foucauldian conception of power creating and being created through knowledge introduced a new perspective on power not only as something negative, coercive or repressive, it also acknowledges its positive potential and productive force in society, producing rituals of truth, domains and reality itself (Foucault 1980:194). The exercise of power creates and

accumulates new information and knowledge that induce the effect of power providing a basis for action and intervention (Townley 1993, Foucault 1980: 52). For Foucault, power is a complex strategic situation exercised from a myriad of perspectives within dynamic and non-egalitarian relationships (Kenway 1990: 188). Challenging power, thus, derives from our capacity of reflection and detachment of the power of truth from the social, economic and cultural hegemonies with which it operates (Foucault in Rabinow 1991: 74-75).

Giddens, the last main author considered in this review, focuses on actors and agency, merging a microsociology approach, actors and the relationships between them. For Giddens, power appears through action within social systems, it *“presumes regularized relations of autonomy and dependence between actors or collectivities... But all forms of dependence offer some resources whereby those who are subordinate can influence the activities of their superiors”* (Giddens 1984:16). Hence, agents have the freedom to act but replicate structures of power through their actions, since the social rules determining our actions are not equally distributed. Still, the notion of agency and the practical knowledge that people have about power and social realities opens the possibility of changes or resistance towards rules, power, structures and institutions. Although Giddens recognises deeper structures of power, he does not go beyond theorizing about them, attributing power to agents without further consideration of the role of the structure (Gaventa 2003).

The theoretical contributions of the authors above represent the multiple angles available to look at power. Some of them have been the basis to explain power interactions on natural resource and protected areas management. As a point of departure, power could be defined as an outcome of collective actions and associations, a construction of realities where different *“actor worlds (or situations) are not independent but are tied together in associations which may result in the domination of some by other”* (Gaventa 2003). Power is embodied, reproduced and validated in many aspects of human and social life and is present in every social interaction. These power interactions can be analysed at different scales, from the micro-sociological to the macro in a wide range of fields such as health, education, management, geography and law. These analyses help us to

reflect and to gain perspective about the deeper structures behind our motivations, actions and stakes as individuals, professionals and members of society. Amongst the fields researching power, development studies have produced copious material analysing power interactions in development interventions. Foucauldian theories have been the basis to develop academic critiques of development discourses and practices. Due to the resemblance between approaches, for development and conservation, these critiques provide useful insights about how power relations unfold within the development/conservation arena.

Even though the analysis of power within biodiversity conservation is not as abundant as within development, some of the critiques of development could be applied to the sphere of conservation and constitute the arguments of critical Political Ecology. Foucault's body of theory has been used to sustain critiques of development discourses and practices by "*depoliticising interventions and extending the reach of the state, being part of a wider strategy*" (Gaventa 2003). Critiques also conceive development as a "*neo-colonisation*" or a method for the global north to retain agency on the global south. Briggs used the case of the World Bank and its actions through the development *dispositif* to exemplify how "*while pyramidal organisation of relations of power gives a dispositif a "head", it is the apparatus as a whole that produces power*" (2002: 432-433). Before government or management can happen, the subjects must first be known (Townley 1993) and, therefore, global entities such as the World Bank and its planners position themselves as the experts who know how people should live, collecting data, simplifying, diagnosing and devising interventions for improvement (Scott, 1998). When a group of people (A) considers that others (B) need to be empowered, the first assume that the second have no power at all and also that A have the power to be delivered to B. This vision has helped to create the perception that states hold the "real" power while only those who are ready to fully participate with it can reach it. The current participation ideology could be called "fear-power", but local populations are far from powerless, as a matter of fact their power is not perceived most of the times (Rahnema 2010). This is the exercise of power where experts define without a democratic consent what is considered to be development and the means to achieve it. If the target groups

want to get access to the institutional presence or the funds, they must conform to prescribed behaviours, while officials, politicians and others remain “*unexamined and unimproved*” (Li 2005). Just like the example of the World Bank, states have similar ways to build simplified models for control and improvement, and even though they often fail in improving people’s lives, they can be very effective in controlling and preventing people from applying their quotidian knowledge (Scott 1998; Li 2005). Development operates translating “*essentially political situations into technical problems to be solved... furthering a particular form of state power*” (Gaventa 2003). Scott provides great insights about the means through which states make populations readable and governable, but his dichotomy between power-resistance falls short to analyse deeper effects since power is beyond states and global agencies. In fact, scientists, missionaries, social reformers, donor agencies, ethnographers and even the misnamed non-governmental organisations are part of the range of parties contributing to measure, to govern and to improve societies around the globe (Li 2005).

Foucault’s term of “*divisory practices*” is also relevant to this argument. Divisory practices are totalising procedures where governments take responsibility for the economy, order and people’s lives in every aspect. These practices lead to centralised management apparatuses and to the collection of statistical data on individuals, constituting a means for vigilance and regulation of the daily life of some for the privilege of others (Rabinow, 1991: 104-108). As Neoliberalism gains terrain, it becomes more the case of many realms such as natural resources and land, where through discursive monopoly, dominant groups constitute a heterogeneous mixture that develops a rhetoric that blends ideas about keeping environmental quality, traditional values, institutions and authority, with all the allowances that the free market provides emphasising privatisation and individualism (Kenway 1990). The work of Foucault and Scott allow us to see that there are schemes aimed to improve the human condition at different ranges and scales of coercion (Li 2002; 2005). Authors like Li (2005) and Gaventa (2003) make a call to go beyond “*the concept of an “up there” state with stored powers*” and for a decentring of power geometries at the dynamic process where power constitutes different spaces and how the arrangement of spaces affects power. Approaches in political ecology, just like in political economy, conceive “*power as*

*the ability to command control over resources*" (Gaventa 2003). Within this context, the power of stakeholders is the ability of stakeholders to persuade and coerce other into decisions and actions. A further element within natural resources and biodiversity conservation is that often, "experts" impose their ideas over territories that are also social constructions, subject to power relations. Local and indigenous communities have their own notions of territory, just as natural resources and environmental services are also conceived in their own ways and values. It is often the case that notions of territory are based on use, and communities organise themselves around that use and access. In this sense, *"material, cultural and political-economic strands"* constitute "bundles" and "webs" of power that play a role in the dynamics that enable actors to hold, maintain and control the ability to benefit from things, or access to land and, therefore, to natural resources (Ribot and Peluso 2003).

Political ecology pays particular attention to the ways in which the state directs, legitimizes and exercises power and control in the name of conservation, as well as the role of other actors claiming legitimate power to enforce socially desirable outcomes (Adams and Hutton 2007; Li 2005; Peluso 1993). The naivety with which many of the schemes are applied has place not only "on the ground" between "facilitators" and "participants", between "donors" and "beneficiaries", but also historically and discursively in the construction of what constitutes knowledge and legitimacy (Cooke and Kothari 2001:14). Consequently, people in and around many protected areas have been classified as poor because they are not completely immersed in the market economy nor consume market commodities, even though they may be satisfying their fundamental needs through self-provisioning mechanisms. *"This neglect of human ingenuity and diversity ultimately reinforces the dominant model of development based on uniformity, centralisation and control"* (Pimbert and Pretty 1995). In the case of formal recognition of previously informal social organisation arrangements, their institutionalisation can be seen as a means for the state to legitimise the presence of the state and its discourse across the nation (Harvey 2001). This could be a perspective towards the official recognition of Indigenous Community Conserved Areas as yet another way of the state and hegemonic discourse to extend their bureaucratic powers (Brockington et al. 2008: 73) and to get some control or



power over previously more autonomous communities. Therefore, power is more complex than an “up there” panopticum state that promulgates rules and a “down there” population that resists them “[...] *we cannot separate power and resistance: They are intertwined*” (Li 2005). Also, there are many other actors trying to govern, devising practices and fighting for continuity of funds translating poor results or failed projects into different versions of success (Li 2005). Until today, conservation science and protected areas management are based on perspectives and understandings that reproduce the same rhetoric, where “experts” are the legitimate source of information for decision-making and if local communities want to remain part of the game, need to intertwine the dominant discourse and their own particular ways of resistance (Li 2002). “*Power is not something that is acquired, seized or shared, some-thing one holds on to or allows to slip away*” (Foucault, 1980: 94). Instead, power becomes apparent within the relationships between, institutions, practices, techniques, discourses and procedures through levels and dimensions (Townley 1993). Their power is constituted by networks and quiet actions that put up against the prevailing power apparatuses in what has been called by Scott as “weapons of the weak” (Scott 1985).

#### **2.1.5.4 The role of NGOs**

The so-called non-governmental organisations have been important in the involvement of local people into participatory approaches (Rahnema 2010). Project implementers are extremely important to the effectiveness of projects, replacing bureaucratic state entities as “experts”. As implementers, NGOs often “*are expected to mobilize communities, build the capacity for collective action, ensure adequate representation and participation, and, where necessary, break through elite domination*” (Mansuri and Rao 2004). NGOs and donors hold the potential to enhance the establishment of local democratic institutions, which are the basis of decentralization (Ribot et al. 2006). There is little surprise that most NGOs fall rather short from these expectations. However, NGOs do have a role legitimising dominant discourses defining the local needs and strategies of action in societies that tend to internalise dominant perceptions and values due to the

marginalisation they have been subject to (Rahnema 2010). Moreover, NGOs often avoid working in communities where fast and evident results can be difficult to achieve (Mansuri and Rao 2004). The same counts for strong enough communities that oppose or challenge external agendas, competing with the state (Rahnema 2010), where support is quickly withdrawn in a classic “*take it or leave it*” approach.

Despite the potential that organised civil society holds, once they become implementators, routinization of procedures and the prioritization of fast results become the generality (Rahnema 2010). Facilitators are often poorly trained, and complex concepts such as participation, empowerment and social capital are poorly designed and implemented (Mansuri and Rao 2004). Furthermore, the proliferation of NGOs is more a consequence of opportunism since funds are being channeled through NGOs, than an increasing political weight of the civil society (Platteau and Gaspart 2003; Rahnema 2010).

### **2.1.6 Governance and Common pool resource theory**

*“The “tragedy of the commons” will occur in highly valued, open-access commons where those involved and/or external authorities do not establish an effective governance regime.” (Hardin 1968)*

The way human beings organise in societies determines the ways in which they transform the structures, dynamic and natural resources and vice versa (Toledo 1999b). Since ICCAs are located within communally-managed territories, the last substantial body of theory explored by this review is related to governance and common-pool resource theory. After Hardin (1968) described the tragedy of de commons, it was argued that either private enterprises or the state could represent the only effective way to achieve environmental sustainability (Mansuri and Rao 2004; Ostrom and Cox 2010). But as Dietz et al. (2003) pointed out, Hardin did not consider that many social groups have managed to overcome the threats of natural resources degradation through the development and continuity

of self-governed institutions. Local-level governance evolved in stable and isolated communities has in many cases sustained natural resource use for centuries. Yet, in times of rapid change, the ability of these governance systems to adapt quickly tends to fail (Borrini-Feyerabend et al. 2004). As Ostrom et al. (1999) observed, local governance solutions cannot simply be scaled up. In their governance analysis of the forestry sector of an Asian country Fischer et al. (2007) found that overexploitation of natural resources is the result of a combination of incentives such as lack of “rule of law”, accountability, education, and trust of people within developing or existing networks, which act as motivations of individualism and therefore combine to further environmental degradation (Fischer et al. 2007; Terry 2008). In their case study, interventions ignored the existing patterns leading to over-exploitation, neglecting the incentive structures. In their analysis of the multiple interactions between public authorities, governments, NGOs and local users Fischer et al. (2007) found that when interventions focus at the organisational and operational levels (i.e. capacity building, training, legal advice) whilst ignoring the system of incentives underneath, such as conflicting or contradictory rules, they help to consolidate the pattern of over-exploitation of natural resources rather than providing a solution.

Governance regimes regulate appropriation, maintenance, monitoring, conflict resolution and changes in regulations themselves (Ostrom 2002). “*Rules and their effectiveness at the local level are critical to the sustainability of complex biological resources*” (Becker and Ostrom 1995). Governance is now recognised as one of the main features shaping and being shaped by natural resource management (Dietz et al. 2003; Fischer et al. 2007). Common-pool resources are defined as a class of resources from which exclusion is difficult and joint use involves subtractability (Berkes and Folke 1998). From this notion, common-property theory has shown why institutions and property rights are important considerations for resource management (McCay 1995 in Berkes and Folke 1998). Within the realm of common-pool resource theory, Elinor Ostrom is a key reference. Her contributions in this field made her the winner of the 2009’s Economy Nobel Prize. Ostrom and her research team explored the notions of game theory and applied them to the natural resource management arena. They emphasise the role of property and

access as key factors defining the conditions leading or not to the “tragedy of the commons”, the “Prisoners” Dilemma” and collective action (Becker and Ostrom 1995). Where natural resources are left open access, conflicts, overuse and eventual destruction are expected. Thus, property rights are the most common way to maintain exclusion over natural resources. Furthermore, access is also important; those who have access to resources without being owners of the resources and do not follow the use regulations are known as “free riders”.

Ostrom and her colleagues also formulated eight design principles for successful common-property regimes, most of which fall into two clusters:

- (1) those dealing with access, group and resource boundary issues and,
- (2) those dealing with decision making for joint use, including issues of representation, monitoring, sanctions, conflict resolution and legal recognition, consistent with the definition of common property resources.

The principles for successful institutional arrangements are: (1) Clearly defined boundaries; (2) Proportional equivalence between the benefits and costs *“[b]enefits are important because people, institutions, and societies live on and for them and clash and cooperate over them.”* (Ribot and Peluso 2003); (3) Collective-choice arrangements; (4) Monitoring; (5) Graduated sanctions; (6) Conflict resolution mechanisms; (7) Minimal recognition of rights to organize, and (8) Nested enterprises (Becker and Ostrom 1995). Through laboratory and empirical experiments, they have also defined a list of variables that have an effect on the rules and property regimes that enhance sustainable use, such as: accurate information about the state of the resource as well as the costs and benefits; homogeneity amongst participants; shared understanding about the risks and benefits of changes in regulations or the continuity of the status quo; reciprocity and trust; the resource users group is relatively small and stable; the future does not have a high discount rate; autonomy to elaborate and operate rules, supported and enforced by external authorities; collective choice rules are used; monitoring and sanctioning at low cost (Becker and Ostrom 1995).

Ostrom’s work has also emphasised the role of communication in three key points,

namely: 1) coordination amongst those involved, 2) distribution of responsibilities and building trust, and 3) Enforcement and sanctioning (Ostrom 2002). It has also been suggested that the rules should match the characteristics of the resource system in order to achieve long-term sustainability. The attributes of the resources also have an effect on the plausibility of development of self-governing entities. Ostrom (1992) as well as Baland and Platteau (1996) identified the following key resource attributes: 1) the resource is used but can still be subject to improvement, 2) there are valid, reliable and affordable indicators of the state of the resource system, 3) the flow of resources is predictable, 4) the resource system is small enough to clearly define boundaries and internal particularities.

Ostrom and Cox (2010) argue that a lack of ownership results in there being no long-term interest in the sustainability of a resource system by a given user. However, it is not only property rights but also how governance arrangements adapt over time to local social and ecological contexts that set rules that participants consider legitimate and equitable, and that reduce uncertainty enhancing trust and collective action (Ostrom and Cox 2010). Property is just one of many factors that shape institutional arrangements and strategies (Ribot and Peluso 2003). Natural resources management is defined by access understood as a “*bundle of powers*” embodied in and exercised through various means, relations and processes that give users the ability to benefit from natural resources (Ribot and Peluso 2003). Hence, in resource systems, some hold control and others only keep the access through social relations more than rights, and thus, benefits are allocated through relations of production and discursive manipulations within complex webs of power (Ribot and Peluso 2003).

#### **2.1.6.1 Issues on equity, legitimacy and elite capture**

*“To treat people justly may require treating them differently; on the other hand, to treat them as if they were the same is not necessarily to treat them justly.” (Lummis 2010)*

The effects of decentralisation, when it does take place, have shown that environment, democracy and livelihoods are hard to balance. Environmental decisions reveal the interconnection and trade-offs between economic efficiency (maximisation of benefits within the system), environmental effectiveness (to achieve expressed objectives), equity (further explored below), and political legitimacy (decisions are accepted according to who makes them and implements them) within dynamic and heterogeneous institutional contexts (Agder et al. 2003; Corbera et al. 2007). It is especially difficult to achieve equity in terms of the cost-benefit distribution of improved natural resource management, and local livelihoods tend to be undermined (Ribot et al. 2010). Moreover, community-based conservation, just as project development and participation, are strongly influenced by rights of access to natural resources and land as well as the organisational networks of the context (Corbera et al. 2007). Therefore, this last section of the conceptual framework looks at issues of equity, legitimacy and the dangers of elite capture on community-based conservation efforts.

All humans share the same task, we must live a life and that makes us equal, but this does not mean that we have to be homogeneous (Lummis 2010). There are two sorts of equity, the first is related to the idea of relative justice and the distribution of assets amongst different groups of people; the second refers to absolute justice for human dignity (Sachs 2010). Related to decentralization in natural resources and protected areas management, equity and effectiveness often depend on the institutional choices that are influenced by national elites and donors (Ribot et al. 2008). Brown and Corbera (2003) propose equity to be sectioned in three elements: access, decision-making and outcome: 1) Equity in access refers to the way local actors can participate depending on access to land, resources, information and networks. For example, in Mexico, better-off households tend to be the ones that are able to let vegetation regenerate or to participate in reforestation, while these activities are not possible for poorer households, resulting in further marginalisation (Corbera et al. 2007). Socioeconomics and cultural norms can determine the distribution of information even when procedural norms aimed to avoid elite capture are complied with (Fritzen 2007). 2) Equity in decision-making concerns issues of legitimacy and inclusion in management decisions, these tend to be accumulated by project

brokers (often NGOs) rather than on local people (Corbera et al. 2007). Finally, 3) equity in outcomes refers to cost-benefit sharing and its perceived fairness, which is also related to access and elite capture. Some authors have drawn attention to the mistake of giving too much attention to the rights holders or units as community instead of focusing on the forest users, or those who in any way have access to the forest resources (Ribot and Peluso 2003; McDermott and Schreckenberg 2009).

Legitimacy is closely related to the way decision-making is performed and the regulations over participation. Local and cultural context and political power define whether or not something is legitimate (Adger et al. 2003). The question of control of access and maintaining access becomes essential when we consider that those with relative power controlling access over resources tend to use that power to benefit their interests before others (McDermott and Schreckenberg 2009:7). Community processes are dynamic and the practices and objectives evolve constantly in response to the local and regional experiences (McDermott and Schreckenberg 2009:9). Community-driven projects can function in ways that reduce the likelihood of local elite capture (Fritzen 2007), but these projects are still rather vulnerable to it (Platteau and Gaspart 2003). Even when marginalised groups are formally included, without the appropriate facilitation, their voices can easily be overheard, such is the case of women and youths whose bargaining power is low (Lummis 2010). Access to benefits is subject to rules of eligibility and compliance with a range of regulations that define the legitimacy to participate. In such arrangements, there is ample room for elite capture of revenues (Adams and Hutton 2007). Wealth, social networks, literacy, ability to communicate with outsiders, education and gender are some of the factors determining the groups that tend to constitute local elites (Mansuri and Rao 2004). Some degree of elite domination may be inevitable, but outcomes depend on how well this heterogeneity is managed. Mansuri and Rao (2004) make a distinction between "*benevolent forms of elite domination*" and elite capture when evaluating project dynamics and outcomes. This, in order to distinguish between elite control of project funds and elite capture of project benefits (Fritzen 2007).

All these issues are relevant to natural resources management and conservation

since it is those relationships that determine who gets access to and exercises control over land and resources that ultimately determine the outcomes (Corbera et al. 2011). Land tenure and access are two interlinked factors associated to natural resources degradation. Such factors are constituted by “*bundles of powers*” (Ribot and Peluso 2003), which include rights of access, withdrawal, management, exclusion and alienation (Corbera et al. 2011). Thus, property requires legitimate institutions to define it while access and benefits from natural resources rely on different forms of authority and institutions (Corbera et al. 2011). In current protected areas governance arrangements, peoples and communities that have been marginalised are now expected to actively participate in spaces that have largely remained the domain of local elites (McDermott and Schreckenberg 2009). The greater pluralism of multi-scalar approaches means that rights are continuously negotiated; it can also be the case that equality of opportunity can be a legitimising device for economic inequality (Fritzen 2007). Thus, on the grounds of ecological concerns, the state retains discretion about the management requirements that condition local people’s rights of access to forest resources. Within this context abuses are common since information, decision-making power, and ecological criteria remain limited to certain circles, and ambiguous to local people (Ribot et al. 2010). Hence, community-based and -driven projects tend to be dominated by local and external elites, and if care is not paid in this sense, projects can worsen the inequality in communities (Mansuri and Rao 2004). In a context where the ability to get access to external funds is limited to educated or better connected people, a disproportionate share of benefits can be considered legitimate if the poor benefit from his/her leadership efforts in a “take it or leave it” situation (Platteau and Gaspart 2003). In fact, poor people expect the elites to serve their personal interest better than the public interest in a sort of remuneration for their leadership (Platteau et al. 2014). Thus, Fritzen 2007 calls for accountability mechanisms and pro-accountability as relevant factors for limiting elite capture and underlines that totally avoiding it may be unrealistic.



## **2.2 Mexico: Biodiversity, land tenure, governance and conservation**

*“... [C]onservation is by itself a social and political process, not a biological one. An evaluation of conservation, thus, also requires the evaluation of social institutions, economic mechanisms and political factors contributing to threatening conservation” (Alcorn 1994: 21)*

### **2.2.1 Biodiversity, indigenous and rural populations**

Mexico is the merging point of two major biogeographic regions that add to a varied topography resulting in a high species diversity and endemism (Ceballos et al. 2002). The South and Southeast of Mexico hold more than the 70% of the biodiversity of North America (Vera-Castillo 2003). Mexico is also home to one of the biggest populations of indigenous peoples in the Americas (10.5-12 million people, almost 20 million when including the *mestizo* population), with 50 main ethnic groups speaking up to 230 different languages (Toledo 1999). Eighteen out of the twenty-four million hectares that are populated by indigenous peoples in Mexico are covered by primary and secondary vegetation. Half of the tropical rainforests and cloud forests and a quarter of the temperate forests in the country are located within indigenous territories (Boege 2008). Almost 22 per cent of the water of the country is captured in highlands inhabited and owned by indigenous communities (Boege 2008). In Southern Mexico, 70% of the most biodiverse regions are inhabited by indigenous communities and rural communities called *ejidos* (Toledo 1999). Along with the Central American countries, they have not only one of the most diverse flora and fauna of the world, but are also home of up to a hundred of original cultures, making it one of the most bio-culturally diverse regions in the planet, called the Meso-American Biological Corridor (Toledo 1999; Vera-Castillo 2003). These are some studies that highlight the correlation between indigenous communities and areas of high biodiversity, natural resources and ecosystem services in Mexico. The states of Oaxaca, Chiapas, Veracruz, Guerrero and Michoacan contain the highest levels of both biological and indigenous cultural diversities. The indigenous peoples and rural

communities that inhabit these states and their local institutions for governance are key factors for conservation and development at the national level (Boege 2008; Martin et al. 2010; Toledo 2003).

### **2.2.2 Land tenure and institutional frameworks**

Mexico's land tenure structure constitutes a different case to other megadiverse countries, the recognition of communal and ejidal land tenure was possible after the Mexican Revolution (1910-1917), when the Article 27 of the Mexican Constitution (1917) prescribed an Agrarian Reform. This resulted in the redistribution of large estates and recognised social forms of land-tenure in the country in the form of *ejidos* and agrarian communities, including indigenous communities and communal lands (Toledo 1999). Agrarian communities were recognised by the Spanish Crown to the original settlers and are usually inhabited by indigenous peoples established long before the colony (Corbera et al. 2011). Agrarian communities hold forested and grazing lands in common while rights holders –or *comuneros*- have individual farming plots which cannot be sold or transferred outside the community (Corbera et al. 2011). Ejidos, on the other hand, are the result of the Agrarian Reform and were constituted by groups of people that claimed lands from large states of national lands to work on. These groups received access to parcels, which are managed individually and usually have an area that is communally managed for grazing, firewood collection and harvesting (Corbera et al. 2011). Even though agrarian communities are often related to the term community, it is worth clarifying that at times agrarian communities, as land tenure, do not have local statutes to behave as community and that sometimes ejidos can have those structures even when private owners of land can participate as part of the ejido (de Gortari, 1997).

The Agrarian Reform was not evenly implemented in all of the country and large private properties remained throughout the 20<sup>th</sup> century, mostly in Southern Mexico. In these regions the lack of land distribution and/or the distribution of lands with poor soils for agriculture enhanced poverty and marginalisation in peasant communities (Klooster and Masera 2000). Nevertheless, the Agrarian Reform has allowed land ownership to be distributed in such a way that agrarian

communities and ejidos cover 52% of the land and own most of the forested areas in the country (70%); private lands cover 37% of the landscape and 26% of the forested lands, while federal and public lands cover 8% of the landscape and only 4% of the forested areas in the country (Alix-Garcia and Harris 2014; Corbera et al. 2011; FAO 2010). However, this ownership is ambiguous and thus, land use and natural resource access have been largely controlled by the central state (Merino-Perez 2001; Corbera et al. 2011). Even the cases that place Mexico as a reference in community forest management have evolved through processes that involved local communities claiming back their access to the forestry resources that the central government gave to private and parastatal enterprises in the early 20<sup>th</sup> century (Merino-Perez 2001).

Indigenous communities and *ejidos* are ruled through customary law (*usos y costumbres*). The *Bienes Comunales* or general assembly is today the principal space for consensus and decision-making. These governing bodies are “*historically constructed forms that have been forged in relationships with the state and other social actors in the context of specific relations of power*” (Speed 2008: 88). In the *Bienes Comunales*, men become *comuneros*, where they are assigned a portion of the communal land and have a responsibility to participate in the community assembly, where decisions concerning every aspect of community life are made. According to the Agrarian Law, the ejidal/communal decision-making organs are:

- (1) the assembly;
- (2) the communal committee and
- (3) the vigilance committee (Art. 21).

The assembly is the main decision-making organ in the community where all the rights holders in the community or *comuneros* participate (Art. 22). Assemblies are the spaces where entitled *comuneros* and *ejidatarios* discuss issues or problems, accountability issues are reported, and community agreements are achieved and enforced. In general, *comuneros* and *ejidatarios* meet and debate decisions that must be made, until reaching a consensus point (Bray and Merino-Perez 2004: 136). In most cases, women do not participate in the assembly unless invited. Assemblies serve diverse purposes, they are a forum to share information, to make decisions about potential participation in external projects, coordination

about common resources management, community investments, etc. (Alix-Garcia and Harris 2014). The themes that are in the jurisdiction of the assembly include the formulation and modification of the local regulations; the incorporation and separation of members from the community/ejido; reports from the communal and the vigilance committees, the election and removal of the members of the committees; account of the investments made with communal economic resources; granting of powers and orders; leasing rights over communal land to third parties; benefit-sharing from the community's activities, and distribution of the different land uses. The assembly can be called by the communal committee, the vigilance committee or a group of community members of at least 20 or the equivalent to the 20% of the community/ejido members (Art.24). The general assembly should congregate at least once every six months or more often if the local regulations or needs require it to do so (Art. 23). For the assembly to be valid, at least half of the community/ejido's rights holders need to be present. Assembly resolutions are valid when voted for by the majority (50%+1) of the attending comuneros/ejidatarios, with exception of situations where changes in the land tenure structure are being voted. In this case, at least three quarters of the *comuneros* need to be present and two thirds of the votes are needed to support the resolution (Art. 26 and 27).

The communal and vigilance committees are both accountable to the general assembly. The communal committee is an executive committee in charge of the implementation of the assembly's agreements as well as the representation and administration of the ejido/community. This committee is constituted mainly by a president (or *comisariado*), a secretary and a treasurer. Additionally, it can have specific people in charge of particular commissions as well as auxiliary secretaries according to the internal regulations which define the form and extension of the functions of each of the members of the committee (Art. 32). The vigilance committee, constituted by a president and two secretaries, is the principal monitoring body, in charge of verifying that the main communal committee complies with the law, the internal regulations and the assembly agreements (Art. 35 and 36). It is also in charge of accountability and responsible for reporting any irregularity which the communal committee incurs. Although there is significant

variation throughout the states, this is the predominant mode of decision-making in indigenous communities in Mexico (Bray and Merino-Perez 2004: 136).

In agrarian communities and ejidos access rights to natural resources and land use are also defined through local forms of organization. Decision-making in ejidos and communities in Mexico is regulated by the Agrarian Law (1992), which establishes that communities have the right to define their own regulations according to their uses and customs as long as they are coherent with national law (Art. 10). Communities can determine the collective use of communally-owned lands and the equitable benefit-sharing of those activities (Art. 11), which is regulated through a communal statute. This communal statute is defined and validated by members of the assembly and then, certified by the Agrarian authority. It regulates all the matters related to life in the community: who is entitled to be a community member; who gets access to land and natural resources, and how; who can participate in community decision-making; the distribution of responsibilities and rights of community members and authorities, and the regulation of co-existence within the community in general, are all matters regulated by communal statutes.

Additionally to customary governing bodies and decision-making through *Bienes Comunes* and the assembly, communities in Mexico also have constitutionally elected municipal governments. Often, decisions are made in the assembly and then implemented through the municipal government (*Presidencia Municipal*) (Speed 2008: 89). Municipal governments are the minimal political units and act as the link between the federal governments and local communities. However, the coordination between federal, state and municipal governments and local communities varies widely throughout the country and there is often a mismatch between local, regional and national policies and actions (Alix-Garcia and Harris 2014).

### **2.2.2.1 PROCEDE**

One of the conditions of the incorporation of Mexico to the free market economy and the implementation of NAFTA<sup>1</sup> was that the agrarian structure of Mexico had to change. Consequently, in 1992 there were a series of reforms in order for the Article 27 of the National Constitution to allow the privatization and sell of previously communally-managed and inalienable lands (de Grammont 1996). The Programme for the Certification of Ejido and Land Ownership Titles (PROCEDE) formalized the fragmentation of land tenure within ejidos that has been possible through commercial transactions and through heritage (de Grammont 1996). Officially, PROCEDE was portrayed as a long needed response to peasant demands for land tenure certainty and to get hold of alienable rights over the land, enhancing social justice in rural Mexico (*Procuraduria Agraria*). The National Agrarian Registry was the agency in charge of implementing PROCEDE, distributing certificated of parcel rights and communal rights. The PROCEDE certified 86% of all the social property in the country, while 6% of the agrarian nuclei refused to get parcel certificates (Corbera et al. 2011).

Despite the promise of land tenure certainty that PROCEDE offered, it is worth to mention that two million hectares remain involved in land tenure conflicts that have not reached a solution (Corbera et al. 2011). Furthermore, even if peasants obtained more autonomy, such autonomy is ambiguous as well. State environmental bureaucracies (SEMARNAT, Ministry of Environment and Natural Resources; CONANP, National Commission for Natural Protected Areas and PROFEPA, Federal Environmental Protection Agency) and their regulations now reach deeper into the Mexican rural space. Such bureaucracies clash constantly with the effects of infrastructure and agriculture policies such as Procampo. The Procampo programme, also created after NAFTA was in place, was conceived to give equal opportunities to the production of corn in front of that from USA. However, the design of the programme gives subsidies for surface of land cultivated rather than for net production; this design enhanced the deforestation of primary and secondary forests to expand the surface receiving subsidies as well as the consumption of processed food and imported corn amongst peasant families (Merino-Perez 2001). The effects of these policies have had dramatic

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<sup>1</sup> North America Free Trade Agreement, between USA, Canada and Mexico.

impacts at a landscape level, on local food security, rural unemployment and increased food imports in rural areas of Mexico (Merino-Perez 2001).

### **2.2.3 Mexico, ambiguity between conservation and exploitation, capitalism and grassroots.**

Mexico has been at the vanguard of biodiversity conservation in many ways (Haenn et al. 2014). Currently, there are 174 federal protected areas in the country covering 25 million ha (13% of the national surface) and inhabited by more than 2.5 million people, representing 2.5% of the country's population (Bezaury-Creel and Gutierrez-Carbonell 2009; Haenn et al. 2014). The establishment of protected areas has been the main strategy for environmental protection (Graf et al. 2003). However, until 2000, the inventory of natural protected areas was the only indicator of the effectiveness of conservation policies in Mexico, where most of these protected areas lacked regulations, vigilance and human resources to promote their objectives (Pujadas and Castillo 2007). Furthermore, the management of such areas constantly faces challenges caused by the ambiguity of the federal policy regarding economic development and environmental protection, where rural peasants and indigenous people are caught in the middle (Merino-Perez 2001).

For a long time, indigenous peoples and peasants in Mexico have been made disproportionately responsible of deforestation in the country (Merino-Perez 2001). In fact, a contradictory policy between production and conservation, centralized forest management, rural marginalization and corruption have been the main causes of the loss of 80% of the tropical rainforests of the country (Merino-Perez 2001). In Mexico, ambiguity on land tenure and access to natural resources policies have meant that even though agrarian nuclei are recognised as legitimate owners of the land, their access to natural resources and the benefits derived from them have been restricted and over regulated by governmental policies and agencies (Corbera et al. 2011; Haenn et al. 2014; Merino-Perez 2001). Within this context, land-use change became a necessary step for landless peasants to get hold of property rights (Merino-Perez 2001). As part of this

ambiguity, state and federal governments created numerous protected areas during the 20th century over the top of municipal and agrarian nuclei, with little if any communication across scales. This lack of consultation and coordination resulted in social challenges for protected areas establishment and implementation in Mexico and particularly in the South-Isthmus region of the country.

National Parks were the first protected areas promoted by the Mexican government. These were based on expropriation and have had dramatic social and environmental effects in the lands where they were implemented (Merino-Perez 2001). Through time, new categories have been developed to define the current protected areas classification in the country, namely: Biosphere Reserves, National Parks, Areas for Flora and Fauna Protection, Sanctuaries, Areas for Natural Resources Protection, Natural Monuments and, the most recent, Voluntarily Conserved Areas (CONANP 2012). Out of these categories, the implementation of Biosphere Reserves aimed to overcome the negative social effects by avoiding (at least in principle) the expropriation of communal lands, but remained ambiguous by restricting the land-use within the limits of the reserves. This has been perceived by local people as a covered expropriation (Merino-Perez 2001). Furthermore, these restrictive figures contrast with the long history of deforestation incentives promoted by the national government through policies enhancing the colonisation and deforestation of primary forests in the 1970-1980s (Merino-Perez 2001).

Nowadays, regulating bodies and a wide range of professionals related to conservation recognise that protected areas in Mexico face many obstacles for their development and full consolidation (Personal observation). A major issue is that in Mexico, as in many other regions of the world, the notion of protected areas is related to “*dispossession*” (Berkes 2009). Protected areas’ establishment and implementation in Mexico have been constrained by social discontent, since protected areas in the country generally have represented an imposition and a restriction on other forms of land use (Senado 2009; Durand and Jimenez 2010). The Southern Isthmus region of Mexico, where Chiapas and Oaxaca are located, is far from being the exception. During the 20<sup>th</sup> century, federal government policies



promoted the colonisation of uninhabited regions of forest and rainforest, enhancing rapid ecosystem degradation (Merino-Perez 2001). Consequently, local and federal governments rushed the establishment of protected areas but without the prior informed consent of local people (Durand and Jimenez 2010). The implementation of protected areas and the subsequent restrictions of use, allocated generally over rural and indigenous peoples who have struggled to get access and titles to cultivation lands, continue to be a major task for conservation practitioners. Top-down conservation processes in the Southern Isthmus region are another example of the limited capacity of the state to coerce limits on resource users (Agrawal and Gibson 1999; Durand et al. 2014). Instead, these processes have engrained negative attitudes from rural and indigenous populations towards the establishment and operation of protected areas (Reyes-Garcia et al. 2013).

The interaction of inhabitants whose lands are located within the perimeter of protected areas and conservation practitioners in charge of operating reserves is riddled with tension (Durand et al. 2014; Trench 2008). Land tenure is the feature that structurates conservation and local groups' interactions (Trench 2008). This is particularly so in some core areas of Biosphere Reserves and National Parks, which are the protected area categories that imply expropriation of lands for conservation in Mexico. Hence, managers have to handle the difficulties of explaining to peasants, whose livelihoods are natural resources dependent, that the uses they can make of the land are subject to restrictions (Merino-Perez 2001). In the worst cases, managers have enforced involuntary relocations to respond to management plans. For instance, in Montes Azules Biosphere Reserve, Chiapas, the relocation of the settlement Nuevo Montes Azules has had negative implications for local livelihoods and culture of the families relocated (Fenner-Sanchez 2011; Trench 2008). In Montes Azules, there have been constant human rights violations and the loss of innocent lives emerging from social and political conflicts about the definition of the indigenous groups recognised as legitimate inhabitants of the region (Haenn et al. 2014). Although the details of these struggles go beyond the scope of this section, it is worth mentioning that conservation matters in Montes Azules Biosphere Reserve are entwined with

economic interests, land tenure conflicts, bio-prospection, elite capture and wider counter-insurgency politics in the region, since many of the communities threatened and/or forced to relocation in Montes Azules are sympathetic to the “*Zapatista*” movement (Trench 2008; Calleros-Rodriguez 2014).

National Parks are another example where processes of expropriation for the establishment of strict protected areas have led to conflict. In Chiapas, for example, the establishment of the National Parks Cañon del Sumidero, Palenque and Lagos de Montebello implied expropriations that were not fully accomplished. The federal government purchased some lands while many landowners did not receive any compensation, some others refused to sell or even to move out after purchase (Vargas-Marquez 1997). Up to today, problems emerge when protected area authorities try to implement National Park’s management plans but are not legally allowed to work with the inhabitants, because according to the law, they should not be there. Adding to the already complex situation, there are organised groups who make use of landless indigenous people to their advantage, promoting land invasions and claiming property rights for profit. The directions these processes can take are numerous; however, many of the cases imply long negotiation processes and, occasionally, the use of public force for relocation (Jimenez 2014).

Since 1996, the Mexican legal framework recognises participation as an element that needs to be promoted through the establishment, and implementation process of protected areas (LGEEPA, 1996). This recognition attended to different motives; on the one hand, it was enhanced by social circumstances prevailing in Mexico during the 1990’s. The rise of EZLN<sup>2</sup> in 1994, an indigenous movement in Chiapas claiming their right to self-determination among others, gave a louder voice to a number of indigenous and peasant movements around the country. One of the common claims was the right of indigenous and rural peoples to have a say on the policies and state actions that were affecting their lives. At the same time, rural and indigenous peoples in different regions of Oaxaca and Chiapas rejected the establishment and challenged the operation of protected areas in lands they inhabited. The two most striking examples are in the Chimalapas region, where

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<sup>2</sup> Zapatista Army for National Liberation (Ejercito Zapatista de Liberacion Nacional).

people organized and mobilized to refuse the establishment of a Biosphere Reserve (Gomez-Martinez 2009: 14), and around Montes Azules where rebel communities, sympathetic to the EZLN, were classified as invaders to the reserve and threatened with forced relocations (Bellinghausen 2005). In the name of conservation, military and paramilitary groups established their presence and intimidated local populations through threats and practices that undermined the human rights of local people. Within this atmosphere, people inhabiting protected areas or priority areas for conservation grew suspicious of the real motives for the presence of government agencies in their lands. The establishment and management of protected areas became even more difficult for conservation practitioners. Thus conservation agencies representatives working in the region were prompted to develop new strategies to achieve land cover for conservation targets through different means (SG pers. comm., Sept 20<sup>th</sup>, 2010).

Simultaneously, the international community, academic researchers and conservation professionals were calling for more socially inclusive approaches to conservation. These calls were also compatible with the recent introduction in Mexico of the neoliberal economy in 1992. This implied a process of reforms towards decentralization inside government agencies, and devolution of the nation state's responsibilities towards civil society. Likewise, the government developed "social liberal" programmes that combined public concerns with policies promoting the market (Fox 1995). The reforms and the social conditions described above allowed and promoted the incorporation of private and community initiatives to achieve conservation objectives. Thus, since 1996 LGEEPA has incorporated participation into the conservation discourse to legitimise conservation practices and programs, as well as to promote the delegation of responsibilities to different stakeholders. This shift has enhanced the creation of joint management boards for protected areas management, involving a multiplicity of actors across scales, including NGOs.

Nevertheless, despite the fact that current national policy and many of CONANP's agents are indeed promoting inclusive processes to move beyond the imposition of government decisions over local people, conservation policies and practices still face several issues regarding local participation and representation. Even though

participation is acknowledged as crucial for conservation efforts at a discourse level, participation and representation of local communities (usually indigenous) in the management of protected areas remains as an aspiration in many cases (Pujadas and Castillo 2007). Pujadas and Castillo (2007) argue that in Mexico, the implementation of protected areas is another example of the top-down development politics developed in the country. Moreover, according to her, the creation and management of protected areas are still developed from a perspective that considers participation through the underlying assumption that people are

*“... empty recipients who should be filled with conservation ideas so that they stop destroying ecosystems and advocate the conservation cause”*  
(Pujadas and Castillo 2007).

Thus, participation in protected areas is seen as an instrument to achieve conservation goals and even though efforts are put into create participatory processes, exclusion is rather common (Durand et al. 2014). As a result, conservation efforts in protected areas provide little or no contribution to local surroundings and fail to incorporate local views and knowledge into the decision-making process (Durand et al. 2014). This ultimately, undermines the maintenance of ecosystems services and the possibilities for more sustainable and dignified livelihoods (Pujadas and Castillo 2007).

The paragraphs above illustrate that protected areas establishment and implementation are similar regardless of the management category. Protected areas, just like development projects, may struggle to be fully implemented and to achieve their management plans (Porter-Bolland et al. 2012). However, empirical cases show that they have been effective in enhancing the expansion of both the state and the free-market economy through conservation (Haenn et al. 2014). Mainstream conservation and economic development have been the means to develop discourses that have allowed a fractured state apparatus to reach areas and people where it could not before (Haenn et al. 2014). Local and enduring resistance as well as failures are usually tackled applying subsidy programs promoted as conservation programs (Haenn et al. 2014). The role of NGOs and

private consultants has extended conservation beyond the state and are including other social actors, filling the vacuum left by the “shrinking state” and putting a green cover to market-based environmental protection measures (Haenn et al. 2014).

Within the local context, protected areas’ conservation programs perpetuate the clientelistic relations between the state and peasants and indigenous people, increasing the contact between the state and formerly remote areas in a “*scientifically-based meritocracy*” (Haenn 2014:7; Trench 2008). Feasibility studies, formats and complex paperwork are required to access aid programmes, perpetuating patron-client relationships, meritocracy and local dependence on state officials, NGOs or private consultancies (Durand et al. 2014). The one size-fits-all approach that Federal protected areas has had mixed social and environmental results that offer several lessons to the design of more viable and just conservation initiatives (Haenn et al. 2014; Porter-Bolland et al. 2012). As an alternative, there are a number of grassroots efforts that include ejido members, small-scale resources users among others, who have a deep effect on biodiversity conservation within and outside federal protected areas (Haenn et al. 2014).

In this chapter we have reviewed the original notions on which the establishment of protected areas has been based, where humans and natural resource use have been detached from “*pristine nature*”, causing social conflicts and human rights violations in many cases. Social unrest and rejection towards protected areas as well as neoliberalism have enhanced the discourse in protected areas management. In the last two decades there has been an increased recognition of the role of local people in the achievement of conservation and management objectives in protected areas as well as the multiple actors involved in management. The emergence of multi-scalar approaches to conservation and the understanding of governance as a process rather than as a series of categories have allowed the formal recognition of areas conserved by indigenous peoples and other social actors. Such achievement holds great potential to enhance the will and capacities for natural resource management by landowners, including indigenous people in ICCAs. However, in practice, participatory governance and the implicit decentralization and power devolution remain a challenge. The

question about why it is so difficult for central governments to devolve enough powers to local communities possibly remains to the nature of power itself, as present everywhere, continuously reproduced through discourses and ways of knowing that define legitimacy and behaviours. Thus, without a careful reflection, power structures tend to get reproduced under different names but with similar practices. Such is the case between the discourse of development and its insertion within the conservation arena. Conservation, just as development projects, has helped to extend the reach of states to places where it was not possible before while participation remains as a means for legitimation and achievement of conservation targets. Yet, the allocation of rights and responsibilities for natural resource use and access remain unclear and states keep the discretionary powers to allocate them. The role of NGOs has replaced government agents, but mainly, they have placed themselves as the experts who can define how people should live. From this perspective, the Mexican conservation arena provides a clear illustration of these processes. Voluntarily Conserved Areas aim to be the Mexican version of ICCAs, holding the potential of grassroots approaches for conservation but limited by the ambiguity that characterizes other forms of protected areas. These issues place the theoretical and geographical context on which this thesis will develop.

## **Chapter 3: Research design and study site**

### **3.1 Research design and scope**

The aim of this dissertation was to explore in depth for the first time, issues of power and governance in relation to the recent policy concept of ICCAs and the practical implications for multi-scalar governance arrangements. The empirical research was developed in the Southern Isthmus region of Mexico, which comprises the states of Oaxaca and Chiapas and, therefore, has the highest bio-cultural diversity in the country (Toledo 2003). Consequently, the region has a high concentration of federal protected areas (13), and has been pioneer in the implementation in Voluntary Conservation Areas (Martin et al. 2010). The data collection and the structure of the thesis reflect the multiple scales involved in protected area management. The overall research was divided in three parts, at the national, regional and local scales, as an approach to capture the multi-scalar nature of governance as follows:

- (1) A review of Mexican national protected areas legislation.
- (2) An exploration of the perspectives of conservation professionals working in the Southern Isthmus region of Mexico concerning community participation and governance.
- (3) An in-depth local case study of the implementation of an ICCA through a multi-scalar governance arrangement.

At an early stage of this research, the aim was to focus in Chiapas exclusively. The state presents a complex enough arena that has been an experimentation field for numerous conservation approaches with multiple outcomes through time (Haenn et al. 2014; Trench 2008). Oaxaca, on the other hand, is now widely known for its local community governance structures for natural resource management (Bray et al. 2012; Corbera et al. 2007; Merino-Perez 2001). Even though both states represent contrasting cases in terms of conservation governance, Chiapas and Oaxaca now share an administrative region (the Southern Isthmus region) in relation to the National Protected Areas Agency (CONANP) and it is difficult to separate them. Therefore, while most of the interviews have been carried out with

conservation practitioners based in Chiapas, some of the relevant actors involved in processes in Oaxaca were also included in order to cover this region adequately. One of the main links in the field was an NGO, called Pronatura-Sur (Chiapas), which introduced me to other relevant actors and, at the time, was starting a highly relevant project in San Miguel Chimalapa, just over the state border, in Oaxaca. The characteristics of the case made it a highly illustrative case for the topic of this research and thus, the in-depth case study was developed in Oaxaca. Therefore in this thesis, the geographical scope will be referred to as the Southern Isthmus region, which contains both states Chiapas and Oaxaca, but the local scale places emphasis on the eastern part of Oaxaca within a Conservation Priority Region, where San Miguel Chimalapa is located.

### **3.2 Methods**

The point of departure of this research consisted on a literature review and a preliminary fieldwork season in Chiapas and Oaxaca between May 4th and June 30<sup>th</sup>, 2009. During the preliminary fieldwork, data was collected through direct observation of a community-conservation experience exchange organised by the Global Diversity Foundation in Santa Cruz Tepetotutla, Oaxaca, and informal interviews with people working on NGOs like TNC and Pronatura Sur. The conversations of protected areas and conservation professionals discussed the voluntary conservation and community-conservation movements. These movements had just started to gain major attention from the state since the reforms to LGEEPA in May 18<sup>th</sup>, 2008, that acknowledged Voluntarily Conserved Areas as another official protected area category. The challenges that the implementation of the new policies represented as well as those of federal protected areas were also explored.

The characteristics of qualitative methods from the social sciences and the potential advantages of their application while researching protected areas governance made them the most suitable approach to take. The fieldwork stage of this research was carried out between June 2010 and May 2011. During this period, various research tools were applied according to the multi-scalar nature of governance arrangements for conservation and the characteristics of the



informants. Data collection was divided in three stages that included the following research techniques, which are described in more detail below:

- (1) Document revision of the “Diario Oficial de la Nacion”, national laws and regulations, scientific articles and relevant publications regarding different governance arrangements for biodiversity conservation in Mexico.
- (2) Semi-structured interviews and workshop observations with agents involved in different governance arrangements for biodiversity conservation at regional, executive and operational levels.
- (3) Semi-structured and unstructured interviews as well as participatory observation were carried out in the community of San Miguel Chimalapa (San Miguel hereafter), Oaxaca in order to inform an in-depth case study. San Miguel is located within a Conservation Priority Region, fieldwork involved close interaction with the external agencies working in the region but with emphasis on the two settlements of the community that are more related to a community conserved area called El Cordon del Reten. These settlements are called San Antonio and Benito Juarez and are located in the eastern region of San Miguel.

### **(1) Document revision**

A revision was carried out of official documents, academic literature and other relevant publications related to governance arrangements in biodiversity conservation in Mexico. The legal framework and mechanisms for different categories of governance arrangements were searched through search engines and obtained through the conservation agencies. Mexican Official Norms, LGEEPA regulations and policy briefs were downloaded from internet. The documents were analysed through a coding system based on Ribot and Peluso (2003: 154) in order to identify *who* and who does not get access to participation in protected areas management and decision-making, in “*what ways* and *when*”.

**(2) Semi-structured interviews and observation of NGO workshops with different social actors.**

Forty four semi-structured interviews were carried out with the following actors in order to explore different conservation practitioners' perspectives (see Appendix II):

- (1) Four senior staff in regional offices of CONANP at the Southern Isthmus region, including the Regional director, the Technical Secretary, the person in charge of fire management and the agent in charge of Voluntary Conserved Areas Certification regionally.
- (2) One senior staff at the National Forestry Commission (CONAFOR), who was involved in the reforms for the recognition of Voluntarily Conserved Areas.
- (3) Three members of the staff of the Chiapas' environmental agency in charge of establishing and implementing state protected areas
- (4) Eleven directors and sub-directors of the Biosphere Reserves and National Parks of Chiapas of state managed protected areas in Chiapas and the director of Yagul National Park, Oaxaca.
- (5) One staff from CONANP with specific responsibility for Priority Region for Conservation in the Chimalapas region.
- (6) Twelve operative members of Biosphere Reserves (La Encrucijada and Montes Azules).
- (7) Nine representatives of different NGOs involved in conservation governance arrangements in Chiapas and San Miguel Chimalapa, Oaxaca (Pronatura Mexico, Pronatura Sur, Maderas del Pueblo, Support Group for Sustainable Development, Global Diversity Foundation and The Nature Conservancy).
- (8) Three owners of private reserves in Chiapas.

The use of semi-structured interviews (SSI) allowed room to explore a broad range of topics regarding the management of protected areas, while assuring that the central questions were covered during the conversation. This research method proved to be useful to enhance a more natural conversation with informants allowing them to go beyond their official statements if they wished to do so. Through triangulation with the official reports and documents I could register when the experiences and statements of the interviewees did not match the official versions. The sets of interviews focused on perceived strengths and weaknesses of the current conservation mechanisms in terms of (1) establishment and (2) implementation of the different arrangements for conservation governance in the region (see Appendix 1 for the SSI interview guide). The questions in the first stage of the interviews referred to the perceptions of conservation practitioners about the advantages and disadvantages of the legal mechanisms available for conservation. A second aspect explored the bureaucratic procedures and the process of centralisation/decentralization of conservation agencies as well as the trade-offs that protected area managers and conservation practitioners perceived between bureaucratic procedures (i.e. accountability formats, reports, planning and funding applications, etc.) and the time available to design and implement participatory processes in protected areas. Conservation practitioners were also asked about the ways local management practices were included in the protected area management plan. Targeted and snowball sampling were used for the semi-structured interviews and the sample size was determined by saturation during the coding stage.

In addition, data were collected through direct and participant observation of four events related to community conservation and protected areas management. The first workshop was a voluntary conservation experience exchange in the community of Santa Maria Guienagati, Oaxaca, one of the first certified Voluntary Conserved Areas in the country. This workshop, run by Pronatura-Sur A.C, brought together people from Oaxaca, Guerrero, Chiapas and Guatemala. The second workshop, also run by Pronatura Sur, was another experience exchange but with members of different networks from Chiapas, Guatemala and Costa Rica regarding the experiences of constituting networks for voluntary conservation. The third

event was a meeting between protected area managers, both federal and voluntary, about the challenges that protected areas in Chiapas face in order to control environmental offences (e.g. land invasion, illegal logging and mining concessions). Finally, I took part in a Community Conservation Forum organised by the research consortium ConservCom, in May 6<sup>th</sup>, 2011, in Campeche. In this forum, ejidos and communities from Campeche, Yucatan, Chetumal and Quintana Roo presented their experiences of community conservation and, along with environmental agencies and NGOs working in the region, analysed the policy gaps as well as the needs for inter-institutional coordination in order to support community conservation efforts.

Data was collected through note-taking, I participated taking the memoirs of all but the last event on which I used a digital recorder and took notes. These data were transcribed and coded with the software QSR NVivo software in order to identify the opportunities and challenges perceived by protected area managers and by the different local communities and collectives engaged in voluntary conservation.

### **(3) Qualitative data from in-depth case study**

Once all the relevant actors related to conservation governance in the region were identified, an in-depth case study was developed in San Miguel Chimalapa, Oaxaca (San Miguel, hereafter), a municipality and indigenous community located within a Conservation Priority Region. The case study looked at the implementation of a recently established Voluntarily Conserved Area (VCA) through a multi-scale governance arrangement by analysing the dynamics and interactions between the multiple actors involved in the decision-making process related to the VCA.

My stay in the different settlements of San Miguel (the head municipality and the settlements San Antonio and Benito Juarez) had place between November 2010 and May 2011. Data collection for the case study included participant and direct observation as well as interviews ranging from semi-structured to unstructured using targeted sampling. Target sampling allowed me to identify those members of the community most engaged in the decision-making within the community and hence more informed about how the establishment and implementation of the

VCA was developing. I could also identify those willing to talk to me and leave alone those who were not interested. This sampling has the disadvantage of the high possibility of not including the views of those who tend to be marginalised within the community and who might not have felt confident enough to talk to me. Truth be told, targeted sampling allowed me to feel safer, being by myself and a woman in a region known by social unrest, illegal logging, drug cultivation and animosity towards environmentalists I did not want to risk too much questioning people randomly about community regulations for natural resource management. Still, I tried to compensate this bias by constantly walking through the settlements, talking to women, youth and teachers informally. When issues about the conserved area, natural resource management or community organisation and regulation came up during the conversation, I would write it down afterwards in my fieldwork diary. Field notes were transcribed and coded with NVivo.

Data were also collected from direct observations of formal and informal meetings between different stakeholders. Note taking was used during meetings between the inter-institutional committee members, meetings between both committees the communal and the interinstitutional as well as in the assemblies within the community. Participant observation was carried out while accompanying local people and NGOs to activities related to fire prevention and patrolling, as appropriate. Twenty-three semi-structured interviews were carried out in both settlements adjacent to the VCA (10 in San Antonio and 11 in Benito Juarez) and five in the municipal seat of San Miguel (Appendix II presents an anonimised list of the interviewees and the coding system). The topics of the interview included oral histories of the site, in order to document how the current governance arrangements developed and the interactions among different actors through time. The information from these oral histories was supported by triangulation with archival documents and information from key informants. Participatory methods such as time-lines and Venn diagrams were used with key-informants in order to explore (a) the history of the site and (b) the interactions between different stakeholders.

Finally, I participated as an observant in the process to develop a new VCA in the settlement of 5 de Noviembre (known as La Cristalina, also in San Miguel). As part

of this process I attended to three land-use planning workshops and a fieldtrip for biological characterisation where all the male members of the settlement participated. This was an opportunity to talk to some of the people who founded the settlements of San Antonio and Benito Juarez and who have been actively involved in the land-tenure conflicts in San Miguel. I carried out four semi-structured interviews with members of La Cristalina to add a total 32 interviews in San Miguel.

The different topics covered by the in-depth case study in San Miguel Chimalapa are listed below:

- a. Description of the diversity of agencies from the government, diversity of NGOs and funders, *ejidos*, community members as well as official and traditional authorities.
- b. Detailed historical account of the development of the current governance arrangement.
- c. Documentation of the decision-making process in El Reten with emphasis on the following aspects:
  - (1) Different actors' roles and their participation on decision-making, negotiation and advocacy during the official starting point and currently.
  - (2) Interactions between social actors at different scales:
    - Between different settlements and local authorities in San Miguel Chimalapa.
    - Between these local actors and external stakeholders (government agencies, NGOs).
    - The implications of such interactions for decision-making and implementation of the agreements made as well as benefit-sharing.

The selection of the case study was based on an opportunity developed through the contact with the NGO Pronatura-Sur A.C. who had been involved in the biological studies for the formal recognition of the VCA in San Miguel. Through Pronatura-Sur, I could contact WWF, whose representative introduced me to a representative of the Supporting Groups for Sustainable Development (GADES), a consultancy working in the implementation of the conservation and development strategies as a result of the conservation plans developed. The first meeting I attended was one of the inter-institutional group for sustainable development of Chimalapas (operational committee), in the city of Juchitan, Oaxaca in July 2010. At the local offices of CONANP in Juchitan I also met the representatives of CONANP, WWF, the funding body of the project called FONDO Oaxaqueño para la Conservación (FONDO A.C.). Through this meeting I had an introduction about the relevant institutions, the different plans and projects that would take place that year (2010-2011), as well as the budgets invested by the different actors. Later, in the same meeting I was introduced to the local communal authorities of San Miguel Chimalapa, who immediately showed their disposition to participate in the project. The same day, I was introduced to the people from the settlement of La Cristalina, and the next week GADES introduced me to the people in San Antonio and Benito Juárez.

### **3.3 Methodological considerations and challenges**

This research process has allowed me to become aware of the different shades of grey that are in what I once, naively, considered as black and white within governance processes. The development of this thesis has been a personal and academic journey where many of my preconceptions about conservation in practice and community dynamics have been challenged and, at times, put down. My personal aim for this research was to inform the development of rights-based approaches for conservation, as well as advocating for policies that promote bio-cultural diversity instead of homogenisation. Although these objectives are still standing, one of the main shifts in my perspective has been the perception of state entities.

Through the development of this research, I have been able to observe how the figure of the state and the programs and policies it promotes often work to legitimise private interests, promote paternalism and exclusion towards local people behind the mask of conservation or development projects. Nevertheless, I have been also able to meet conservation practitioners that (often naively) give the best of their efforts with limited human and economic resources available to develop conservation processes that are coherent with their social contexts. Many conservation practitioners in the field, beyond all the plans and strategies, are usually overwhelmed by the needs, responsibilities and bureaucracy required to perform their tasks. On the other hand, in the academic field, our task is to critically think about conservation policies and practices, and to draw theoretical lessons to improve them. However, literature on this regard often shows little or no empathy for those who have to deliver results with limited funds, personnel and capacities. Thus, before pointing out all the issues that, according to my perception, need to be done differently, I want start by expressing my respect to the people who work every day to achieve biological conservation and who invest their efforts to do a good job with the resources, mechanisms and time available, in spite it often does not give the most desirable outcomes.

The conservation arena in Chiapas has been subject to constant critiques from human rights defenders since 1990's. Social conflicts and private economic interests in conjunction with the use of military forces and violence in protected areas in Chiapas have enhanced conservation's reputation of repression and marginalisation, especially in the Lacandonian Rainforest (Haenn et al. 2014; Speed 2008; Trench 2008). Because conservation is such a political issue, informants at state and NGOs agencies are generally very cautious about their statements. The political weight that they have to bear makes them very strategic and thus, only a few of them really opened up about the problems of protected areas operation during the interviews. The fact that the interviews took place in their working space also limited the freedom with which the informants spoke. Hence, regardless of the efforts invested to move beyond official statements, this was only possible with some of the informants. Nevertheless, there were a couple of officials and NGO members who became key informants and with whom I



developed more than one interview and who kindly provided feedback on various chapters of this thesis.

The current focus on multi-scalar approaches was developed largely through the fieldwork stage, when the plan was to have two case studies, one in an Indigenous Community Conserved Area and another in a Biosphere Reserve. The events on the ground had a strong effect on the order and the extent to which the objectives could be accomplished, as not everything was successful in this process. Additionally to the difficulties for access to the Biosphere Reserve, the development of a comparative study showed the mismatch between the scales of the cases selected. The size of the Biosphere Reserve, the number of governmental and non-governmental agencies involved and the number of communities embedded within it did not allow developing an in-depth case study to establish a comparison with a single Indigenous Community Conserved Area during the time available. Still, some lessons could be drawn from this experience, beginning with the fact that the ICCA is geographically and administratively confined within the boundaries of a certain community/municipality, making it easier to define the stakeholders involved and the interactions between each other. In terms of research, getting access to a particular case-study with clearly identified authorities and boundaries made research more logistically feasible. Nonetheless, a short stay in Agua Fria, the only community I could visit in El Triunfo Biosphere Reserve, provided some useful insights about the size and institutional scales of Biosphere Reserves, the difficulties of managing remote areas for reserve authorities and the resulting local population's feeling of being neglected by institutions.

That is how ICCAs became the primary focus on this research through an in-depth-case study. Biosphere reserves have been, however, explored at the regional management level, informing the argument towards the importance of community conservation. Furthermore, even though ICCAs imply a different governance structure, Biosphere Reserves in Mexico themselves are not only populated, often by indigenous communities, but also rely heavily on the inhabitants for operational purposes. As will be further explained during this thesis, recent developments on protected areas legislation enhance the relevance of the

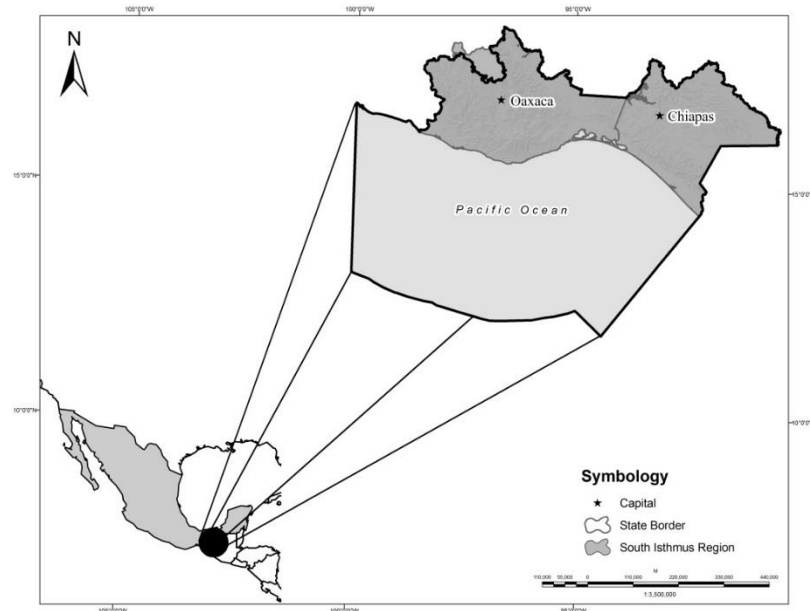
contributions of this research for both governance structures: ICCAs and Biosphere Reserves.

### **3.4 Study site: The Southern Isthmus region of Mexico**

Oaxaca and Chiapas are the two most bio-cultural diverse states in Mexico (Toledo 1999). Located in the Southern region of the country, in the convergence point of the Palaeartic and the Neo-tropical bio-geographical regions, both states share a rich topography and an outstanding variety of climates and biodiversity. The correlation between biological and cultural diversity in this case means that, despite being neighbouring states, Oaxaca and Chiapas also represent rather different contexts in cultural and social terms (Fernandez-Osorio 1999; Vera-Castillo 2003). Titled indigenous communities constitute the main form of land tenure of Oaxaca covering 5, 399 883 has (De Gortari 1997; Robson 2007), while *ejidos* prevail in Chiapas with 3 mil 021 *ejidos* and 91 communities, covering 4.3 million has (Fernandez-Osorio 1999; SEDATU 2012). Although there has not been a systematic comparison between both states, local experts acknowledge that the difference in land tenure patterns and social processes between Oaxaca and Chiapas have resulted in different organisational arrangements. Consequently, both states have developed different processes, struggles and natural resource use patterns. Despite their different backgrounds, Oaxaca and Chiapas share a common prestige for the fierce resistance of their indigenous peoples to western ways of natural resource extraction (Merino-Perez 2001) development (Speed 2008; Toledo 1992) and even top-down conservation (Doane 2007; Walker et al. 2007). Such resistance has meant in many cases for them to remain in marginalisation by the state and international funding agencies and social unrest due to conflicts regarding land tenure and access to natural resources (Martin et al. 2010). These conditions have wider implications for the conservation of the landscapes where these wealthy social-natural systems are located.

Despite their natural and cultural diversity, in 2009, the federal Protected Areas Commission (CONANP) decided that Chiapas and Oaxaca would constitute a single administrative region: the Southern Isthmus (Fig. 3.1). Thus, this research focuses on this administrative regionalisation in order to analyse the governance structures and mechanisms for biodiversity conservation. In order to clearly set

the differences between both states and underline the local characteristics of relevance for participatory conservation governance, this section will describe each state separately.



**Figure 3.1. CONANP's Southern Isthmus Region (Fernando Rodríguez).**

### **3.4.1 Oaxaca**

**Bio-cultural diversity.** Bio-cultural diversity finds a major expression in Oaxaca, an outstanding land where biodiversity and indigenous cultures have co-evolved since pre-historic times, creating multiple and diverse landscapes. Oaxaca represents 4.8 % of the national area with 9,379,300 ha, bordering with Chiapas (E), Guerrero (W), Veracruz (NE), Puebla (NW), and the Pacific Ocean (S). Oaxaca's hydrological systems include thirty major streams that run through its four main mountainous systems: the Neo-volcanic axis, the Southern Sierra Madre, the Plain lands from the South of the Gulf and the Central American mountain range (INEGI 2005). This intricate topography allows Oaxaca to have the highest climate and biological diversity of the country. Biologically, Oaxaca holds the highest number of vertebrate species (1,431) and vascular plant species (8,431) in Mexico. Biological inventories for the state are still incomplete, but it is calculated that Oaxaca is home for 8.3% of the endemic species of Mexico. It is also the origin and

domestication centre for corn, squash and several species of beans by some of the multiple indigenous peoples that inhabit the state (Boege 2008).

Oaxaca is divided into 570 municipalities (INEGI 2010) and up to 80% of the area of the state belongs to indigenous communities. There are sixteen ethnic groups in the state, making Oaxaca the state with the biggest indigenous population in Mexico with more than one million indigenous people out of a total population of 3.1 million inhabitants (INEGI 2005).

**Economic activities.** Indigenous and rural *ejidos* and communities from Oaxaca supply agricultural products to the local, regional and even international markets. The economic activities in the state include forestry, cattle farming and agave cultivation and processing to obtain products like *mezcal*, syrup, fibres and food (Carrasco 1999). Locally, indigenous agriculture provides products to the market such as: coffee, agave, fruit trees, vegetables, sugar cane, rubber, vanilla and chilli among many others that are complemented by herbs for medicine and food, flowers, wild seasonal food and seeds, animal leather, pottery products, pigs, poultry and insects. Nevertheless, indigenous and rural production does not seem profitable when compared to the notion of productivity by economists (Carrasco 1999). This disparagement of the rural livelihoods has led to the development of policies for agricultural production that have been acknowledged for enhancing poverty, unequal conditions for the local peasants and environmental degradation (Merino-Perez 2001). Thus, despite the lack of growth in agricultural areas, there is a constant environmental degradation process in the state and by 1994, 84% of Oaxaca's land was suffering different levels of erosion (Carrasco 1999). Demographic pressure, deforestation, overgrazing, loss of vegetation cover in areas of high biodiversity due to the clearing of vegetation for cattle farming, the use of agrochemical products, and the traditional slash and burn systems have been acknowledged as the causes for soil erosion. Even though the proportions of the negative environmental impacts by activity have not been studied, Carrasco (1999) argues that these problems have increased since the 1990s agrarian reforms. The agricultural policies, especially to rural and indigenous communities, are ambiguous and further marginalise rural areas of Oaxaca (Carrasco 1999).

**Structures for natural resources use and conservation.** In Oaxaca 91% of the totality of the land tenure is communal or ejidal (Lopez-Arzola 2007), where 30 priority regions for biological conservation have been defined by CONANP. These areas include indigenous territories belonging to the following ethnic groups: mixes, zoques, zapotecos, chinantecos, cuicatecos, mazatecos and chontales from the coast. These groups are acknowledged by holding strong communal institutions for natural resource management (Bray et al. 2003; Martin et al. 2010; Merino-Perez 2001). Throughout the 20<sup>th</sup> century, transnational and state companies for timber extraction were granted access to forests owned by local communities in exchange for a tiny proportion of the profits and access to the roads built to transport the timber. This precedent enhanced in Oaxaca's communities the organisation of structures that allowed them to claim back their access rights, as well as the development of capacities to manage their own forest resources (Merino-Perez 2001). Oaxaca has a potential for timber extraction that has been calculated in two million cubic meters, mostly made by communities (Lopez-Arzola 2007). Since the 1990s Oaxaca has attracted research regarding the management and conservation of community forest resources (Anta-Fonseca et al. 2000; Chapela 1999; Anta-Fonseca et al. 2000; Ventura-Aquino et al. 2008). With only four federal protected areas in the state, Oaxaca is considered to be a model for community conservation efforts and a successful example of local empowerment for natural resource management (Martin et al. 2010).

Surprisingly, only 5.2% of its area is under some form of federal protection in four different protected areas (Garcia-Mendoza et al. 2004, See Figure 3.2). Contrastingly, Oaxaca has become one of the world's leaders on community resources management and establishment of Indigenous Community Conserved Areas under the category of Voluntary Conserved areas (Martin et al. 2010). Martin et al. (2011) found 126 sites of community conservation, 43 of them were certified by CONANP in Oaxaca, which represents the 69 percent of the cover under the category of VCA at the national level. These conditions of cultural, ecological diversity as well as the historical background make of Oaxaca the ideal place to study the dynamics of local governance structures for natural resources management (Martin et al. 2011).

### 3.4.2 Chiapas

**Bio-cultural diversity.** Located in South-eastern Mexico (17° 59' and 14°32' N; and 90° 22' and 94° 14' W), Chiapas borders with Tabasco (N), Pacific Ocean (S), Guatemala (E), Oaxaca (SW) and Veracruz (NW). It represents 3.8% of the national area with 7,441,500 ha. (Gov. of Chiapas 2005). Precipitation in the state ranges from 300 to 5,000 mm per year and the river systems represent 30% of the hydrological resources of the country with two main watersheds: the Gulf Watershed (formed by the *Usumacinta* and the *Grijalva* rivers), and the Pacific Watershed (*Cahoacan*, *Coatan* and *Suchiate* rivers). Although biodiversity listings are still incomplete in Chiapas, it has been calculated that there are up to 49,000 species of fungus; 51 species of algae; 70% of the national richness of ferns with 798 species; 1,173 registered species of epiphytic vascular plants, with 568 orchid species and 101 species of bromeliads. In total, the vascular plant richness is calculated in 10,000 species, placing Chiapas in the second place of national diversity, after Oaxaca (Rubio-Delgado 2013). The ecosystem and species diversity of Chiapas result from the topographic and consequent climatic diversity, as well as the fact that Chiapas is located in a convergence point for two bio-geographical regions: the Palaearctic region and the Neo-tropical region. Chiapas holds 20% of Mexico's biodiversity with up to 8,500 plant species, 100 species of amphibians, 181 of reptiles, 340 of birds, 130 of mammals and over 1,200 species of butterflies (Gov. of Chiapas 2005). The ecosystems present in the different regions of the state include tropical rainforest, subtropical deciduous rainforest, montane moist forest, pine forest, pine-oak forest, low deciduous forest, riparian forest, swamp forest, mangrove, reed beds, lagoon systems, *jimbales* (Communities dominated by *Bambusa longifolia*), savannah, tropical moorland, *chusqueal* (Communities of the genus *Chusquea*) (CONANP 2009).

Chiapas is the second most culturally diverse state of the country with eleven indigenous groups (INEGI 2010). By, 2010, the population in Chiapas reached 4,796,580 inhabitants distributed in 119 municipalities; 37.7% of them are considered indigenous (INEGI 2010).

**Economic activities.** The state can be divided in micro-regions delimited by cultural identity and economy as follows: Cintalapa-Jiquipilas, Chol, Zoque-Tzotzil, Chiapas' Highlands, Lacandonian, Comitán and Soconusco. Productive activities across the regions display a mosaic, which includes cattle farming and cultivation of grains, cacao, banana, and recently African palm and *Jatropha* for food and cosmetic production as well as biofuels. Corn is a crop traditionally used for home consumption while coffee production is used for commercialisation.

**Structures for natural resources use and conservation.** Chiapas is a place where there is local and regional diversity (Speed 2008: 82). A process of internal colonialism in the last 200 years has its biggest expression in Chiapas, characterised by hegemony and avoiding a more inclusive process of development (Nahmad-Sitton 1999). In Chiapas 17% of the land is collective property and it is the second state at the national level in terms of the number of *ejidos* with 1.887 (Rice 1997). Agriculture and land tenure patterns display a significant variety due to the fact that many colonists settled and received “*ejido*” lands. Colonists are either private producers or “*ejidatarios*” from many parts of the country and Chiapas itself, and have played a central role in shaping the land use patterns.

The dramatic effect of extensive logging of precious timbers and cattle grazing on Chiapas' ecosystems created a conservation crisis that resulted in the creation of numerous state managed protected areas (Parra et al. 1994). Since the late 1970s, the conservation of Chiapas' biodiversity was promoted Miguel Alvarez del Toro, the icon of conservation in the state. It was his early efforts that set the basis for the current protected areas system of Chiapas. Nowadays, Chiapas has the largest number (18) of Biosphere reserves and other categories of Federal Protected Areas in the country. According to the National Institute of Ecology, there are up to 90 municipal and state protected areas although the actual management of these is uncertain (CONANP 2013).

Chiapas is well defined by the word contrast. Known for its impressive amount of natural resources and landscapes, the state has had a very dynamic history with inequality towards its indigenous and rural populations as a constant feature (Speed 2008). The indigenous population and rural peasants have had to face

discrimination, abuses, food deficit, lack of education, health problems, deforestation and erosion through time. This situation enhanced migration and colonisation within the state; this led to numerous conflicts over the land (Cruz-Burguete 2008). The establishment of protected areas without the prior informed consent of the people living within them have created some of these conflicts. Additionally, in places like Montes Azules, political forces acting in the name of conservation have worked for protected areas to be perceived as a threat by the rural population in this region of the country (Haenn et al. 2014).

Development in Chiapas has been scattered, gradual and a slow process (Harvey 1998). Since 1970s several international agencies, governments and many others have promoted poverty alleviation alternatives with elusive results. The 1990s agrarian reforms have had a devastating effect on the peasantry, and particularly on small grain producers (Escalona 2007; Harvey 1998). Combined struggles resulting from the discrimination against indigenous peoples, the new economic scheme, and the starting point for the implementation of the NAFTA<sup>3</sup>, led to a social uprising in January 1994 by the EZLN (Zapatista Army for National Liberation). This event marked the beginning of an increased interaction between members of indigenous communities, various state agents, and national and international human-rights activists. This movement led in 1996 to the agreements of San Andres<sup>4</sup>. Even though the governments have not respected them, San Andres agreements could be the starting point to recognise indigenous rights regarding territories, self-determination and autonomies, as well as the defence of indigenous languages and cultures, collective access and stewardship of the natural resources (Boege 2008; Speed 2008).

For both Chiapas and Oaxaca, despite the great amount of external actors trying to work for conservation, poverty alleviation, human rights and justice, sustainable solutions prove to be elusive. Government paternalism has had negative effects on local capacities for organisation and mobilisation, mainly in Chiapas, where after the uprising plenty of money was invested by the government to keep people calm

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<sup>3</sup>North America Free Trade Agreement

<sup>4</sup>The San Andres Accords on Indigenous Rights and Culture recognise indigenous people's rights to "develop their specific forms of social, cultural and political organisation... to obtain recognition on their internal normative systems for regulation and sanction insofar as they are not contrary to constitutional guarantees and human rights... to freely designate their representatives... to promote and develop their language, culture and traditions." (Acuerdos de San Andres 1999:35)



(Durand et al. 2014). Nevertheless, the current national wave of violence, drug traffic, illegal logging, and corrupt mining concessions in communal lands call more than ever for the strengthening of local structures of governance to face the current crisis in which the government is an actor with multiple faces and agendas.

**Table 3.1 Protected areas of Chiapas and Oaxaca (adapted from CONANP 2009; INEGI 2007).**

<b>Chiapas</b>				
<b>2823 Agrarian nuclei covering 4 440 837.31 ha. Inhabited by 11 indigenous groups (INEGI 2007).</b>				
<b>State</b>	<b>Year of creation</b>	<b>PA name and management category</b>	<b>Surface (ha)</b>	<b>Ecosystems</b>
<b>Chiapas</b>	2000	Montes Azules Biosphere Reserve	331,200	Tropical rainforest and Sub deciduous rainforest, Pine-Oak forest, Riparian forest, jimales (Communities dominated by <i>Bambusa longifolia</i> ) and savannah.
<b>Chiapas</b>	2000	La Encrucijada Biosphere Reserve	144,868	Mangrove, Swamp forest ( <i>selva baja inundable de zapotonales</i> ), Reed beds ( <i>tulares-popales</i> ), Lagoon systems and Tropical rainforest relicts
<b>Chiapas</b>	2000	El Triunfo Biosphere Reserve	119,177	Montane moist forest, Pine forests and Tropical Rainforest
<b>Chiapas</b>	2000	La Sepultura Biosphere Reserve	167,310	Montane moist forest, tropical moorland and <i>chusqueal</i> (Communities of the genus <i>Chusquea</i> )
<b>Chiapas</b>	2000	Lacantun Biosphere Reserve	61,874	Tropical rainforest
<b>Chiapas</b>	2001	Selva El Ocote Biosphere Reserve	101,288	Tropical rainforest, Sub deciduous rainforest, Lower deciduous forest and Pine-Oak forest
<b>Chiapas</b>	1959	Lagunas de Montebello National Park	6,022	Pine forest, Oak forest, Montane moist forest
<b>Chiapas</b>	2003	Volcan Tacana Biosphere Reserve	6,378	Montane moist forests, tropical moorland and <i>chusqueal</i>
<b>Chiapas</b>	1980	Cañon del Sumidero National Park	21,789	Sub deciduous rainforest (Selva mediana subcaducifolia), lower deciduous forest, oak forest,
<b>Chiapas</b>	1981	Palenque National Park	1,772	Tropical rainforest (Selva alta perennifolia) and induced grassland.
<b>Chiapas</b>	1992	Bonampak Natural Monument	4,357	Tropical rainforest
<b>Chiapas</b>	1992	Yaxchilan Natural Monument	2,621	Tropical rainforest
<b>Chiapas</b>	2007	La Frailecana, Area for Natural Resource Protection	116,732	No information available
<b>Chiapas</b>	2000	Cascada de Agua Azul, Area for flora and fauna protection	2,580	Tropical rainforest
<b>Chiapas</b>	1999	Metzabok, Area for flora and fauna protection	3,368	Tropical rainforest, Sub deciduous tropical rainforest and Montane moist forest

<b>Chiapas</b>	1999	Naha, Area for flora and fauna protection	3,847	Tropical rainforest, Sub deciduous tropical rainforest and Montane moist forest
<b>Chiapas</b>	2000	Chan-Kin, Area for flora and fauna protection	12,185	Two variants of tropical deciduous rainforest (Medium and lower)
<b>Chiapas</b>	2002	Sanctuary Playa de Puerto Arista	63	No information available
<b>Oaxaca</b>				
<b>1632 Agrarian nuclei covering 8 621 855.83 ha. Inhabited by 16 indigenous groups (INEGI 2007)</b>				
<b>State</b>	<b>Year of creation</b>	<b>PA name and management category</b>	<b>Surface (ha)</b>	<b>Ecosystems</b>
<b>Oaxaca</b>	1998	Huatulco National Park	11,891	Lower deciduous forest, riparian vegetation, wetlands, mangroves, coral reefs, algae, and sea grass.
<b>Oaxaca</b>	1937	Benito Juarez National Park	2,737	Pine-oak forest and Lower deciduous forest.
<b>Oaxaca</b>	1937	Lagunas de Chacahua National Park	14,187	Medium rainforest, Lower deciduous forest, Mangrove and Coastal dunes.
<b>Oaxaca</b>	1999	Yagul Natural Monument	1,076	Sub-humid deciduous forest.
<b>Oaxaca</b>	2008	Area for flora and fauna protection Boqueron de Tonala	3,912	Lower deciduous forest and Oak forest.
<b>Oaxaca</b>	1986	Playa de Escobilla Sanctuary	30	Coast line
<b>Oaxaca</b>	1986	Playa de la Bahía de Chacahua Sanctuary	0 (coast line)	Coast line

### 3.4.3 Case study site: San Miguel Chimalapa and El Cordon del Reten as a Voluntary Conservation Area

The Chimalapas region is located on the border of the states of Chiapas and Oaxaca on the Isthmus of Tehuantepec in Southern Mexico. The region has been inhabited and defended since pre-Hispanic times by indigenous people from the Zoque culture, who are descendants from a group called *Mokayas* who were the historical link between the Mayan and Olmec cultures (Anaya and Alvarez 1994: 26).

Chimalapas is home to some 15,114 people (INEGI 2010) representing a multiplicity of ethnic groups<sup>5</sup> that have migrated to the area at different times and under different circumstances. The region is divided into two titled indigenous communities - Santa Maria Chimalapa and San Miguel Chimalapa - which are also municipalities. San Miguel, which is the site of El Reten, has title to 134,000 hectares of land. In 2010 it had 6,608 inhabitants (INEGI 2010) distributed between one main population center (the "*cabecera*") and seventeen smaller settlements or *congregaciones*. El Reten is located in the eastern zone of the community lands, and the four closest settlements (San Antonio, Benito Juarez, Sol y Luna and 5 de Noviembre) have had a particularly important role in its creation (Fig. 3.2). The municipality is classified as a region of extreme poverty, making it a priority target for multiple governmental aid programs and subsidies<sup>6</sup>. However, internally living standards of the settlements are very variable, decreasing with increasing distance from the *cabecera*. The eastern region of San Miguel has no paved roads, no electricity, and very basic health and education services.

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<sup>5</sup> These include zoques, mixes, huaves, mixtecos, zapotecos, chinantecos, tzeltales, chamulas, chatinos and mestizo people (Anaya and Alvarez 1994).

<sup>6</sup> These include federal programmes such as Procampo (for corn cultivation), Oportunidades (for women and education) and Progan (for cattle ranching) and also the FAO funded programme Food Security Programme.



**Figure 3.2** Location of San Miguel Chimalapa and the two settlements most related to El Reten.

The region is also known for its outstanding biodiversity. It includes the second largest remaining areas of tropical rainforest in Mesoamerica after the Mayan rainforest (Grupo Mesofilo 2008) and initial surveys have revealed a high level of species diversity, including 146 mammal species, 316 bird species and some 900 butterfly species, representing 36% of national biodiversity (Anaya and Alvarez 1994). The diversity of ecosystems of the region includes cloud forest, pine forest, pine-oak forest and tropical rainforest with many endangered flora and fauna (WWF 2007). Accordingly, it is a priority Eco-region for WWF (WWF 2007); part of Conservation International’s Mesoamerican biodiversity hotspots (CI 2007), a national bio-cultural diversity hotspot (Toledo et al. 2002), and one of the 152 Priority Terrestrial Regions for conservation identified by CONABIO<sup>7</sup> (Arriaga et al. 2008).

El Reten itself represents the largest area of pine-oak and temperate forest left in San Miguel. It includes patches of tropical rainforest and forms part of a natural corridor called “*Selva Zoque*”, which represents the northern limits of tropical

<sup>7</sup> National Commission for the Knowledge about Biodiversity.

rainforest on the American continent. Despite San Miguel's outstanding biodiversity, inappropriate colonization and agricultural policies and the constant search for sources of income by the inhabitants and migrants, who are some of the poorest people in Mexico, together with economic pressure from cattle ranchers and loggers from adjacent lands, and land tenure conflicts, have resulted in serious impacts on the state of the environment. Villalobos (2001), Anta-Fonseca (2001) and Oviedo (2002) identify the most important threats to the biodiversity in the region:

- (1) Agrarian conflict (unclear property rights- inside and outside the community).
- (2) Socioeconomic marginalization and migration increasing pressures on natural resources.
- (3) Lack of viable and sustainable livelihood alternatives.
- (4) Forest cover loss due to the expansion of the agricultural frontier.
- (5) Illegal forest exploitation.
- (6) Trafficking of wild flora and fauna species.
- (7) Forest fires.
- (8) Inadequate development policies.
- (9) Lack of incentives to strengthen community-based forest control and protection.

From a conservation perspective, therefore, the region represents a critical area, but in a region where a federal protected area would be politically inappropriate and logistically unfeasible. Therefore protected areas advocates have had to search other alternatives in the face of constant ecological and social threats (Gutierrez-Montes 2005).

# Section II: National legal frameworks and regional aspects of protected areas governance

## **Chapter 4. Legal Frameworks for protected areas governance**

Governance structures are shaped through formal and informal frameworks defining who is entitled and legitimate to participate and the means to do it. The legal framework for protected areas in Mexico defines how protected areas are established, the legal categories of protected areas and the according management strategies. Mexican protected areas legislation establishes who is entitled to participate in the establishment and management of protected areas in the country but the how and when this participation should take place remain open to interpretation. This chapter introduces the legal frameworks that regulate the establishment and management of protected areas in Mexico. It also explores who and how can participate in protected area management in the country and the recently added protected area category for Voluntarily Conserved Areas (VCAs). When managed communally, VCAs can be an equivalent to the international category of ICCAs and thus, implies a process of power devolution that will be explored in further chapters of this dissertation. By examining the implementation of ICCAs it will be possible to look closely at the potential and challenges of the institutionalisation of grassroots approaches for conservation in terms of local arrangements for natural resource management, participation, power devolution, accountability, legitimacy and sustainability.

### **4.1 Protected areas in Mexico, design and implementation**

Protected areas in Mexico, as in many developing countries, have been based on the division between pristine nature and human of the Western thought (Adams and Hutton 2007; Andrade and Rhodes 2012; Brockington and Igoe 2006). The first state-managed protected area in Mexico was a National Park, established in 1876 and several others were set up since then (CONANP 2011b). It was until

1988 that the legal and normative framework for ecosystems conservation was published in the country (CONANP 2011b). The General Law for Ecological Balance and Environmental Protection (LGEEPA) is the legal instrument defining and regulating the establishment and management of natural protected areas in the country. Protected areas as defined by LGEEPA:

*“[A]im to conserve representative habitats so that the evolution and functional processes are preserved and to assure the continuity of the appropriation of natural resources by human societies”. (LGEEPA, Art. 45)*

Article 46 of LGEEPA defines the categories of protected areas based on their biological and physical characteristics. Up to 2010, 175 Federal Protected Areas had been decreed in Mexico covering an area of 25,372,182 ha (12.92% of the national territory) consisting in the majority of cases of I. Biosphere Reserves (41), and II. National Parks (67), and followed by V. Areas for Flora and Fauna Protection (36); VI. Sanctuaries (18); IV. Areas for Natural Resources Protection (8), and III. Natural Monuments (5) (CONANP 2012). The protected area categories are very consistent with the IUCN classification (Borrini-Feyerabend et al. 2010). Nowadays, Biosphere Reserves, which combine different management categories from strict conservation areas, called core zones, to influence areas where human settlements and natural resources use are allowed but regulated, generally by the state (Adams and Hutton 2007) are the most widely conservation strategy in the country, covering 12,352,787 has (CONANP 2014).



**I. Biosphere Reserves.** Representative areas of one or more ecosystems that have not been altered by human actions or that require to be preserved and restored, in which there are representative species of the national biodiversity including endemic, threatened or endangered species (CONANP (a) 2009).

**II. National Parks.** Areas with one or more ecosystems with outstanding importance for their scenic beauty; their aesthetic, historic, educational, leisure or scientific values; for the existence of flora and fauna; their aptitude for the development of tourism, or for other analogous reasons (CONANP (b) 2009).

**III. Natural Monuments.** Areas with one or more natural elements, that for their unique character, aesthetic, historic or scientific value, are designed to an absolute protection regime (CONANP (c) 2009).

**IV. Areas for Natural Resources Protection.** Designated for the preservation and protection of soil, hydrographical river basins, water and natural resources located within forested lands (CONANP (d) 2009).

**V. Areas for Flora and Fauna Protection.** Established on places containing habitats on which the existence, transformation and developments of flora and fauna species rely (CONANP (e) 2009).

**VI. Sanctuaries.** Zones with considerable flora and fauna richness or with the presence of restricted range species, subspecies or habitats. (CONANP (f) 2009).

**VII. State Reserves and Parks.** Areas managed by state governments.

**VIII. Municipal Zones for Ecological Conservation.** Areas managed by municipal governments.

**IX. Voluntarily Conserved Areas.** Any areas containing any of the features mentioned above, providing environmental services or which because of their location contribute to the aim stated in Art. 45 of LGEEPA, mentioned above (DOF 2008).

**Figure 4.1 Federal Protected Areas Categories according to LGEEPA (CONANP 2009; DOF 2008).**

By law, proposals for the establishment of protected areas should consider the opinion of a diversity of governmental, social and academic entities (LGEEPA, Art. 58). In order to establish a protected area within the categories I to VI, the official document is required to contain: (1) a precise delimitation of the area as well as a

zoning exercise; (2) the type of protected area specifying the regulations for land and resources use in place; (3) a description of the activities allowed according to the zoning exercise; (4) if required, the public benefit causes that justify the expropriation of the lands being declared as protected area; (5) general management regulations, designation of funds and decision-making bodies as well as the development of the management plan; (6) the guidelines for preservation, restoration and sustainable use actions, management regulations applying according to LGEEPA and other relevant laws (LGEEPA, Art. 60). The category will define the specific zoning of the protected area and, consequently, the regulations over the land and natural resources' use within the area (LGEEPA Art. 47BIS, Figure 4.2). The zoning of protected areas considers that areas relevant for the inhabitants of protected areas should be located in the traditional use sub-zones which "will aim to keep cultural wealth of communities, as well as to satisfy the basic needs of the inhabitants of the natural protected area" (LGEEPA 1998: Art. 55).

Even though LGEEPA acknowledges the importance of conservation for the long-term sustainability of ecological processes as well as of human populations, protected areas in Mexico have long been related to exclusion and restrictions over peasants and indigenous people (Fraga 2006; Reyes-Garcia et al. 2013). Hence, alternatives to these exclusionary approaches have been developed and since 2008, Articles 46 and 55BIS of LGEEPS have been modified to incorporate Voluntarily Conserved Areas, in addition to Federal Protected Areas, as a formal category of protected area (Figure 4.1). However, as will be explored later on, previous conservation practice in the country implied a lack of inclusion of local people's needs in the creation and management of protected areas, which has resulted in numerous difficulties when applying conservation efforts.

- |     |   |  |
|-----|---|--|
| I.  | <b>Core zones</b>   | Areas with restricted use if any.                |
| a.  | Protection area.  | b. Restricted use.                               |
| II. | <b>Buffer zones.</b>  | Where sustainable use activities are limited to: |
| a.  | Traditional use: natural resources that have been used in a traditional and continuous way. Related to meet the socioeconomic and cultural needs of the inhabitants of the protected area.  |  |
| b.  | Sustainable natural resources use.  |  |
| c.  | Agro-ecosystems sustainable use.  |  |
| d.  | Special use. Reduced extension with natural resources that are essential for social development, used without damaging the ecosystem or modifying substantially the landscape nor causing irreversible environmental impacts on the natural elements. |  |
| e.  | Public use. Recreation activities with concentration of visitors that are within the ecosystems' carrying capacity.   |  |
| f.  | Human settlements. Surfaces with significant modification of the original ecosystem previous to the protected area decree.  |  |
| g.  | Recovering. Severely altered or modified ecosystems subject to restoration and rehabilitation programs.   |  |

**Figure 4.2 Zoning within protected areas defined by LGEEPA (Art. 49).**

The declaratory document for a protected area also requires a management plan to rule its operation, elaborated with the participation of the landowners within the area (LGEEPA, Art. 65). Management plans are basic instruments to respond to any event inside a protected area and provide legal support in cases against harmful infrastructure projects such as highways, dams and mines, only if these activities are explicitly forbidden in the management plan (CC, Tuxtla Gutierrez, August 9<sup>th</sup>, 2010). Management plans formally define: location, dimensions, characteristics, management category and strategies, zoning and land use regulations of a particular protected area (LGEEPA Art. 66). They also establish a basic stock of activities, which are not exclusive of other activities, that any protected area must accomplish focused on a five year period, but applicable to longer periods (GJ, Tuxtla Gutierrez, August 4<sup>th</sup>, 2010). According to protected

area managers, however, developing and implementing a management plan remains a challenge, in Mexican protected areas most of the activities are carried out opportunistically to face human population growth and ecological threats (CC, Tuxtla Gutierrez, August 9<sup>th</sup>, 2010). Thus, if an international funding body delivers resources to develop a certain activity or product that additionally helps to achieve conservation or development objectives, protected areas' activities are directed towards it even though the management plan did not contemplate them. (CC, Tuxtla Gutierrez, August 9<sup>th</sup>, 2010). Furthermore, the amount of legal and bureaucratic requirements for a management plan to be fully developed requires a long and complicated process (GJ, Tuxtla Gutierrez, August 4<sup>th</sup>, 2010). As a result, only 57 out of 173 federal protected areas have published management plans, representing 34.14% of the total protected areas (CONANP 2009). Thus, 66% of the federal protected areas in Mexico do not have a legally binding strategy to plan and direct their conservation actions, which is consistent with the argument of Wells and McShane (2004) regarding the limited legal faculties, capacities and resources that protected area managers have to achieve conservation targets. Therefore, management of protected areas in the Southern Isthmus Mexico is largely developed on a reactive basis and with a great reliance on the capacities and styles of the authorities in charge rather than on a preventive institutional strategy (CC, Tuxtla Gutierrez, August 9<sup>th</sup>, 2010).

Local community participation in the decision-making process is the only variable that significantly relates to compliance with the regulations in protected areas (Andrade and Rhodes 2012). Yet, in the Mexican context local participation is mostly open to interpretation and a very polemic aspect in protected area establishment and management (Durand et al. 2014). Despite the importance of management plans, the law does not define how the consultation and participation with different stakeholders should be carried out to define the category, zoning and management of federal protected areas. Consultative and participatory processes with people living within protected areas are subject to operational team's capacities and often limited to a process of validation of decisions already made in upper administrative levels (Personal observation). There are also differences of how inclusive processes can be according to the

protected area category. On the one hand, National Parks are the only category that implies land expropriation, and as such, they are not supposed to have population within them, making decision-making straightforward, at least in theory. In practice, however, expropriations were not fully applied and National Park's authorities often need to negotiate with inhabitants with the limitation that their status as irregular inhabitants does not legally require any participatory process nor provide mechanisms to support such negotiations (GE, Tuxtla Gutierrez, August 7<sup>th</sup>, 2010). On the other hand, all the other protected area categories require participatory processes to define their management plans (LGEEPA, Art. 65). However, the spaces, terms and conditions of such participation are not defined leaving a legal gap that, as will be illustrated throughout this thesis, has been and continues to be a source of conflict in multi-scalar governance arrangements for protected areas. Limitations on effective local inclusion in protected area management, deliberate or not, work against the achievement of conservation objectives since local opposition makes protected areas more vulnerable to the negative effects of agricultural expansion, infrastructure and population growth (Bathari and Hammig 1998; Porter-Bolland et al. 2012; Wells and McShane 2004; Wilshusen et al. 2002).

Notwithstanding the legal gaps defining the terms of participation, there are also legal means for the state to devolve, to some extent, managing powers to non-governmental actors. Article 67 of LGEEPA entitles the Natural Resources Secretary (SEMARNAT) to grant, after developing the corresponding management plans, the management of protected areas ranging from Biosphere Reserves to Sanctuaries (Categories I to VI) to State and Municipal governments, *ejidos*, communities, indigenous peoples, civil groups and organisations, private companies and any other interested people. Accordingly, whoever acquires the responsibilities of managing a protected area becomes subject to LGEEPA's provisions, regulations and Mexican Official Laws, as well as to follow the decrees established and the corresponding management plans (LGEEPA Art. 67).

## **4.2 Voluntarily Conserved Areas and other voluntary conservation alternatives**

In Mexico, the discursive change to inclusive approaches for protected areas (Adams and Hulme 2001) was formalised in 1996. Currently, conservation policies and practitioners tend to embrace a vision where the diversity of land uses, local livelihoods, human rights and access capacities should be acknowledged and considered in management decisions at a landscape level (Bray et al. 2008; Li 1996; Porter-Bolland et al. 2012; Pimbert and Pretty 1995). Yet, the participatory processes need consolidation in the view of protected area managers (CC, Tuxtla Gutierrez, August 9th, 2010). Also, the roles that local people should play seem to be limited to be guards of the areas as the following statement illustrates:

*... "[T]he better conserved lands within protected areas are part of an ejido... [hence,] lands without population are far more difficult to manage, because we do not have an army for conservation like the US" (G, Tuxtla Gutierrez, August 4<sup>th</sup>, 2010).*

Even though the perspectives on conservation practitioners might be slower to change, the legal frameworks are slowly shifting to give increasing role to local communities in protected areas management. Additionally to state-managed protected areas, Art. 59 of LGEEPA states that other non-governmental actors are entitled to promote the establishment of protected areas in their own lands. There are multiple legal mechanisms by which landowners, either social or private, can establish their own protected areas (Gutierrez-Lacayo et al. 2002, Figure 4.3). VCAs can be compatible with the IUCN governance category for private governance and governance by indigenous peoples and local communities where these groups or their representatives hold the principal authority, responsibility and accountability of the areas and resources. This framework has allowed the slow transition towards multi-scalar governance arrangements for protected area management in Mexico. Nevertheless, federal protected areas remain the most promoted and institutionally supported option by CONANP (RM, Mexico City, May 20<sup>th</sup> 2009). CONANP is the body in charge of providing the declaration of such Voluntarily Conserved Areas (VCAs) and the corresponding management plans,

though a certificate. Certified VCAs have been conceived to be promoted and implemented by landowners, and even though VCAs were not conceived to be federal protected areas (RM, Mexico City, May 20<sup>th</sup> 2009) they contribute to the total area under some form of protection status (CONANP 2012). Furthermore, their formal recognition makes them subject to the regulations of LGEEPA which, until 2013, did not have specific regulations for this recently developed category (CDC, Oaxaca, May 25<sup>th</sup>, 2009).

The term “certification” of VCAs was developed by CONANP and there is a debate about the accuracy in its use for the process or formally recognizing VCAs (RM, Mexico City, May 20<sup>th</sup>, 2009). The establishment of VCAs has emphasis on lands located within priority areas for conservation but outside the protected areas’ network. Furthermore, VCAs incorporate not only private owners and companies into conservation efforts, but they are compatible with the concept of Indigenous/Community Conserved Areas (ICCAs), developed as a governance category by IUCN. The process of establishment of VCAs, which is by definition unilateral and self-promoted by landowners, involves CONANP certifying the willingness and means of the owners to conserve their lands for a period no shorter than 15 years. The establishment of VCAs is formally acknowledged through a certificate specifying the owners’ name, the legal document proving the ownership of the land, the assembly’s resolution to assign those lands for conservation; people entitled to develop management activities in the area; the area’s location and the description of management strategies and zoning. LGEEPA also establishes that SEMARNAT shall provide technical advice to develop management strategies of the area, which will be managed by the owner according to the strategy specified in the certificate. Since May 2014, the 2008 LGEEPA’s reform has a Regulation body (*reglamento*) that defines procedures for modifications of areas, management strategies and certificates (DOF 2014). The certifications were applied during six years with an unfinished legal framework while discretionary powers remained in those in charge of the certification process in the different regions of CONANP (Personal observation).

**Table 4.1 Legal categories available for the establishment of protected areas most applied in the Southern Isthmus region of Mexico.**

Protected Area	Legal basis	Promoting and Granting bodies	Characteristics
Federal, State and Municipal	LGEEPA Art. 46 on Natural Protected Areas	<ul style="list-style-type: none"> <li>• Promoted by government authorities at different territorial levels or any other people</li> <li>• Recognised through official decree</li> </ul>	<ul style="list-style-type: none"> <li>• CONANP is in charge of the federal protected areas while States, Municipalities, and Federal District authorities can establish and manage their own areas</li> <li>• CONANP can delegate management to communities, individuals, organizations and private companies, subject to the decrees established and the management plans of the areas</li> </ul>
Voluntarily Conserved Areas (CONANP certification)	LEGEEPA Art. 46, reformed in 2008 (DOF 2008)	<ul style="list-style-type: none"> <li>• Promoted by landowners (private, corporate or communal)</li> <li>• CONANP certifies landowners' willingness</li> </ul>	<ul style="list-style-type: none"> <li>• Landowners define and apply management plans of the areas subject to the Mexican Laws</li> <li>• Certified lands are eligible for economic support to operate although the legal framework is incomplete. CONANP does not have specific budget for management of these areas</li> </ul>
Ecological Easements	Mexico's federal civil code 6 <sup>th</sup> Title, Chapter 1, Art. 1057	<ul style="list-style-type: none"> <li>• Civil contracts promoted in Chiapas by Pronatura A.C. with the landowners (private, corporate or communal)</li> </ul>	<ul style="list-style-type: none"> <li>• NGOs provide legal and technical advice for landowners to set the baselines for management and monitoring, as well as assistance to find economic incentives for conservation.</li> <li>• Not acknowledged by CONANP, and thus more difficult to get economic incentives</li> </ul>



The owners have to promote their lands in form of CONANP (DOF 2014, Art. 126). The documents required include baseline physical and biological data of the land and the proof; proofs of the legal ownership of the land and, the case of collective land tenure, an assembly agreement to set that land for conservation. The procedure also requires a geo-positioned map, photographs of the key features of the land and the specification about the management strategies including the zoning of the area and the surface of each land use and the management, determined by the landowners. The capacity of CONANP to assist landowners to generate all these data is limited by the human and budget capacities of the agency (GJ, Tuxtla Gutierrez, August 4<sup>th</sup>, 2010). Once the area is certified it becomes acknowledged as a federal protected area and is included to the National Protected Area Database and subject to technical supervision and monitoring by CONANP (DOF 2014, Art. 128). The access to economic incentives by landowners with certified land depends of the size of the land, ecological importance and conservation state of the area, the activities and attention it gets from researches (DOF 2014, Art. 130). According to these criteria, there are three levels of certification, namely: priority, intermediate and basic, according to the amount of criteria fulfilled, evaluated by CONANP. If landowners want to withdraw, they can do so through a letter and assembly agreement to CONANP. The sustainable production from these areas will be supported through a “sustainability mark” provided after requisition and evaluation of CONANP (DOF 2014, Art. 135BIS).

The emergence of VCAs is similar to the processes where there has been a transition from centralised governance to diversified networks for institutional collaboration (Lockwood 2010). Yet, the devolution of powers required for effective management is incomplete as it is often the case (Ribot and Peluso 2003; Berkes 2009). Regarding funding for VCAs, officially, CONANP does not offer economic incentives for the certification of VCAs, but it does offer institutional support to landowners in lobbying with other government agencies, foundations and NGOs for consultancy or funding (GJ, Tuxtla Gutierrez, August 4<sup>th</sup>, 2010). Even though CONANP can also channel resources through its programs to economically support the technical studies, establishment and operation of VCAs, the agency does not have specific budget for them. Communities with certified

lands in priority regions for conservation can be supported by PROCODES (Programme for Conservation through Development) and similar programs managed by CONANP. However, the agency's power and attributes to support VCAs both, financially and operationally is rather limited, and institutional links with other related agencies are established to fulfil funding and regulation gaps (G), Tuxtla Gutierrez, August 4<sup>th</sup>, 2010; RJ, Lacanja, September 10<sup>th</sup>, 2010). Consequently, CONANP and the National Forestry Commission (CONAFOR) work together to offer the program for Payments for Environmental Services (PES) run by the National Forestry Commission (CONAFOR) to promote VCAs establishment (Personal observation). In their study on VCAs in Oaxaca, Martin et al. (2010) found that 46% of the established VCAs surveyed had received PES.

Payments of Ecosystem Services (PES) are the transfer of economic resources from services users to providers as a means to reduce the risk of forest cover loss through market mechanisms (Corbera et al. 2007). This program is intended for the conservation, increase, sustainable use and restoration of forestry resources through the enhancement of the market for environmental services in Mexico (Martin et al. 2011). Nevertheless, the implementation of PES in Mexico is ill-defined and governments are often the intermediaries deciding over the distribution of financial resources at pre-established prices (Corbera et al. 2007). CONAFOR is the agency in charge of PES implementation, the services that are promoted are mainly hydrological and biodiversity. The allocation and distribution of PES mostly relies on property rights and thus, better-off households tend to get access to them at the local level (Corbera et al. 2007). In protected areas, PES can be used as subsidies in order to get local support or to reduce local resistance over the land use restrictions that they represent (Durand et al. 2014). Thus, even though, PES and VCAs are managed by different agencies, constitute different programs and there are no official links between them in practice, the most important source of economic incentives in place for many VCAs in Oaxaca is the PES for Hydrological Services (LM, Santa Maria Guienagati, September 23<sup>rd</sup>, 2010). The certification of VCAs started in 2002 and has been well received by civil society. Currently, there are 326 certified areas in 18 states of the country covering a 370,000 ha surface, and in which there are 11 ethnic

groups with 95, 522 Mexican citizens participating (CONANP 2012). In Chiapas, the certification of areas has just started and to date there are only five VCAs, three of them communal and two private. Oaxaca, on the other hand, is a leader in number of certifications through community-conserved areas with 124 VCAs (CONANP 2012; Martin et al. 2010; Martin et al. 2011).

Even though VCAs are currently the most widely used mechanism to establish conservation areas through social participation, the regulations leave the terms of such participation open to interpretation and discretionary and monitoring powers remain in the federal state's hands and limited capacities. On the one hand, this legal gap allows the mechanism to be fairly flexible to the diversity of situations present on the ground regarding access and local dynamics, for example. On the other hand, the potential of this legal recognition to support grassroots becomes limited once there is an explicit expansion of the powers of the state over these areas in terms of regulations supervision and certification under externally define standards. The latter is consistent with the literature on the expansion and building of the state through protected areas (Bray et al. 2012; Brockington et al. 2008; Durand et al. 2014). Even though PES represent an economic incentive, the amount of power that VCAs certification gives to the state over the area, raises concerns amongst local communities and other conservation practitioners about the transparency and legitimacy of these processes. Furthermore, although there are different legal mechanisms available for voluntary conservation and their feasibility for application in Chiapas and Oaxaca differs due to the local contexts. In Chiapas, for example, land tenure uncertainty represents a core challenge for the establishment of private and community conserved areas (MO, SCLC, June 5<sup>th</sup>, 2010). Notwithstanding these challenges, there are numerous communities that have made use of the uses and customs to set communal agreements in their local assemblies in order to establish their own protected areas without searching for official recognition due to potential limitations that come with it (Martin et al. 2010). Thus, even though communal agreements have been underused by conservation agencies, they are the ultimate expression of the customary law and its importance for local natural resource

management, representing a locally appropriate way to regulate land and natural resource use at the communal level (MO, SCLC, June 5<sup>th</sup>, 2010; Durand et al. 2014).

This chapter has defined the legal framework that regulates the establishment and implementation of protected areas in Mexico. It has also narrowed down to look closer at the operational challenges that those in charge of protected area management have to face in terms of legal, human, technical and infrastructure limited capacities. It also has defined the legal alternatives for protected areas establishment in the country. Chapter 5 will explore the governance arrangements in place for protected area governance.

## Chapter 5. Organisational arrangements for protected areas governance

Once the legal frameworks regulating the establishment and implementation of protected areas and VCAs in the country have been examined, this chapter elaborates on the institutional arrangements in place for protected areas implementation. Multi-scalar governance arrangements, from global to local, are crucial in the definition of the design, implementation and outcomes of conservation discourses, practices and funding (Pimbert and Pretty 1995). In the face of the multiple scales involved in protected areas governance (Armitage et al. 2012; Chapin III et al. 2010), it is essential to understand how the “bundles of powers” (Ribot and Peluso 2003) and competences are distributed along these networks. The allocation of rights, access and responsibilities throughout these networks is crucial for natural resource management (Ostrom 2009; Wells and McShane 2004). Thus, the clarity with which these are distributed throughout the governance arrangements in place is likely to determine the outcomes and their sustainability through time (Ostrom and Cox 2010). These arrangements are also affected by informal networks and agreements that constitute “*the messiness of politics-in-practice*” (Leach et al. 2007). The struggles for control and dominance (Bulkeley 2005) are often asymmetric and linked to politics, markets and the building of the state (Adams and Hutton 2007; Adger et al. 2005; Lebel et al. 2006; Rhodes 1997; Haenn et al. 2014). The problems that multi-scalar arrangements for conservation face are mostly related to ignorance (limited understanding); mismatch (lack of consistency between ecological scales and institutional apparatus) and plurality within the arrangements (Buizer et al. 2011; Cash et al. 2006). To this challenge, power asymmetries add another dimension that is particularly relevant for the research on ICCAs, determining the context in which grassroots approaches for conservation are embedded (Berkes 2009; Martin et al. 2010; 2011).

## **5.1 Protected areas implementation and advisory boards**

The National Secretary of Environment and Natural Resources (SEMARNAT hereafter) is the government agency in charge of biodiversity conservation processes in Mexico. SEMARNAT defines the legal federal framework in environmental matters based on the current national policy and international commitments. SEMARNAT has four deconcentrated agencies in charge of water (CONAGUA), forestry (CONAFOR), biodiversity (CONABIO) and natural protected areas (CONANP). The latter is the national agency in charge of natural resource management and biodiversity conservation through protected areas and other means. Administratively, CONANP has six strategic objectives, namely:

- (1)* to conserve the representative ecosystems and biodiversity of the country;
- (2)* to develop and to apply programs and plans for protected areas regarding protection, management and restoration;
- (3)* to implement the national strategy of conservation for development;
- (4)* to promote tourism in protected areas as a tool for sustainable development and public awareness;
- (5)* to consolidate the cooperation and economic support to keep the leadership in conservation at the international level, and
- (6)* to achieve the conservation of endangered species (CONANP 2011a).

The size of Mexico, its topography and the remoteness of some areas represent challenges for administrative matters. This adds to the neo-liberal policies that promote an on-going process of deconcentration of the federal state agencies. CONANP was created as a deconcentrated body in 2000, and since then different regions have been set up for management and operational purposes. CONANP has one central office and additionally it also has nine operational regions. The focus of this study, the Southern Isthmus region, consists of Chiapas and most of Oaxaca (with exception of the Tehuacan-Cuicatlan desert, Figure 3.2). The different regional offices of CONANP are economically accountable to the central office, which distributes the federal budget for the agency. Operationally, regional offices

are fairly free to define their priorities and means of operation but these are also subject to the budget assigned by central offices and regulations of the programmes available to implement it. Thus, each protected area is accountable to its region, and the latter is accountable to the federal office of CONANP, which in turn is accountable to SEMARNAT.

The organization of regional offices varies according to the local characteristics. In the case of the current Southern Isthmus region, protected areas are distributed among different operational teams according to their geographic location and their dimensions. Each operational team covers one or more protected areas according to the location, the micro-region or the protected area's management category. This means that, at times, managers are in charge of protected areas that are very distant from each other, as is the case for the director of all the state's Chiapas National Parks. In other instances, a single operational team gives attention to up to three federal adjacent protected areas; such is the case of the team of Montes Azules Biosphere Reserve, Lacantun Biosphere Reserve and the Area for Flora and Fauna protection Chan Kin. Operational teams are generally constituted by a director, a sub-director and a team whose size depends on the funding capacities and operational needs of each protected area. The operational team is formally in charge of the implementation of strategies to achieve institutional objectives based on the protected area's management plan. The budget assigned by the national office is allocated regionally in order for the regions to develop implementation strategies according to the plans made by the operational teams of each protected area and the budget available. However, funding programs that support the operation of protected areas such as the Program for Conservation for Sustainable Development (PROCOCODES) and the Temporary Employment Program (PET) are centrally designed.

The dimensions, multiplicity of stakeholders and economic needs within the federal protected areas system require most of the management to involve collaborative arrangements for funding and implementation. Even though CONANP is legally in charge of the operation of federal protected areas, the agency is able to do so by establishing alliances with other parties, creating multi-level

and multi-stakeholder management arrangements. The legal figures for these agreements are called advisory boards that can be constituted by different government agencies; local and international NGOs; academics, and local communities' representatives. With CONANP as a leader, advisory boards help to identify local problems as well as defining the operational strategies and funding opportunities to accomplish CONANP's strategies. According to conservation practitioners at CONANP, advisory boards facilitate the application of policies designed at higher administrative levels through the knowledge and tools available, enhancing informed decision-making and planning. Advisory boards, as a multi-scalar governance arrangement, enhance accountability and transparency in order to direct the funding available for protected area operation, as well as a reconsideration of the discourses and practices used (Pimbert and Pretty 1995). However, the constitution and implementation of boards and structures for planning and decision-making is not consistent and every protected area in Mexico is subject to local and regional preferences and capacities (RJ, Lacanja, September 10<sup>th</sup>, 2010; EA, Acapetahua, August 16<sup>th</sup>, 2010).

In the Southern Isthmus region, the management of protected areas requires the attention of landscapes with areas ranging from a simple coastline to large inland areas that include a dynamic diversity of ecosystems, peoples, cultures and conflicts. According to many of the interviews carried out at the Southern Isthmus region of CONANP (VA, Tuxtla Gutierrez, August 9<sup>th</sup>, 2010; CC, August 9<sup>th</sup>, 2010; GJ, Tuxtla Gutierrez, August 4<sup>th</sup>, 2010; EA, Acapetahua, August 16<sup>th</sup>, 2010; OG, Acapetahua, August 16<sup>th</sup>, 2010; RJ, Lacanja, September 10<sup>th</sup>, 2010), conservation practitioners acknowledge that some the key aspects that complicate their jobs and affect the management of protected areas can be grouped into three main subjects related to the links between different levels of the same institution:

- (1) the bureaucracy required to coordinate the regional with the central CONANP's office;
- (2) the lack of a more effective regionalisation to improve institutional presence at the local level, and
- (3) the lack of enough economic, decision-making and accountability powers for the operation of protected areas.



Thus, the operation of protected areas requires a constant process of adaptation. Institutional alliances, prioritisation and negotiation amongst multiple stakeholders are daily practices for protected areas operational teams who stretch capacities, time and resources to give attention to both, social and ecological needs. The interaction of multiple actors adds to the already difficult links between the operational and the administrative levels of CONANP. Even though conservation practitioners at CONANP are aware that formats and reports increase institutional accountability and transparency, in such a dynamic environment the constant filling of reports and invoices becomes a burden (VA, Tuxtla Gutierrez, August 9<sup>th</sup>, 2010; CC, August 9<sup>th</sup>, 2010; GJ, Tuxtla Gutierrez, August 4<sup>th</sup>, 2010; EA, Acapetahua, August 16<sup>th</sup>, 2010; OG, Acapetahua, August 16<sup>th</sup>, 2010; RJ, Lacanja, September 10<sup>th</sup>, 2010, CL, Acapetahua, August 16<sup>th</sup>, 2010 ; GN, Acapetahua, August 16<sup>th</sup>, 2010;). For example, the Biosphere Reserve of El Triunfo covers 119, 177 hectares with 3, 771 and covering nine different municipalities and multiple small locations of different ethnic origins and degrees of marginalisation. In order to conserve the priority ecosystems located within it and numerous endangered species, the operational team of El Triunfo needs to coordinate with communal/*ejidal* authorities, municipal authorities, state authorities and other state and federal government agencies in order to enhance development. With the multiple needs of the El Triunfo, the operational team struggles with the bureaucratic requirements of CONANP arguing that it makes the operation more difficult rather than facilitating it, as illustrated by the Biosphere Reserve director:

*... “[T]here are constant frictions [between the personnel] when [CONANP supervisor’s priority] would seem to be the bureaucratic controls instead of the achievement of protected areas’ objectives... This happens at the regional level but it’s even stronger between the regions and national offices”. (CC, Tuxtla Gutierrez, August 9<sup>th</sup>, 2010)*

The process of communication and coordination is further complicated by the way the regionalization of CONANP has been established. CONANP is a fairly young institution in which real efforts towards deconcentration and practical operation

began around 2005. Thus, learning in the region happens mainly through iterative processes. In this regard, practitioners argue that attending the two most bi-culturally diverse states overpowers the regional institutional and human capacities. As has been explained before, Chiapas and Oaxaca represent not only diverse but also contrasting social contexts. Each state has particular conservation needs, organisational structures and requires different management arrangements. Within CONANP, decisions and coordination for protected areas' management in Chiapas and Oaxaca have complex dynamics due to distances and organisational differences. CONANP's authorities in Oaxaca have been through a transition from being a single region to become part of the Southern Isthmus one, which has a totally different context and working style. The fact that budgets, decisions and reports have now to go through the regional authorities in Chiapas (a seven-hour drive) adds bureaucratic procedures and time to processes in Oaxaca (SG, Oaxaca, September 20<sup>th</sup>, 2010). Hence, each side of the state boundaries behaves as a separate entity as there is a lack of an institutional basis to provide sufficient and effective response to the multiple needs within protected areas (SG, Oaxaca, September 20<sup>th</sup>, 2010). Furthermore, the interactions with other state and non-state agencies from both states multiplies the efforts required to achieve effective inter-institutional coordination and sound strategies, as a conservation practitioner in Oaxaca acknowledged:

*“There should be a state level strategy at CONANP in which the state itself was seen as a unity... I attend two states and I don't have time to be in both... this generates a differentiated attention... The coordination process needs to be much more organised, strategic, planned. Nowadays, it is subject to the characteristics of the chairs of national offices... making it even more variable” (SG, Oaxaca, August 27<sup>th</sup>, 2010).*

Even though conservation practitioners adapt to the conditions to deliver results at the planning and operational levels, the planning processes could be further improved by an additional process of regionalisation that divides regions for each individual federal entity. Nevertheless, such regionalisation could also mean less

economic resources per entity, which would restrict further operational capacities and human resources of each region (SA, Oaxaca, July 31<sup>st</sup>, 2010).

The lack of economic and human resources was also identified as an obstacle to protected areas management by conservation practitioners (CC, GJ, EA, AV, JJ, SCLC, September 30<sup>th</sup>, 2014). This constrain is a common inhibiting factor in conservation; however, not all of its effects are negative since limited economic and human resources have enhanced a certain degree of power devolution to other non-state actors for protected areas management. At CONANP's Southern Isthmus region, budget and human constrains have promoted the establishment of arrangements among different governmental and non-governmental organisations to fulfil planning, funding and operational gaps. In terms of planning, the constitution of advisory boards is one of the strategies that directors of protected areas apply according to the local context and different actor's disposition. Representatives of federal and local governments; representatives of *ejidos*, communities; landowners, academic institutions, NGOs and any other stakeholder can constitute the advisory board of a protected area. Advisory boards can provide useful insights related to the immediate context and can cover multiple subjects, from ecological research to social conflicts, inform the definition of priorities and lines of action in protected areas. Furthermore, since protected areas are inserted in wider landscapes and indirectly subject to regional development policies, there is a need to establish more formal links promoting coordination with other agencies to add efforts and to prevent actions with opposite objectives. Despite their relevance, the establishment of advisory boards is subject to the disposition of the different stakeholders and to the abilities of the authorities of each particular area to chair them, since the implementation and legal responsibilities of the decisions achieved are CONANP's.

In theory, government agencies have institutional links to coordinate with one another and support the achievement of their objectives. In practice, the multiplicity of actors and the lack of institutional frameworks for information exchange and coordination make it difficult to ensure coherence and consistency in inter-institutional actions. At national level, CONANP has structural links with

environmentally related agencies, namely: SEMARNAT, CONAFOR (National Forestry Commission), CONAGUA (Water National Commission) and CONABIO (National Commission for the Knowledge of Biodiversity). As it has been mentioned, for operation purposes CONANP relies on CONAFOR and the resources assigned to important forested areas through PES. CONAFOR is another decentralised body from SEMARNAT and its objective is to develop, enhance and promote productive, conservation and restoration activities, as well as to participate in the planning, programmes and policy implementation for sustainable development within the forestry sector (CONAFOR 2014). Amongst its competences, CONAFOR is in charge of the evaluation and assignation of PES to areas that are of strategic importance in terms of water capture and biodiversity. The agency has its central offices in Guadalajara Mexico, and there are offices in each state of the country. According to the director of production in CONAFOR in Oaxaca at the time of fieldwork, many of the decisions about the allocation of PES were decided through remote sensing techniques in Guadalajara. Hence, while the agency was decentralised, decision-making remained centralised (AS, Oaxaca, July 31<sup>st</sup>, 2010).

Also, as the agency in charge of management of protected areas, CONANP is connected at the national level to SAGARPA (Agriculture, Livestock and Fishery Secretary), SEDESOL (Social Development Secretary), PROFEPA (Federal Agency for Environmental Protection) CDI (Indigenous Development Commission), as well as the Tourism, Defence, Fishing and Marine Secretaries. At the regional level, CONANP should coordinate with state and municipal governments as well as their respective agencies and agendas. Nevertheless, one of the main obstacles for the operation of protected areas in the region is the lack of coherence and coordination between different government levels and their respective agencies, objectives and actions. Thus, even though national level agencies have agreements to keep coherence, this does not reflect on the regional, state and local levels. As the statement of the director of two National Parks in Chiapas describes below, while CONANP is promoting sustainable land use practices in settlements located within protected areas, other agencies either regional or national often operate with contrasting objectives:

*“...while we are trying to [promote] environmental awareness, people don’t come to my meeting because [at the same time] the Agriculture Secretary is distributing agrochemical products... we need to work a lot at the inter-institutional level”*(GE, Tuxtla Gutierrez, August 7<sup>th</sup>, 2011).

Hence, planning and applying transversal processes remain subject to personal assets and disposition of civil servants, reducing consistency and certainty in protected areas management. Processes of negotiation and coordination defining lines of action between agencies largely depend on personal relationships and links rather than constituting a basic practice within different institutions. The results are often that development and agriculture agencies or local governments promote practices that directly oppose the aims and objectives of environmental agencies.

In Chiapas, the state government since the late 1980s has enhanced “sustainable development” practices without coordinating with CONANP’s protected areas directors. Between 2006 and 2012, for example, Chiapas’ government through the agriculture agency promoted the cultivation of up to 45 thousand hectares of palm oil and 10 thousand of *Jatropha* through the distribution amongst small landowners and *ejido* members of packages of plants, fertilizers and pesticides (Garcia-Aguirre 2011). It also established a deficient production chain with some processing plants for biodiesel production. The distribution of such packages was portrayed by the state government as sustainable development and was taken to lowland populations of the state, including those inside the Biosphere Reserves of La Encrucijada, Lacantun, Montes Azules and El Triunfo; the Natural monuments Bonampak and Yaxchilan; the National Park of Palenque, and the Areas for Flora and Fauna Protection of Chan Kin, Naha and Metzabok (Garcia-Aguirre 2011). These cultivations have been promoted without the previous authorisation of the protected areas authorities. Consequently, institutional agreements are being developed in the region in search for coherence in different agencies’ work crossing different organisational levels and administrative stages. However, the continuity of those coordination efforts is subject to political periods and has to be built from scratch every time a new government arrives to power, every six years for state governments and every three years for municipal ones.

As alternative examples, El Triunfo and La Sepultura Biosphere Reserves are also under constant threat from the agreements and commitments the state and municipal governments have made without considering the land use restrictions that protected areas imply (CC, Tuxtla Gutierrez, August 9<sup>th</sup>, 2010; VA, Tuxtla Gutierrez, August 9<sup>th</sup>, 2010). Due to the intricate topography of the land, many of the communities and settlements are located in remote areas with precarious roads. If this scattered distribution has enhanced low population densities and the conservation of important ecosystems, it has done so at the expense of the marginalisation of the inhabitants of those lands, who lack of infrastructure such as pavement roads and health services. The roads are also needed for transport of local products such as coffee. These needs are used for election purposes every electoral campaign, where candidates invariably promise roads and highways to voters as if these were synonym of “progress”. Consequently, both Biosphere Reserve authorities are constantly lobbying with municipal presidents, deputies and senators to inform them about the restrictions and, currently, developing studies to propose the design of a network of roads with the least ecological damage to the reserve. Despite of these initiatives, all is subject to political agreements and will. But perhaps more alarming is the latest threat to the reserve. There are nine mining prospections authorised inside El Triunfo Biosphere Reserve. Under such authorisations, four companies are already carrying out extractive activities (Gonzalez 2012). These actions that are diametrically opposite to the purposes of the reserve have been authorised by SEMARNAT despite the explicit opposition of the protected area’s authorities and numerous groups of the civil society, raising serious concerns about corruption.

Thus, institutional structures require further development for coordination and consistency between the efforts and actions for conservation by CONANP and other agencies. Agencies like SAGARPA and SEDESOL are often promoting actions incompatible with sustainable lands management; moreover, they do so with more budget and infrastructure capacities than the environmental agencies. Accountability and transparency in the decision-making processes are also an urgent need, but a difficult task for a state in a country that ranks 105 amongst 174 the most corrupted countries in the world (Transparency International 2012).

## **5.2 Funding restrictions and alliances for protected areas management**

Another relevant aspect when defining priorities and strategies for protected areas management relates to funding. In the Southern Isthmus region, funding available for protected areas operation is sourced from both, the federal fiscal budget distributed from the national offices to the regional level of CONANP and, increasingly, from international funding channelled through NGOs. According to a Financial Gap Analysis carried out by Bezaury-Creel et al. (2011), CONANP's main economic source are fiscal funds (the budget for 2011 was equivalent to £ 67 million nationally) with an increasingly important source of external fiscal funds from CONAFOR through Payments for Environmental Services in protected areas (£3.7 million annually approximately). The budget assigned by the federal government for protected areas is not enough to cover their operational needs. Bezaury-Creel et al. (2011) calculated that funding for protected areas management requires an increase of 287% in the next eight years to fulfil operational needs. In functional terms, practitioners acknowledge that the differences in management of protected areas are not due to their different categories as much as to the budget available for their operation, as the following statement from the Montes Azules Biosphere Reserve director points out:

*... "basically, the programs are the same, the difference is that not all (reserves) have budget... we are always in deficit. Thus, we cannot give the attention we would like to, but we try to mix resources and to coordinate between protected areas to give a good attention" (CC, Tuxtla Gutierrez, August 4<sup>th</sup>, 2010).*

In El Triunfo Biosphere Reserve (119,177 ha), La Sepultura Biosphere Reserve, La Encrucijada Biosphere Reserve and El Ocote Biosphere Reserve, the budget for operation has been reduced since 2000, according to informants(CC; VA; RE; ER; SCLC, September 30<sup>th</sup>, 2010), . For example, in El Triunfo in 2000 the operational team had \$1.1 million pesos (~£53,298 GBP) for operational expenses, while the budget for operation for 2009 and 2010 were \$300, 000 (~£14,533 GBP) pesos

each year. The economic constraints not only create uncertainty in the planning process but also make the agency dependent on external projects for continued implementation. The subsidy programs are additional to the funding allocated to each protected area every year. Protected areas heavily rely on three subsidies for operation, namely:

- (1) Program for Conservation through Development (PROCOCODES), designed to support the operational needs of natural protected areas and priority areas for conservation through funding for activities and projects that support the achievement of their objectives, e. g. ecotourism and sustainable fish production projects.
- (2) Temporary Employment Program (PET) that provides sources of job in rural areas source of income when demand of unqualified workforce is lower in districts classified as extremely poor. CONANP applies it to fund fire prevention activities and cleaning of rivers for example.
- (3) Conservation Program for Native Corn (PROMAC), created to support the cultivation of native varieties of corn through traditional means within protected areas.

Although useful, these programs do not come with extra funding for their implementation, causing extra effort to execute them within administrative regulations and with limited personnel. Furthermore, there are not specific funds for protected areas management itself such as monitoring and research, increasing the need for coordination with NGOs and academic institutions to achieve these objectives.

The funding restrictions have led CONANP to establish collaboration and funding agreements at different levels: national, state-wide and locally. These agreements can include government institutional partners: CONAFOR; the Tourism Secretary; SEDESOL; SAGARPA, and the Indigenous Development Commission; as well as international funding agencies such as UNDP, GEF, and international development agencies from countries like Spain, U.S.A., Germany, Japan, and the United Kingdom (Bezaury-Creel et al. 2011). National and international NGO's such as



Fondo Mexicano para la Conservacion, Pronatura A.C., World Wildlife Fund, Conservation International and The Nature Conservancy also have important funding and implementation roles in the Southern Isthmus protected areas. Likewise, the private sector is increasingly involved in funding CONANP as external sources of funding are essential for the operation of protected areas in Mexico. Even though the real figures of funding arriving to the country for conservation are difficult to calculate accurately, an average of £5.2 million are invested every year by external sources for protected areas operation in Mexico (Bezaury-Creel et al. 2011). For the governance of large protected areas, where human productive processes mix with conservation objectives, the investment of the private and non-governmental sectors has become essential at planning, implementation and evaluation stages.

The cases of the Biosphere Reserves of Montes Azules and El Triunfo illustrate these interactions, where local and international NGOs coordinated with CONANP define the strategies to achieve the protected area's objectives. Decision-making, funding and implementation of management activities within Montes Azules and El Triunfo are supported by a group of Academics, NGOs and private funders. Advisory boards are co-chaired by the protected area director to plan and coordinate fund-raising and implementation for management activities that would not be possible to develop with state funds only. Thus, the diversification of sources of funds, human and technical capacities has enhanced power devolution for the protected area's management. It also enhances innovation and adaptation; such is the case of the interaction between ecotourism and organic coffee production and the operation of both Biosphere Reserves. Conservation in the rainforest relies heavily on ecotourism, while high altitude regions of El Triunfo are related to organic coffee production. In order to face the uncertainty of the markets, service providers and producers in the region have assembled in cooperatives. With the help of NGOs, these cooperatives have improved their services, infrastructure and practices to achieve good practices' certifications and to get better prices for their services and products. These processes have not only facilitated capacity building, certifications and better income, but also have enhanced organisation and implementation of activities compatible with conservation of the ecosystems present in both reserves reserve (Tejeda-Cruz and

Sutherland 2003). Even though authorities acknowledge that decision-making is now more complex and requires more conciliation and coordination amongst multiple level stakeholders, authorities also feel supported by a network to achieve conservation. These are two examples of how important multiple-scale alliances are for the funding and implementation of protected areas management in Chiapas.

### **5.3 Multi-scale coordination for implementation**

Besides the shortage of economic and human resources to operate protected areas, the legal competences of CONANP also limit the possible lines of action, making inter-institutional coordination a necessity. Even though CONANP would seem to be the leading actor within protected areas for decision-making and planning, its competences and capacities are rather restricted, while extra responsibilities are not clearly defined. Notwithstanding that CONANP is in charge of the management of protected areas, the regulation powers of the agency are uneven. For instance, it cannot regulate the speed limit within protected areas, as this falls under the jurisdiction of the Communications and Transport Secretary. Hence, even when vehicles exceed speed limits and transit regulations within protected areas, often resulting in harm to fauna or even to local inhabitants, CONANP as institution and managers of protected areas are not entitled to act (CC, Tuxtla Gutierrez, August 9<sup>th</sup>, 2010). The same applies for the example mentioned above about the mining concessions since the regulatory powers of CONANP cover only the land use but do not apply to the mineral deposits under the soil, unless their management plan specifies it, which is rare. Furthermore, even when an event falls into the competence of CONANP, such as the projects of highways or illegal traffic of flora and fauna, the outcomes largely depend on other agencies' capacities to respond. This situation creates not only a constant uncertainty but also a sense of powerlessness for protected area managers (VA, SCLC, September 30<sup>th</sup>, 2010). The latter became evident during the course of environment defence, when a Biosphere Reserve's director mentioned the concerns that managers need to face with other agencies on the top of their bureaucratic duties:

*“...at the end of the day, you can't do enough... the needs are so many that members of the team and I do not have enough energy to think about the strategic or what is important, such as the relationships between coffee producers within the reserve, or if the recently elected municipal president wants to build a highway in the middle of the area and so on”...*  
(CC, SCLC, September 30<sup>th</sup>, 2010).

Under such circumstances, the need to get other government agencies more actively involved and coordinated in planning and implementation of conservation processes becomes critical. To face legal, economic and capacity limitations and to accomplish organisational objectives, particular protected area directors are entitled to adapt the programs according to the social and environmental local contexts. Every region has particular social-ecological characteristics that add to the experience of the personnel working there, defining their strategies for policy implementation. For instance, CONANP's institutional presence in Chiapas and Oaxaca is limited not only by institutional capacities but also by the difficulty in accessing communities situated in geographically remote areas. Thus, operational teams of large protected areas such as Biosphere Reserves can be divided into smaller sections, to reach more isolated communities and to deliver projects more effectively. This is not to say that the human and institutional capacities are not exceeded by the needs, but it points out the freedoms granted to those individuals in charge of implementing conservation strategies. Such freedom has both positive and negative effects. On the one hand it enhances adaptability of the operational teams to local contexts, increasing the reach of the state through protected areas (Durand et al. 2014). On the other, coordination and appropriation of the objectives amongst operational teams becomes more difficult to the point that, in some cases, different regions of a single reserve can behave as different reserves as a whole.

Practical collaborative efforts are established at the local-regional level through social more than institutional networks. According to practitioners, communication links amongst government agencies has slowly developed although they are not institutionalized yet. The implementation of advisory boards and the availability of external sources of funding depend on variable

conditions such as the delivery style of protected area directors and the charisma of the ecosystems and species represented by the area. Advisory boards can be adapted to the needs, availability and possibilities of local stakeholders but in practice, not all protected areas have operational committees and if they do, their consistency is not secured due to constraints in resources and availability. Thus, the projects to achieve management objectives in protected areas are implemented on an opportunity basis, depending on the external sources of funding available, the agenda of those sources and the ability of directors to orchestrate them with the protected area's needs. The challenges and responsibilities faced by protected area's directors require multiple technical and political skills to complement different actors' capacities with conservation objectives, as the following statement by one operational member of the region emphasized:

*"[Conservation] activities are often done through opportunity [and these opportunities] emerge from political trends... These trends still drive many [processes] in the Mexican conservation politics. So, we [civil servants] catch the directions and search for the opportunities because they are our means to operate... even if we have our management plan, without [these opportunities] we would not have the resources to implement them". (JJ, Tuxtla Gutierrez, August 4<sup>th</sup>, 2010)*

Notwithstanding the current problems and limitations, the institutional continuity of CONANP at the Southern Isthmus region has allowed the development of learning processes that some of the local staff regard as their most powerful tool. However, there is still much left to improve in order to respond to current conservation and social needs in the region. Thus the protected areas' network in the Southern Isthmus region represents an outstanding living laboratory where different approaches for ecosystem management and protected areas governance are constantly challenged. According to some of the interviewees, conservation in Chiapas has been and continues to be a slow process where the use of subsidies has worked to strengthen state paternalism instead of promoting local appropriation of the management activities and sustainable practices (HA, Tuxtla

Gutierrez, June 11<sup>th</sup>, 2009; GM, SCLC, December 16<sup>th</sup>, 2010; RJ, Lacanja, September 10<sup>th</sup>, 2010; HJ, Palenque, June 16<sup>th</sup>, 2009). Hence, most of the management activities at the federal protected areas level are related to solving or managing conflicts with people living within or around them, rather than managing ecosystems (NS, Lacanja, September 10<sup>th</sup>, 2010).

Furthermore, participation models imply a transformation of top-down bureaucratic systems (Cooke and Kothari 2001) that is not perceived in Mexico's case. Even though nowadays there are spaces for local representatives to have an input in planning and management, these remain limited by asymmetric power structures (Adams and Hutton 2007; Adger et al. 2005; Lebel et al. 2006; Rhodes 1997). Local representatives are expected to defend their stakes in front of boards that bring together academics, NGOs and state agents with different discursive, inclusive and negotiation capacities. Thus, up to date, protected areas authorities are still the main actors in the operation of advisory boards while local communities remain supporting operation through paid work and government subsidy programmes (GM, SCLC, December 16<sup>th</sup>, 2010). Consequently, active and informed participation from local communities for decision-making and implementation of protected areas remains limited to a political discourse that lacks of the social and technical infrastructures to become a common practice. The path to reverse decades of reinforcement of paternalistic policies and top-down designed projects is still underdeveloped. At the operation level of CONANP, the institution needs to be flexible and responsive, while processes and reforms are increasingly slower as the level on the institutional ladder ascends. Furthermore, with responsibilities unclear, the workload and gaps different operational teams are required to fulfil increases. According to the situation, the resources and staff available, protected area operational team members may have to act as facilitators of processes that require them to become tourism promoters, workshop facilitators for community enterprises, technical advisors for sustainable agriculture techniques, as well as delivering subsidies available in protected areas, verify activities and elaborate reports. The workload only increases with the lack of mechanisms and clear procedures to facilitate the active participation of different stakeholders and coordination amongst them for protected areas governance. Hence, although in-situ conditions often require managers and

technicians to be in continuous adaptation, training and flexibility, management needs and bureaucratic structures increase the risk for conservation practitioners to fall into the mechanical repetition of procedures and rigid application of operation rules with little attention to contextual needs.

This is the gap that the emergence of participatory conservation in the form of Voluntary Conserved Areas is meant to fulfil. Due to institutional promotion and to the economic incentives they represent, certification has become very popular, especially in Oaxaca (Martin et al. 2011). Yet, for the practitioners, the reality on the ground differs from the success that CONANP displays publicly (GJ, Tuxtla Gutierrez, August 4<sup>th</sup>, 2010). According to interviews with some operative members at CONANP, providing support to particular and smaller areas on the top of giving attention to other federal protected areas exceeds the institutional capacities by far, as one member of CONANP's staff acknowledged:

*“It is easier to establish a [state managed] protected area ... than generating self-management processes... you require leaders... it takes longer and is more difficult”* (GJ, Tuxtla Gutierrez, August 4<sup>th</sup>, 2010).

Once more, the efforts of individuals within CONANP as institution, to make conservation a more participatory process, have not permeated to the organisational structure. Thus, the performance of participatory conservation processes depends on specific actors and their negotiation skills to validate the processes rather than on established institutional frameworks enhancing local deliberation and capacities (Walker et al. 2007).

## **5.4 Community governance and conservation in the Southern Isthmus region**

Indigenous communities often acknowledge how integral forests are for their general wellbeing. Yet, protected area implementation have long neglected local knowledge, value and management systems (Brockington and Igoe 2006; Brockington et al. 2008: 93; Colchester 2004; Dowie 2005; Duffy 2005; Fairhead and Leach 1996; Pimbert and Pretty 1995; Pujadas and Castillo 2007; West et al. 2006). Indigenous people, however, have diverse sources of knowledge and

complex relationships based on reciprocity and cooperation, which can benefit decision-making for natural resource management (Mitchell 2006). Even though they are not the norm, the Isthmus South region of Mexico also has some outstanding examples of capacity building, community empowerment and conservation processes (Merino-Perez 2001), such is the case of the communities located in the Sierra Norte (Mitchell 2006) and Sierra Juarez (Bray et al. 2003) regions of Oaxaca. These regions provide numerous examples of arrangements for common-pool resources use, different networking strategies and, consequently, diverse social and conservation outcomes. Since the legal reforms officially recognised VCAs and different economic incentives (e.g. Payments for Environmental Services) have been implemented, new scales and cross-scale relationships have been added to those previously local arrangements. The outcomes of this shift are diverse and illustrate the constant challenge of fitting institutional and social scales with ecological systems for natural resource management and conservation (Wyborn and Bixler 2013).

As a product of the Mexican Revolution, indigenous communities in Oaxaca were entitled their ancestral lands. However, each community has struggled in its own way at different stages to gain and maintain control over their lands and access to natural resources (Bray et al. 2003; Merino-Perez 2001; Haenn et al. 2014). In the Sierra Norte and the Sierra Juarez regions, grassroots movements to claim local control over natural resources are considered a leading example throughout Mexico (Bray et al. 2003; Mitchell 2006). In these regions, community structures for natural resource management have developed through struggles with public and private companies for timber exploitation operating within communal lands in the early 20<sup>th</sup> Century. Those companies operated through concessions that gave little if any retribution to the legitimate owners of the forests (Bray et al. 2003), allowed by a largely absent government regulation for forest resources use. Forest resources use, then, fall into the responsibilities of the local communal committees. Eventually, communities claimed back the right to access to their own forests, enhancing the development of community forest enterprises. Local communities in these regions have developed strong structures for organisation, decision-making and enforcement through similar struggles to get access to ancestral lands and to the right to make profit out of the natural resources.

Simultaneously, the government's absence enhanced independence and local autonomy, leaving the main-decision making to local and traditional structures (Mitchell 2006). Such empowerment processes have been central to develop the community cohesion and organisation for natural resources use and protection for which communities in the Sierra Juarez and Sierra Norte are known.

In her paper, Mitchell (2006) explores two contrasting cases in the Sierra Juarez, where one community (Ixtepec) successfully developed a community forestry enterprise (CFE), by establishing strong structures for forest management and by making alliances with government institutions and international agencies for forestry certification. In this CFE, managerial positions are held as voluntary positions and while for some people these positions are a real commitment with one's community, they are a heavy burden for others, with long working hours and no remuneration. Despite these contrasting views, there is a sense of local pride and cohesion in holding responsibility of the community enterprise and perform well in the position. Additionally to these local arrangements based on customs, Ixtepec has also allied to government and international agencies to fund their operation, provide technical support and get certifications for sustainable production. Such multi-scale arrangements, with local structures as the basis, have allowed Ixtepec to be a successful example of common natural resource management. On the other hand, another community (Yavesia) preferred to preserve their forests from commercial exploitation and refused to develop links with external agencies. However, surrounding communities did not agree with Yavesia and, based on inter-community arrangements, neighbouring communities started making use of Yavesia forests and conflicts emerged. Through this example, Mitchell (2006) argues that conflicts tend to arise where social bonds are weak and there is no definition of responsibilities and instruments for resources management. Research points also concerns regarding corruption, gender equality and the quality of deliberation in communal natural resource management (Bray et al. 2003; Klooster 1999; Merino-Perez 2001; Mitchell 2006).

Hence, community governance is the basis for multi-scale governance, but community decision-making and cooperation are not exempt from conflict, corruption and poor management practices. The diversity of governance



structures for forestry enterprises, and consequently for Voluntary Conserved Areas, represents a wide range of capacities for leadership, debating, decision-making and transparent implementation that result in different managerial weaknesses and strengths (Mitchell 2006). Sierra Norte and Sierra Juarez along with many other localities in Oaxaca are examples of how complex contexts have given place to a diversity of community management arrangements that have conserved their forests and generated income to local people (Robson 2007). In these regions, empowerment processes have led to local governance structures to positive social as environmental outcomes that have also influenced other processes in the country and are currently considered as a living laboratory where community resources management, economic viability, social justice, environmental sustainability and multi-scale governance can be evaluated (Martin et al. 2011). As multi-scalar governance arrangements emerge, communal structures have been progressively linked to new institutional structures, negotiation arenas and regulations. Multi-scale conflicts also emerge. On the one hand these new arrangements provide communities of new resources for conflict resolution and development of negotiation skills in the policy arena (Li 1996), as well as access to alternatives for income and capacity building through training and experience exchanges. However, on the other hand, multi-scale governance arrangements also enhance communal structures to be increasingly subject to policy simplifications as well as external market and political constructions of what community conservation is (Li 1996) that challenge and homogenize previously autonomous and complex arrangements (Borrini-Feyerabend et al. 2004; Li 1996). Furthermore, multi-scale governance arrangements require of trust, social capital, co-production of rules, collective actions and enforcement at multiple scales that keep making difficult for local people to see the gains out of the costs of getting involved in such arrangements for conservation (Abrams et al. 2003; Bray et al. 2012; Ostrom 1996; Fischer et al. 2007).

Local participation in protected area establishment and management has made important steps in Mexico (Haenn et al. 2014). Nevertheless, the risk of falling into mechanic simplifications and overlook local heterogeneity is a constant (Colchester 2004; Li 1996, 2001; Mosse 2004). Furthermore, even those approaches portraying the participatory rhetoric seem to be replicating top-down

forms of conservation. In 2010, the first VCA in the country, Santiago Lachiguiri, expressed their will to withdraw their VCA status during the COP 16 in Cancun, Mexico. In interviews with international media, the communal authorities alleged that the process was being imposed over them and they were being forced to change their traditional practices in exchange of PES which were not enough to cover the opportunity costs of growing corn in a slash-and-burn scheme as they have done it throughout the history of the community (Vigna 2012). Furthermore, VCAs and the linked PES have been proven to have negative impacts of the food security of communities that, persuaded by “purist” conservation ideas, external regulations and NGOs, ban hunting and gathering in order to attract the economic incentives (Ibarra et al. 2011). As will be explored in more detail later, the limited information used to persuade communities to engage in the certification process, at least in the Southern Isthmus region, leads communities to confusion and later, to disappointment.

## **5.5 Closing section: Institutional arrangements for protected areas management**

This chapter has provided an overview of the regional institutional arrangements for protected area management; this is the context in which the case study of this dissertation is framed. Park managers and staff often lack capacities, resources and legal faculties to carry out management and enforcement duties (Wells and McShane 2004). Despite their limited capacities to achieve conservation objectives (Porter-Bolland et al. 2013), there is an explicit expansion of the powers of the state over these areas in terms of regulations supervision and certification under externally define standards. The latter is consistent with critiques that argue the expansion and building of the state through protected areas (Bray et al. 2012; Brockington et al. 2008; Durand et al. 2014; Scott 1998; Li 2005). Furthermore, the spaces for local representatives to have an input in planning and management are limited by asymmetric power structures (Adams and Hutton 2007; Adger et al. 2005; Lebel et al. 2006). Local representatives are expected to defend their stakes in front of boards that bring together academics, NGOs and state agents with different discursive and inclusive capacities. Decision-making for protected area management remain dominated by the state and funding agencies who determine conservation priorities, management strategies and evaluation standards. This participatory rhetoric, naïvely overlooks the power relations implied (Cooke and Kothari 2001) and available spaces for local participation avoid positions that go against the

interest of powerful groups (Mansuri and Rao 2004). Operationally, despite protected areas have an increasingly wider range of scales; the participation spaces for local institutions remain limited by a classic “*take it or leave it*” approach (Rahnema 2010). The prevailing use of local participation rhetoric is seen as a means to get local support and to increase efficiency in protected area management (Cooke and Kothari 2001; Pimbert and Pretty 1995), with very few cases where participatory processes have reached the development of local capacities for natural resource management (Bray et al. 2003; Merino-Perez 2001; Mitchell 2006). Within this framework, VCAs represent an alternative for power devolution and enhancement of local active participation. However, the local capacities to hold their stakes in from of legal and institutional frameworks used to top-down approaches are constantly challenged.

The following section provides empirical data about the issues that emerge during the implementation of multi-scalar governance arrangements for conservation in the Southern Isthmus region of Mexico, focusing on an in-depth case study of the implementation of a VCA.

# Section III: A case study of the VCA El Cordon del Reten, San Miguel Chimalapa: Community-led conservation or neo-preservationism?

## **Chapter 6. Local governance dynamics and the process leading to the creation of El Reten**

As it is often the case, the implementation of legal frameworks requires people in charge of implementation to adapt them to local contexts. In San Miguel, local conditions such as the physical characteristics of the land; the distribution of the population; interactions between settlements and communal authorities in charge, as well as land tenure conflicts in place have resulted in different strategies for community governance according to local dynamics. The formal governance structures for agrarian communities have been already presented in Section 2.2.2. Therefore, this chapter focuses on the actual local governance arrangements in place, the structure of the general assemblies and the communal statute in San Miguel. This will lead to the historical process for the establishment of El Reten as a VCA and the exploration of the multi-scale governance arrangement in place. Although municipal authorities are relevant to community matters, during my stay in San Miguel, there was no municipal government due to an alleged fraud. Furthermore, since the establishment of a VCA is a matter related to land, its use and community organisation and work, the agrarian authority is of most relevance. Thus, this section of the dissertation will focus on the agrarian authorities and communal decision-making structures that were directly involved in the establishment and operation of El Reten. San Miguel has a long trajectory of interaction with external agencies which have delivered different capacities and discourses (Doane 2007; Russell 1996; Walker et al. 2007). These have been appropriated by the community and shape the way local dynamics interact with the external agencies determining natural resource

management in the VCA. Third, by looking at the different processes for the implementation of the VCA and the role of external institutions and regulations, this chapter makes use of the common pool resource theory in order to examine the implications of institutional arrangements in place for the long-term sustainability of conservation efforts. The final part of this chapter explores the interactions between local community governance structures and external agencies, programs and regulations that take place in the management process of El Reten. Such interactions illustrate how participatory or community-led conservation is being implemented in the region and highlight the issues encountered in the process. It also explores the role of NGOs within these arrangements, facilitating the roles that were previously played by government agencies, legitimising discourses and the expansion of the state to reach to areas where it could not before. The data provided in the final part of this chapter focuses on the interactions for decision-making, benefit-sharing and scale dilemmas that the governance of El Reten poses to the different stakeholders involved.

### **6.1 Local governance structures and dynamics in San Miguel**

In communities like San Miguel, population is scattered throughout the land and transportation and communication can be difficult, populations aggregate in smaller settlements. Each settlement that is part of San Miguel has representatives of both authorities and holds its own local assemblies for immediate and local needs. Auxiliary secretaries of the communal committee and municipal agents are those individuals from each settlement that are elected by the local assemblies to work as the link between the local assembly of each settlement and the communal committee and municipal authorities respectively. Local assemblies meet every month or more often if required by the needs of the settlement. Communal and auxiliary authorities in each settlement are voluntary and unpaid positions, being regarded as a service to the community that each *comunero* has to develop as part of the *tequio* (work that community members contribute in the name of community's benefit). These unpaid positions tend to be perceived as a burden

but also as an opportunity to serve the community and, at times, also as a source of pride for community members.

In San Miguel, the population is scattered in 17 settlements including the centre or *cabecera*, with communication between them limited by distance and the geographic characteristics of the region. Consequently, communal authorities in San Miguel tend to be from the settlements in the centre of the community, which means that non-central settlements are not normally represented in the communal committee. Because of the periods and amount of energy required to call for a general assembly, the seventeen auxiliary secretaries are called to smaller assemblies (every two or three months), so communal authorities can inform them about relevant issues and to keep a regular communication between the local assemblies and the communal committee. Hence, each auxiliary secretary of the communal committee elaborates the reports from the local assemblies and delivers them during the auxiliary secretaries' assemblies where s/he informs the communal committee about the agreements reached by the local assembly. Then, the communal committee sends feedback through the auxiliary, and secretaries who report back in the following local assembly. At the local level, different settlements have different structures of organization and hence, the size and frequency of their assemblies as well as the strength of their agreements differ greatly in the overall community.

The general assembly, on the other hand, is a bigger event, where all entitled community members congregate at the centre and interact with each other discussing and striving for major decisions in the community. General assemblies are spaces of great value for sharing information and coordinating action amongst community members as well as important spaces for decision-making regarding natural resource management (Gutierrez-Montes 2005). According to extensionists working in San Miguel, general assemblies of the Chimalapas region are known for their strength and mobilisation powers (MJ, Oaxaca, July 22<sup>nd</sup>, 2010). These assemblies were one of the main bases for successful resistance to the imposition of the Biosphere Reserve and other development projects that have been explained before (GM, SCLC, December 16<sup>th</sup>, 2010). However, general assemblies are a delicate matter as well since accumulated personal and political

tensions make discussions to go round in circles, can prompt violence and have usually little achievements in decision-making as stated by an extensionist with long experience in the region:

*[San Miguel's] "assembly is bloody... The management of the general assembly is difficult, you need a group of policemen... because there are antagonistic groups not only due to the land conflicts but [also]... resentments between political parties" (Skype conversation MJ, May, 6<sup>th</sup>, 2012).*

Moreover, due to the large amount of *comuneros*, achieving a consensus and agreement over controversial issues in a general assembly can be an endless job (PR, Zanatepec, July 7<sup>th</sup>, 2010). These are some of the reasons why a general assembly has not been called in San Miguel on a regular basis since at least 2005, according to local informants (RA, San Miguel, November 30<sup>th</sup>, 2010). The auxiliary secretaries' assemblies have substituted general assemblies; this change enhances local concern about the legitimacy of the decision-making processes as well as the transparency and accountability of communal authorities (SB, San Miguel, December 11<sup>th</sup>, 2010).

The opposition to decisions taken merely by auxiliary secretaries is particularly acute among members of the assemblies from San Antonio and Benito Juarez along with La Cristalina and Sol y Luna, which have worked together to fight land invasions and lack of institutional presence in the eastern region of San Miguel. Despite the existence of inter-settlement differences, conflicts and competition, San Antonio and Benito Juarez constitute a local alliance to face the ejidos from Chiapas located within the eastern border of the communal lands. This is also the case for the management of El Reten, where these settlements continue to assemble together to negotiate with external agencies and communal authorities. Informants from the eastern settlements argue that the refusal of communal authorities to call for a general assembly aims to limit the participation and resistance of community members, diminishing the legitimacy of the agreements achieved (SC, San Miguel, December 10<sup>th</sup>, 2010). These issues are raised during local and auxiliary secretaries' assemblies where members claim for a general

assembly. Nevertheless, according to an external agency's extensionist, general assemblies are only called for the election of the communal committee, every three years, and they are so contentious that authorities are afraid of calling them (OD, Oaxaca, February 26<sup>th</sup>, 2011).

Political parties divide the community and, consequently, both local authorities' elections, communal and municipal. Even though in principle, customary institutions should be free of the influence of political parties, these play an important role in the definition of the communal authority. Hence, the relationship of the authorities with the different settlements varies according to their respective political inclinations. The internal divisions due to political parties create a delicate situation in San Miguel, only increased by land tenure conflicts. At the time of the development of this research, the two dominant political parties, PRI and PRD<sup>8</sup>, were struggling to get the municipal power. San Miguel is one of the biggest municipalities in the country and its marginalisation score makes the municipality eligible for multiple economic resources and infrastructure projects, which are managed by the municipal authorities. Hence, the stakes are high and, according to numerous members of the community, the PRI coerced people for their vote in order to win the elections. Consequently, community members, dissatisfied with the election procedures and results, occupied the municipal house asking for the state electoral authority to guarantee a transparent process, to nullify the elections and to carry them out again. This process lasted for over a year, until the state electoral authority called for new elections. Meanwhile, the municipal authority was headless and there was no involvement of the municipal authority in the land tenure conflict, neither in the implementation of El Reten and the programmes arriving through it.

Community institutions are struggling to keep up social transformation in San Miguel. On the one hand, political divisions have had their toll on local trust. On the other, subsidies and population growth challenge traditional forms of organisation (CyC, San Miguel, November 3<sup>rd</sup>, 2010). According to local informants, since the arrival of subsidies and development projects from the government, communal work or *tequio* has slowly faded in central parts of San

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<sup>8</sup> Acronym for the Institutional Revolution Party and Democratic Revolution Party, respectively.



Miguel, and people expect an economic retribution for every work done regardless of the common good. Additionally, population growth and dispersal make enforcement of the communal statute difficult (CA, San Miguel, November 3<sup>rd</sup>, 2010). Throughout the community there have been many incidences of rule-breaking in relation to local agreements regarding illegal logging, land invasion, leasing of lands for cattle ranching, excessive hunting and illegal trafficking of fauna. These elements of the local context have carved the way local people organize themselves, the way they prioritise their needs, their perceptions and use of their environment. These dynamics and conflicts have taken their toll on community cohesion and have defined the interactions between the different settlements and communal authorities San Miguel as well as the interactions of the community with external agencies (GM2, San Miguel, December 8<sup>th</sup>, 2010).

However, according to local accounts, in the case of the settlements located in the eastern region, where El Reten is located, land tenure conflicts have also promoted community cohesion and organization through inhabitants shared resistance (GM2, San Miguel, December 8<sup>th</sup>, 2010). Community members and extensionists working in the region acknowledge the strength in the local assemblies of the eastern region (SB, SC, DC, MJ, PR). However, trust relationships with the communal authorities of San Miguel and external agencies tend to be rather unstable (Doane 2007; Gutierrez-Montes 2005; Walker et al. 2007). As a result, there are many sources for political and social tensions and suspicion in the eastern region. This became evident when I arrived to one of the settlements and after a couple of visits to a household, a man told me:

*“We, as a community, investigate the institutions and people that arrive... we need to see if you can be trusted”* (SB, San Miguel, November 25<sup>th</sup>, 2010).

Therefore, although the settlements San Antonio and Benito Juarez are influenced by the dynamics in San Miguel, local struggles and distance from the centre enhances a certain degree of autonomy. Also, since members from Benito Juarez tend to vote for the PRD and communal authorities are mostly from the PRI, attention from the communal authorities to this settlement has been minimal,

according to local accounts (SC, MA, DS, San Miguel, November 23<sup>rd</sup>, 2010). This way, distance and lack of institutional presence have meant that, in contrast to the central areas of San Miguel, many of the customary institutions are kept in the eastern region, such as the local assemblies and the *tequio*. These settlements and their local assemblies have been determinant in the formal recognition of El Reten, and remain the strongest link to its implementation.

The governance of one of the biggest municipalities in the country with a scattered population poses a problem of scale. As has been described, distances and deficient communication links make deliberation and decision-making an inefficient process in terms of the amount of time and energy required to achieve consensus. In response, local assemblies have developed to provide immediate responses to local needs, but still are subject to a centralised and mostly absent authority. This increases tension between the communal authorities, which tend to focus mainly in the centre of the community, and the different settlements, which tend to feel neglected. Another issue related to scale is that of boundaries, since the land tenure conflict increases the difficulties implied to rule over such a large area. The amount of external agencies as well as the economic and political interests involved in this inter-state conflict erases the possibilities to clearly distribute rights and responsibilities over the land and the natural resources within it. Consequently, there are little incentives for compliance and enforcement of the communal agreements. The dysfunctional general assembly and the establishment of the auxiliary secretaries' assembly further enhance this lack of rule of law. An even though, current arrangements for decision-making reduce the risk of tension and violence, they do so at the expense of transparency and accountability between the communal authorities and community members in both ways.

### **6.1.1 Local structures for natural resource management**

The communal statute is the document that, by law, should rule the natural resource management in any agrarian community. The last communal statute in San Miguel was published in 2000. The World Wildlife Fund (WWF) and other

NGOs took an active role in defining the local Natural Resource Committee and in writing the communal statute, linking community priorities with wider conservation discourses (Walker et al. 2007). The Title six of this statute specifies the local regulations for use and conservation of natural resources in the community. Articles 89 and 90 define the conditions for use of forestry resources which are subject to the regulatory frameworks and previous permission by SEMARNAT and the general assembly. Article 95 established that the use of timber and non-timber products should be done according to the Forestry Law without further specification. Articles 96-97 define the conditions on which fire for agriculture should be practiced, while Articles 100-101 state that all community members should participate in reforestation activities every year and each *comunero* should plant two trees for every tree he uses. The statute mentions the existence of an Environmental Committee that would be in charge of protecting species and resources (Art. 105). Hunting pregnant females is forbidden but the species are not specified and Articles 107 required a permit for hunting but does not specify who is entitled to provide it. Contrastingly, Article 111 establishes that the use of fauna can only be done through Environmental Management Units (similar to synergetic farms) with permits granted by SEMARNAT. Articles 112-114 describe the duties of the Environmental Committee, which include the establishment of protection brigades against illegal logging and to carry out a registry of the wood cut per month. Article 126 prohibits the use of explosives and poisons for fishing. Finally, Articles 128-131 define who is entitled to apply sanctions in cases of rule-breaking.

The content of this document was developed amidst controversy about the process of elaboration and its legitimacy. According to local accounts, the statute was developed by external agencies and authorized by the communal authority at the time without consultation and without the consent of the general assembly (DS, MA, SC, SB, RS, San Miguel, November 23<sup>rd</sup>, 2010). As a result, the members of the different settlements are not aware of the content of the statute and needless to say, the regulations have not been implemented. Local settlements, like San Antonio and Benito Juarez have their own arrangements for fire control which is still considered *tequio*, while logging remains a delicate issue. The regulations for

natural resource management, according to Ostrom's work lack of coordination amongst those involved, distribution of responsibilities and building trust, as well as clear means for enforcement and sanctioning (Ostrom 2002).

## **6.2 The process leading to the establishment of El Reten**

Located in the heart of the Isthmus of Mexico, connecting Central South America to central Mexico, Chimalapas is of strategic importance in terms of natural resources and economy (Pacheco-Sanchez 2006). The last three decades of history in San Miguel have seen the evolution of the relationship of local institutions with conservation-related agencies; this process portrays the enduring local struggle for land and local sovereignty (Walker et al. 2007). The Chimalapas region is widely known for the ferocity of its land and resource conflicts, and this is related both to its complex history of settlement and to its location on the (ill-defined) boundary between the states of Oaxaca and Chiapas. Land conflicts are the overriding concern of the inhabitants of the region and have a deep influence on every aspect of their life, and therefore they are described in some detail here. Although there is archaeological evidence of human presence in the eastern region of San Miguel since pre-Hispanic times, population densities were very low until 1947, when a group of logging companies were established in the area after it was claimed by Chiapas state as federal forest lands (Doane 2007: 455). During 1950s the federal government, through the National Commission of Colonisation (Southern Region of Mexico), entitled new settlements or "*colonias*" in the area under the jurisdiction of the state of Chiapas, overlooking the Colony titles of San Miguel and Santa Maria Chimalapa. By 1967, the region was officially divided into two titled indigenous communities within the state of Oaxaca - San Miguel Chimalapa, the site of El Reten, and Santa Maria Chimalapa - which are also municipalities. At the same time as San Miguel and Santa Maria received their titles as indigenous communities, logging companies present in the eastern region of San Miguel mobilized their workers to claim the lands for themselves under the auspice of the agrarian reform. Three months later, the federal government gave formal titles to two ejidos within San Miguel's communal lands, again under the jurisdiction of Chiapas. Between 1970 and 1980, the Agrarian Reform Secretary

(SRA) gave further titles to other private owners and ejidos as part of Chiapas in areas within San Miguel's communal lands. Thus, although San Miguel is officially within the state of Oaxaca, five ejidos within its borders have titles as part of the state of Chiapas.

Through the years, these overlapping titles have been the cause of numerous conflicts, especially regarding the access rights to forest resources. The land tenure uncertainty has had impacts not only in the local relations between inhabitants, but also in the attention that federal and State government agencies provide to the area. Even for PROCEDE which was the program designed to solve these kind of conflicts, Chimalapas remained as an area under conflict. Different agencies at different scales deal with the land tenure conflict and access rights dilemmas in often contrasting ways. The concessions for forestry use for the eastern settlements of San Miguel are just one example of this. Inhabitants from the eastern zone of San Miguel have sought permits for timber extraction from Oaxaca's office of the National Secretariat for Natural Resources (SEMARNAT), but the permits have always been denied on the basis that they cannot be granted in an area where land tenure is disputed. Nonetheless, in 2005 the federal office of SEMARNAT provided a 12-year authorization for timber extraction in this same area to one of the Chiapas' ejidos. This permit has been source of constant tension and numerous encounters, violent at times, between the inhabitants from San Miguel and the *ejido* Diaz Ordaz. However, it is not clear which government office has jurisdiction to solve the situation and define clear access rights to forest resources, enhancing illegal exploitation. During data collection, some *comuneros* mentioned that they prefer to use their forests illegally rather than leaving them to the *ejidos* to exploit, and thus it is not surprising that there has been a low but constant level of illegal logging (ES, SB, UP, San Miguel, November 23<sup>rd</sup>, 2010). The situation created by the lack of rule of law, clear definition of rights and responsibilities and trust of people enhancing overexploitation of natural resources. This was acknowledged by community members as well as conservation practitioners in the region (PR, Zanatepec, July 7<sup>th</sup>, 2010) and is consistent with the CPR literature on the importance of institutions and property rights for natural resource management (Fischer et al. 2007; McCay 1995 in

Berkes and Folke 1998). Property rights and access are two key aspects for exclusion over natural resources (Ostrom 2002; Ribot and Peluso 2003).

Simultaneously, the land tenure conflict with Chiapas has and continues to define the way local people in the eastern zone of San Miguel organize themselves, their settlement patterns, the way they prioritise their needs and perceive and use their environment and, above all, the way they negotiate with external agencies. Many of the current settlements were created through the movement of households from the Centre of the community to peripheral areas in order to defend the land from specific threats. This is the case for the four communities closest to El Reten –Benito Juarez, San Antonio, Sol y Luna and 5 de Noviembre-, which were formed from 1972 onwards by landless people from the central settlements who settled there and successfully mobilized to displace logging companies and cattle ranchers. The uncertainties of tenure and the related conflicts have taken their toll on community cohesion and on the environment (GM2, San Miguel, December 8<sup>th</sup>, 2010). Consequently, extensive forest areas within San Miguel have been destroyed, and only a few large remnants of primary vegetation remain. However, despite the ecological damage, these forested areas still constitute a priority for conservation (SC2, Juchitan August 25<sup>th</sup> 2010). Due to the land tenure structure, conservation NGOs and agencies in the Southern Isthmus region participation is a strategic need to get access to communities and territories (Walker et al. 2007).

From the mid-1980s onwards, the remaining forest areas and the threats they faced attracted the attention of national and international conservationists, and several proposals have been made for the establishment of protected areas in Chimalapas. However, the multiple actors in the region have worked uncoordinated most of the times (Walker et al. 2007). In 1988, under the auspices of the federal agency for urban development and Ecology (SEDUE), the first land-use planning exercise was published, and this eventually resulted in a proposal for the establishment of a Biosphere Reserve. A Biosphere Reserve would take considerable control out of the hands of local people and therefore there was significant opposition. In 1990, with funding from WWF, a Socio-Environmental Diagnostic of the Chimalapas Rainforest was undertaken by local

NGOs Ecological Groups Pact and Maderas del Pueblo in coordination with the Economic Research Institute of the National Autonomous University of Mexico (UNAM). Through their work and economic capacities, Maderas del Pueblo a local NGO, became a leading actor in the region. This was due not only to its involvement with the communities but also to its approach, which, in contrast with other environmental NGOs, also conceded importance and efforts to the resolution of the land tenure conflict. The role of Maderas del Pueblo has been analysed by Russell (1996) and Doane (2007), and for the purposes of this thesis it is sufficient to say that at the time Maderas del Pueblo was the main external institution working in place in the absence of formal government involvement.

In 1991, a National Committee for the Defence of Chimalapas (NCDC), with Maderas del Pueblo as a main actor, was established which worked to protect Chimalapas both at the level of national policy (Russell 1996) and also by supporting local people to oppose the imposition of an increasing array of major development and conservation projects on their lands. These included a forestry project promoted by the Inter-American Development Bank; a hydroelectric dam; a highway from Chiapas to Veracruz, and – also perceived as a threat because of its implications for the loss of local control - a Biosphere Reserve. The movement gained political weight and brought the Chimalapas region and its problems to national attention, enough to stop the projects, including the Biosphere Reserve. With Maderas del Pueblo facilitating, a series of workshops and community planning processes led to a proposal for a Campesino Ecological Reserve. This proposal from the community and the local NGO was developed as an alternative to the Biosphere Reserve, and at the time it represented an innovative alternative to top-down conservation approaches. The Campesino Reserve would enhance biodiversity conservation whilst allowing local inhabitants to maintain greater control over their lands.

In 1994, local people recovered an area called La Gringa (40,954 ha) in Santa Maria Chimalapa that had been invaded and set a local agreement to establish the Ecological *Campesino* Reserve on this land. The community plans for the reserve were delivered to the federal office of SEMARNAT, but it was rejected on the basis

that it was not in line with existing legal frameworks and government policy. At that time, LGEEPA considered legitimate protected areas only those managed by the government under a determined set of management classifications that did not include community or private conservation. After all the effort and resources invested, carefully described by Anaya and Alvarez (1994), the creation and implementation of an Ecological *Campesino* Reserve did not proceed due to a gap in the legal system in terms of a mechanism for community conservation. Hence, the official establishment of any kind of protected area in the region was postponed due to the lack of institutional frameworks for voluntary conservation and the local opposition to the establishment of a Biosphere Reserve.

Yet again, forest conservation became an increasingly pressing issue for people in the Chimalapas region in 1998, when a combination of extreme drought, increasing slash-and-burn farming, burning of pastures to renew grasslands for livestock, and illegal fires started by hunters led to the biggest wildfires in recent regional history (Gutierrez-Montes 2005). Local people, with the assistance of some one thousand members of the Mexican army and Mexican and U.S. fire brigades, fought the fires for a month, but in spite of this some 37,806 ha of forest were damaged in San Miguel, and one third of the entire Chimalapas region was affected. The fires were a milestone in local perceptions of the importance of forests: fighting the fires, people realized how logging and land clearance for cattle ranching had made the area around their settlements more vulnerable both to fires and to soil erosion, with worrisome implications for water supplies and climate change. The area that suffered the highest impact was the eastern region of San Miguel – the area that now includes El Reten (Anta-Fonseca and Plancarte 2001). From that point, the National Forestry Commission (CONAFOR) strengthened its presence in the area and started to pay a certain number of community members in each settlement to prevent and to fight fires. This institutional intervention did not consider previous local arrangements that established those works as part of the *tequio* and, as will be explained later on, has affected local governance for forest protection.



By 2000, due to the political atmosphere in the region and the country, the funding of Maderas del Pueblo was suspended at the same time rumours emerged about their management of economic resources. The relationship with the communal authorities deteriorated up to a point where the NGO had to leave the community. However, local informants acknowledge that the information and capacities the NGO helped to develop within the community still remain (UP, San Miguel, October 15<sup>th</sup>, 2010). Accordingly, many of the key informants in San Antonio and Benito Juarez and current local leaders reported to have been involved with the work of Maderas del Pueblo in the region. People in Chimalapas are perceived by external actors as “*empowered, organized, knowledgeable, and highly sceptical*” (Walker et al. 2007: 12). The community leaders have three empowering experiences that accompany them to participatory spaces: the long-term involvement and negotiation with state institutions and programs, a transforming legal framework fostered by the rise of indigenous politics, and negotiations with national and international NGOs in the region (Walker et al. 2007). Thus, as a consequence of the constant conflicts and conservation priorities in the region, San Miguel authorities and the inhabitants from the eastern region have been involved in multiple negotiation processes through time. This general context has given shape to the local perceptions and attitudes towards external agencies. Consequently, such interactions set the local basis on which El Reten was formally established and determine the strategies local people and external agencies follow for its implementation.

On the other hand, from the perspective of external state and non-governmental institutions, the process leading up to the official recognition of El Reten started with the establishment of communication and collaborative links between representatives of the Oaxacan government offices for environment, protected areas, and forestry (SEMARNAT, CONANP and CONAFOR respectively), together with more punctual participation of a group of NGOs led by the international NGO World Wildlife Fund (WWF). The working strategy of WWF has changed through time (Walker et al. 2007), and while they now work with other NGOs, they make sure to keep the leading role in the processes as well as direct and close but still fragile relationships with communal authorities (Walker et al. 2007). After the

fires of 1998, WWF promoted and funded a series of activities to build capacity, information-sharing structures and common strategies among the different external agencies working in the region. Once a working group, a common goal and a single discourse had been established, negotiations were started with the two Chimalapas communities in order to promote the establishment of Voluntary Conserved Areas (VCAs) through CONANP's certifications.

The proposal for VCAs came at a time when there had been significant changes in government policy and institutional structures for conservation. In 2000, the National Secretariat for Natural Resources (SEMARNAT) underwent structural changes, and the Natural Protected Areas Commission (CONANP) became a deconcentrated institution from SEMARNAT. The recently created CONANP was divided into different regions, and the one corresponding to Oaxaca started to work together with directors from other environmental government agencies (e.g. CONAFOR, SEMARNAT). Environmental authorities in Oaxaca acknowledged widespread local community resistance to the imposition of Biosphere Reserves and thus, enhanced the development of "softer" legal mechanisms for conservation that did not involve a loss of local autonomy and sovereignty over lands and resources. This development in Oaxaca was important in shaping changes in national environmental law and policy in support to civil and community initiatives. The general Law for Ecology and Environmental Protection (LGEEPA) was reformed repeatedly between 1996 and 2008, and through these reforms a mechanism was created for formal "certification" of Voluntarily Conserved Areas (VCA) on private and community conserved lands in priority regions for conservation. Communities or *ejidos* who received a certificate from CONANP for a VCA would increase their eligibility to get environmental services payments from the National Forestry Commission (CONAFOR) and other programs managed by CONANP.

The first Voluntarily Conserved Area (VCA), known as Cerro Azul, in the Chimalapas' region was established in Santa Maria Chimalapa in 2004. Following this certification, negotiations started with San Miguel in order to persuade local people to support the creation of a second VCA that would act as part of a natural

corridor across the Selva Zoque. The area for the proposed VCA was selected through a process of land-use planning developed by WWF and an Oaxacan NGO called Mesofilo. El Reten is located in the mountains, in areas used only for hunting and collection of palm products. Since 2008 San Miguel, as a community, receives Payments for Environmental Services for the conservation of 2,899 has of forested lands within the area of El Reten, and finally, CONANP certified the conservation of El Reten as a VCA in October 2010, covering an area of 15,328 has for a period of thirty years.

### 6.3 Institutional arrangements around El Reten

The establishment and early implementation of El Reten have required the development of a multi-scale governance arrangement that is operating at different levels and management stages (Fig. 6.1). Along with an increased institutional presence in the eastern region, there are a series of projects, subsidies and alternative sources of income that are currently arriving to San Miguel to enhance local support for the management of El Reten. Each of these projects and programmes come with their respective regulations and interact in particular ways with local governance structures.

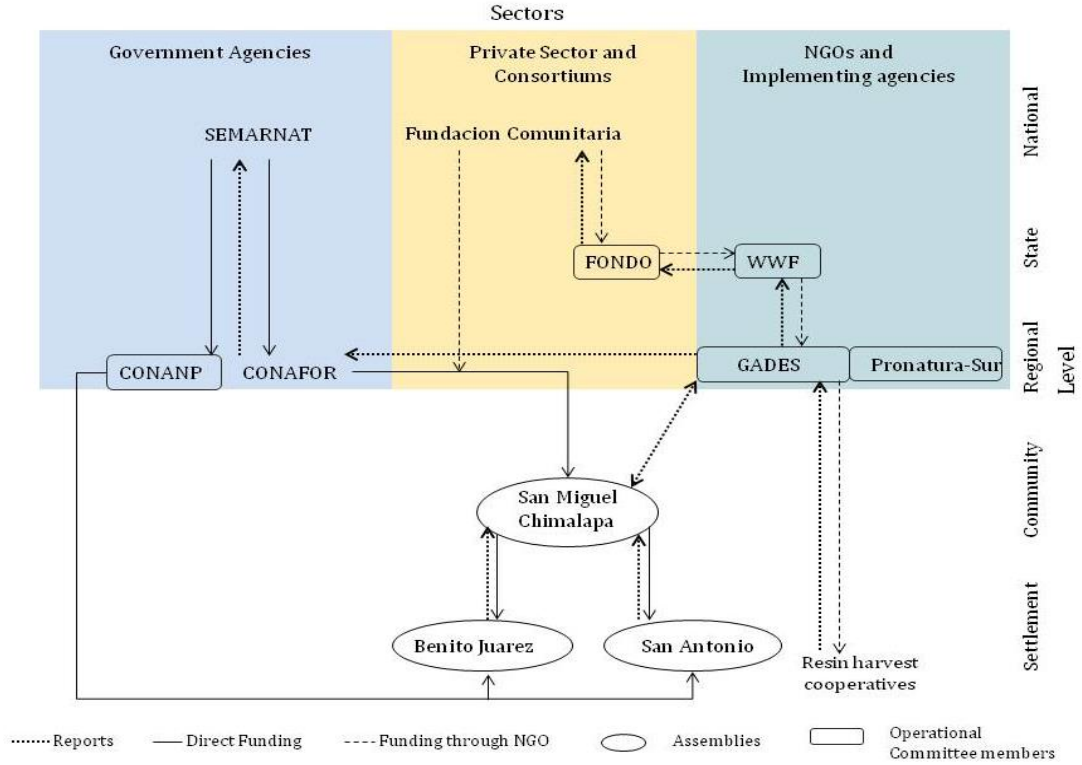


Figure 6.1 Institutional arrangement and scales involved in the governance of El Reten.

The main body promoting the establishment as well as the implementation of El Reten is a Planning and Operational Committee for the Chimalapas Region (operational committee, hereafter) constituted by government agencies and NGOs, WWF among them. This body is similar to the advisory board figure within federal protected areas. The operational committee brings together funding bodies, government agencies, and NGOs related to environment and development in the Chimalapas region for both communities, Santa Maria Chimalapa and San Miguel Chimalapa. The creation of the operational committee resulted out of the constant misunderstandings and frictions generated between government agencies and local communities. It is also a result of the need to develop more consistent, stable and cost-effective processes in the region. The operational committee is first mentioned in the *Master Plan for Development in Chimalapas* of 2004. This document was a product of a regional planning exercise which aimed to facilitate a more coordinated and strategic attention to both communities, Santa Maria and San Miguel. The operational committee members at the time when this research was developed were: the office for the priority region for conservation of Chimalapas of CONANP; the Oaxacan office of the international NGO, the World Wildlife Fund (WWF); a local NGO called Helping Group for Sustainable Development (GADES); the local office of a national NGO called Pronatura-Sur A. C.; one funding body called FONDO from the state of Oaxaca. Even though some of the member agencies of the operational committee are in charge of wider regions, the group structure allowed a somewhat clear distribution of responsibilities and monitoring their own performance, enhancing a certain degree of coordination and transparency.

In this arrangement, CONANP provided the institutional platform and the legal mechanisms for conservation, while WWF and GADES were the institutions most directly involved with the community concerning the implementation of projects related to El Reten. WWF was a source of funding and also the main link to the communal authorities, while GADES was so for the settlements in the eastern region, implementing projects for the development of economic alternatives. The participation of Pronatura Sur consisted in the development of technical studies,

such as biodiversity inventories and land-use planning exercises; nevertheless, their role on the operational committee table was subject to the routes defined by WWF and other funding bodies. Finally, FONDO was the channel through which a conglomerate of private funding bodies, such as Fundacion Comunitaria A.C., Carlos Slim Fund, and the Spanish International Development Agency, participated in the operational committee and monitored the implementation of the economic resources of the funded projects.

Hence, the operational committee represents an innovative and positive approach for institutional coordination, bringing together a diversity of organisational capacities to support conservation objectives in the region. Some of the extensionists within the committee have worked in the region since 1990s, and know the local context, leaders and dynamics, which give them greater insight to define appropriate courses of action. The operational committee offers a space for strategic and focused planning, based on the needs and the experience of its members. In the implementation of strategies, the committee also aims to avoid the scattered and confusing presence of multiple external agencies that often duplicate efforts or compete to achieve either similar or contrasting goals within communities. With clear duties and competences distributed, committee members argue that to allocate responsibilities and to evaluate the performance of the projects in place has become easier (SC2, Juchitan, August 25<sup>th</sup>, 2010). According to some members of the committee, compared to previous conservation efforts in the region, the establishment and coordination of different agencies in the operational committee has enhanced transparency. This was declared to have a positive effect on the relationship with local communities, by having clearer and more strategic means to interact with them (AI, Juchitan, August 25<sup>th</sup>, 2010).

Nevertheless, the operation of the operational committee soon started to face the trade-offs between economic efficiency (maximisation of benefits within the system), environmental effectiveness (to achieve expressed objectives), equity (further explored below), and political legitimacy (decisions are accepted according to who makes them and implements them) of heterogeneous institutional contexts (Agder et al. 2003; Corbera et al. 2007). Through the direct observation of meetings of the operational committee and dynamics in the

implementation (See Appendix II), it was possible to detect that despite the institutional advantages and the benefits of coordinated efforts, its running was far from smooth. The first aspect drawing my attention was that the operational committee lacked of local community representation. Secondly, the composition of the operational committee at the time created alliances and power dynamics that made the active participation of less powerful members (the ones in charge of implementation) subject to the strongest members, namely, CONANP, WWF and FONDO. However, other members of the operational committee such as Pronatura or GADES, in charge of implementation, did not have the same weight in the decision-making process of the operational committee and thus, were subject to the directions of CONANP and WWF, mainly. Thus, even though the establishment of ways of action was declared to be determined by previous participatory planning exercises, the implementation of the VCA depended on the institutional choices influenced by national elites and donors (Ribot et al. 2008) and thus not achieving the equity and legitimacy that VCAs portray as their advantage in front of top-down approaches to conservation.

The Master Plan for Development in Chimalapas and other relevant documents regulating conservation in El Reten (Figure 6.2) define the strategies and actions to be developed by the operational committee.



**Figure 6.2 Chronological account of the regulatory frameworks related to El Reten (Grupo Mesofilo 2004; 2006; 2008; Anon. 2009).**

The Master Plan is the strategic platform over which conservation and development in the region are based and it is also the main element for funding applications for implementation. After this document was generated in 2004, the next exercise consisted in a Land Use Planning for the municipality, where the potential areas for conservation were identified and promoted in front of the communal authorities, the biggest of them being El Reten. Once the process already described for the creation of El Reten had taken place, the certification of El Reten required the area to have a management plan. In order to become certified as a VCA, San Miguel needed a management plan for El Reten, as well as economic resources to develop it. Despite being in a priority region for water capture in the country, San Miguel did not meet the criteria to receive PES due to the agrarian conflicts and to previous unfulfilment of reforestation projects of CONAFOR in the region (CA, San Miguel, November 3<sup>rd</sup>, 2010). Thus, external institutions of the operational committee lobbied for San Miguel to become eligible for Payment for Environmental Services (PES) to generate economic incentives for support and resources for the development of the management plan. In 2008, San Miguel received the first PES for El Reten for the conservation of 2,899 ha of forested lands, included in the area that would be certified later. Part of the resources from PES, were used to pay for technical studies to develop a management plan for El Reten, which was delivered to the community in December of 2008. Additionally to the generation of the management plan, CONAFOR (the agency granting the PES) required the community to develop a Plan for Better Management Practices of the area receiving PES, which was already inside of El Reten. This document contains particular activities to ensure the area would remain standing at least the five year period that the PES programme lasts (MJ, Oaxaca, July 22<sup>nd</sup>, 2010).

Therefore, for planning and implementation concerning El Reten, the reference documents are the Management Plan for El Reten and the Better Management Practices Plan for the area receiving PES within El Reten. The management plan is a very comprehensive yet general document, which defines the general objective of the VCA of El Reten as:

*“To maintain natural ecosystem elements of El Cordon del Reten, in particular species of flora and fauna, through activities that allow the conservation of the current communities of flora in the area and that generate the sustainable development of the eastern region’s inhabitants”.* (Grupo Mesofilo 2008)

The management plan recovers the section of the communal statute that defines that the community should have a zonification, dividing El Reten into different management zones, namely: (1) Use and restoration zone; (2) Conservation and non-timber resource use; (3) Strict conservation; (4) Forestry management and reforestation; (5) Forest Management and (6) Settlements (Figure 6.3) and gives general indications about the activities that are compatible to each zone. However, the management plan does not specify or distribute clear rules, responsibilities and rights to manage each of the zones. Moreover, the document states that management should be adaptive and should provide opportunities for participation, training and benefit-sharing of the local communities, although it does not specify how these opportunities should be available to the local population.

The Better Management Practices Plan, on the other hand, includes the activities that community members should develop in order to make sure that the forested areas receiving PES will remain standing at least during the five years that PES last. The activities suggested by this plan include fire-breaking lines, surveillance walks, and other fire and illegal logging prevention activities, all these measures were already part of the communal statute but were not fully implemented until the PES program started. Hence, in technical terms, both documents are comprehensive of the activities required to conserve the natural resources present in El Reten. Nevertheless, the Management Plan of El Reten and the Better Practices Plan fail to acknowledge the importance of the local and communal assemblies, the *tequio* as well as the land tenure conflict with the consequent contestation for access to natural resources has over the management of El Reten. When asked about these gaps, the CONANP representative said that the document was aimed to be a technical support, not a political one (SC2, Juchitan August 25<sup>th</sup> 2010).



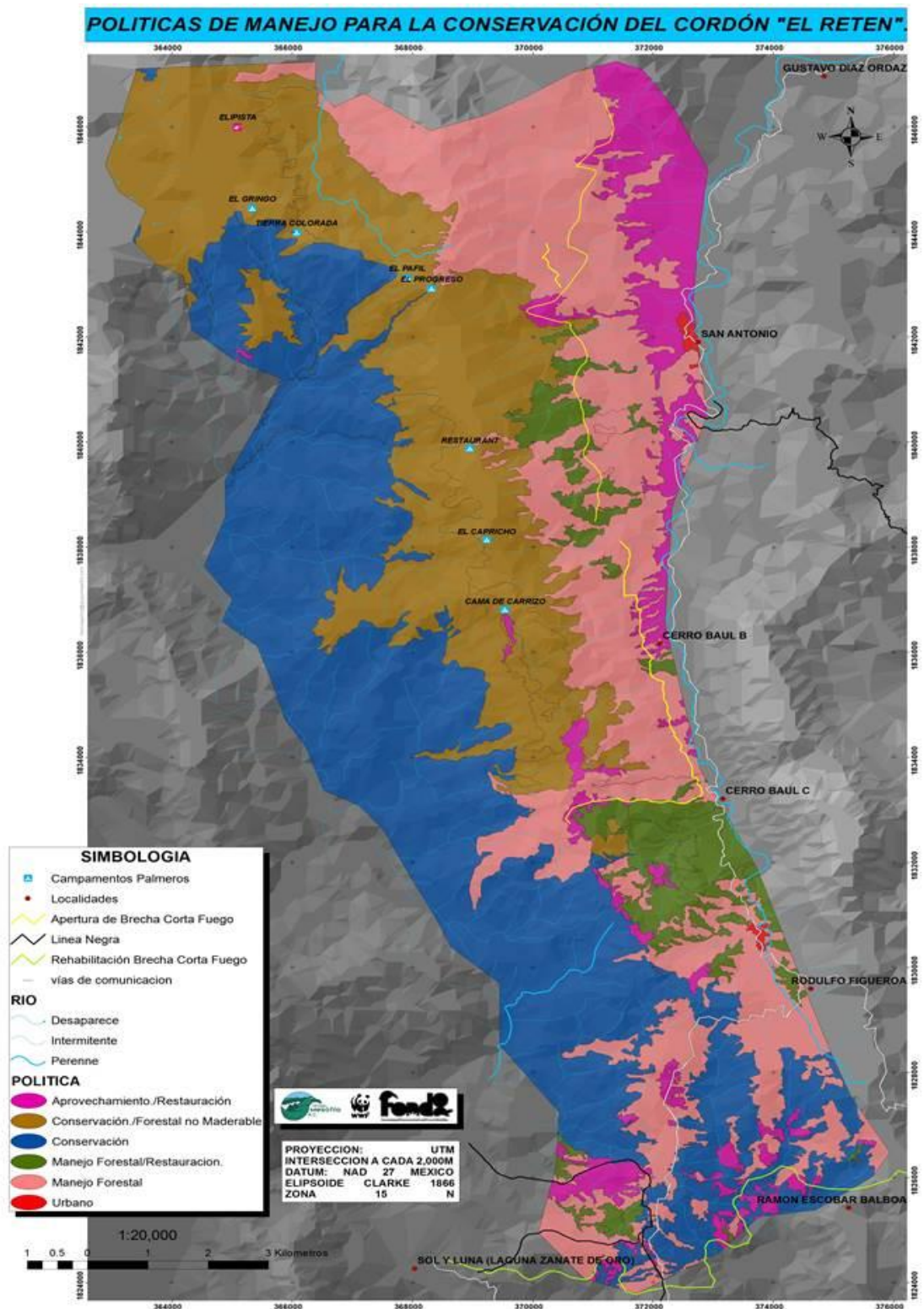


Figure 6.3 Management categories of El Reten: (1) Purple: Use and restoration zone; (2) Brown: Conservation and non-timber resource use; (3) Blue: Strict conservation; (4) Green: Forestry management and reforestation; (5) Pink: Forest Management and (6) Red: Settlements (Grupo Mesofilo et al. 2004).

## **6.4 San Miguel and the governance of El Reten: decision-making, scale and benefit-sharing dilemmas**

### **6.4.1 Decision-making and representation**

During the data collection and coding periods of this research at the settlement level the salient subjects referred to issues on decision-making and representation. These issues are exemplified at different management stages of El Reten. First, the process of establishment and implementation of the VCA shows how the interactions between external institutions and local governance arrangements raised local concerns regarding devolution, participation and representation. Then, the process of implementation of the conservation activities and the funding programmes applied continue to develop in manners that ultimately affect the local sense of involvement and appropriation towards El Reten, as will be explained below.

The proposal to establish a VCA in El Reten came more than ten years after the proposal from San Miguel and Santa Maria Chimalapa to SEMARNAT to establish the Ecological Campesino Reserve (1994). The communities' proposal was developed in response to the initiative to set up a Biosphere Reserve in the region, but as described in Chapter 5, voluntarily conserved areas were not considered a category of protected area at the time. By 2006, there had been significant changes in government policy and institutional structures for conservation. Immediately after the certification of the VCA Cerro Azul in Santa Maria, negotiations started with San Miguel to persuade local people to support the creation of a second VCA that would act as part of a natural corridor across the Zoque Rainforest. The decision to establish a VCA in El Reten was mainly defined by the fact that it represents the largest area with primary vegetation in San Miguel, belonging to the biological corridor called "Selva Zoque" and, consequently, is a Priority Region for Conservation for CONANP. According to local accounts, already since 1990s, when environmental agencies and NGOs promoted the creation of a Biosphere Reserve in the Chimalapas region, the current area of El Reten was included in the proposal. Even though the Biosphere Reserve was never established, when the Ecological Territorial Planning was developed in San Miguel, El Reten was defined, along with other five areas, as potential lands for conservation (Grupo Mesofilo

2006). Due to the size of the area (15,328 has), environmental agencies promoted the certification of El Reten as the first step of a series of conservation related activities within San Miguel as a community. However, even though for members of the operational committee the establishment and implementation of El Reten is just part of a bigger process that involves the whole community, local perceptions differs from this perspective. The fact that there were other four (smaller) areas eligible for certification and only El Reten got to be recognized as a VCA, raised questions locally about who really made the decision about the area to certify. Then, when adjacent settlements to El Reten (San Antonio and Benito Juarez) started to receive different projects to develop alternative sources of income, other non-eastern settlements started to complain openly during the auxiliary secretaries' assembly, since alternative sources of income are also needed in their own settlements. This will be further explored in Chapter 7 on benefit-sharing issues.

According to the view of inhabitants from settlements other than San Antonio and Benito Juarez, the decision to certify only El Reten as a VCA attended to the external agencies' interests more than to local initiatives. Furthermore, in the view of key informants, the decision to establish El Reten as a VCA was only possible through a decision-making process that did not involve the consensus of a general assembly, but that of an auxiliary secretaries' one. This procedure created suspicions amongst local people, who believe that the suspension of the general assemblies and its substitution by the auxiliary secretaries' one was the way for external agencies to achieve the establishment of a Biosphere Reserve, only with a different name, as the following statement of a community member from San Miguel illustrates:

*"We refused the [declaration of the Biosphere Reserve] before, but [the external agencies] turn it... we propose [the Ecological Campesino Reserve and other areas] and the government does another thing... it happens because the agreements are signed in the [auxiliary secretaries' assembly, not in the general one]" (LA, La Cristalina, March, 17th2011).*

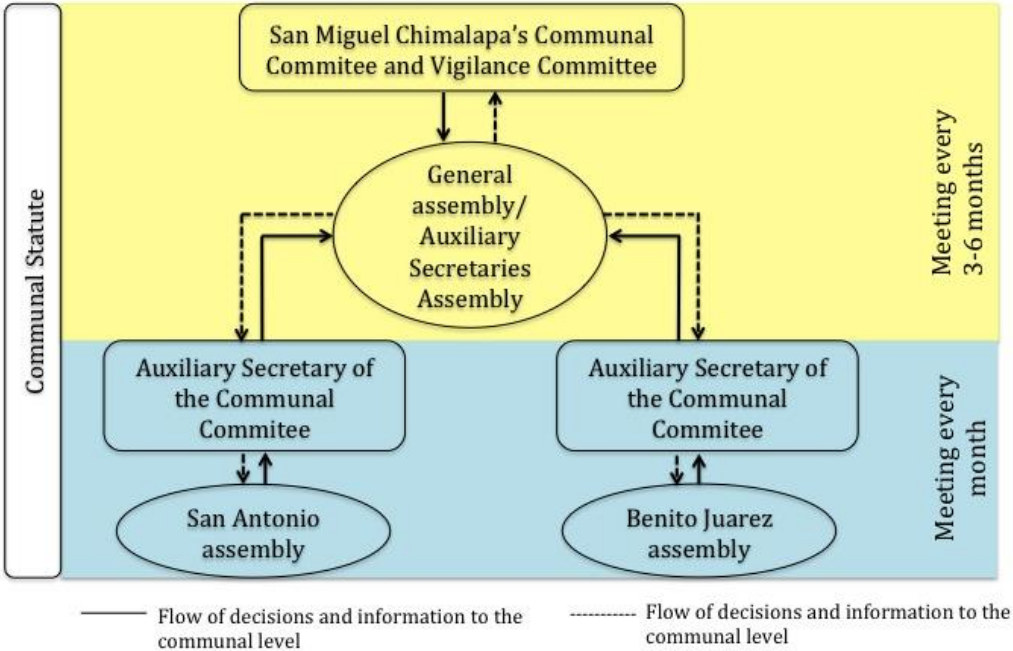
Local accounts state that the process of negotiation to achieve the formal recognition of El Reten involved many workshops and meetings (RS, San Miguel, October 22<sup>nd</sup>, 2010). Representatives of CONANP, CONAFOR, and the NGOs WWF and Grupo Mesofilo held these meetings in the eastern settlements of San Antonio and Benito Juarez, where El Reten is located. However, according to local people, in spite of the amount of workshops developed in the region for consultation, people did not feel like active participants of the decision-making regarding the establishment of the VCA (SC, San Miguel December 10<sup>th</sup>, 2010). The cause for this lack of appropriation, according to informants, was the fact that the communal committee did not call to a general assembly for the final decision about the certification. The auxiliary secretaries' assembly formally agreed for El Reten to be certified as a VCA and San Miguel received a certificate by CONANP in 2010, despite this process was illegal for not calling to a general assembly to establish the agreement. Thus, the formal procedures for the establishment of El Reten were fulfilled through a process that was locally perceived as spurious by setting a communal agreement through the auxiliary secretaries' assembly. Furthermore, the process was illegal and lacked of transparency and legitimacy to local inhabitants since it did not respect the local uses and customs. Besides the unrest that this decision-making process created among local people, there is the fact that there are not hard copies of the management plan or the zoning maps available in the local settlements. Hence, since most of the population in San Miguel was not fully informed about the content of the management plan, and people from the eastern settlements doubt about the decision-making process the implementation of the VCA is often charged of tension, as will be explored below. These omissions to the federal and customary law saved time and energy at the expense of legitimacy, affecting the likelihood of collective action for environmental protection (Ostrom and Cox 2010).

The implementation of an approach that has been conceived as community-led conservation, in the case of El Reten, depends on the practitioner's interpretation of what a participatory process is and how it should be implemented. VCAs just as other protected areas categories omit local heterogeneity in order to give way to homogenized dominant discourses and management practices legitimised by

validation processes that are portrayed as community-driven (Sachs 2010). This became evident during the data collection period, when documenting the decision-making process for operation of El Reten. The institutional interaction for decision-making process in El Reten starts with the definition of agendas by the operational committee. Once the different agencies exchange, negotiate and set their objectives and financial capacities, they coordinate together the aims, funding strategies and means of action. This may require further coordination with other agencies to fund, operate and deliver conservation and development programs in the region. For example, during the first meeting of the operational committee I attended, the members of the operational committee identified the actions needed to give continuity to the conservation process in San Miguel, beyond El Reten. Pronatura Sur presented, among other points, a proposal to develop field visits to determine the location of specific land uses and to identify areas eligible areas for conservation and restoration in different areas of San Miguel. The activities proposed served a bigger purpose in order to set up a conserved areas corridor throughout the entire community. At that moment, the two main sources of funding for conservation activities in the region were a project of WWF and Carlos Slim Fund as well as the Payments for Environmental Services (PES) from CONAFOR. Nevertheless, the continuity of the PES was uncertain due to the failure of the previous communal committee to provide economic and activities' reports to CONAFOR. Hence, members of the operational committee agreed that, in order to keep the process in San Miguel, CONANP, WWF and the new communal committee would lobby with CONAFOR's representative in Oaxaca for San Miguel to continue receiving PES. At the same time, the new communal committee would have to agree to make a more transparent use of the PES and use them for the activities already established in the management plan and the better management practices plan.

Once the strategies had been defined and the roles distributed, the operational committee phoned the *comisariado* of San Miguel and asked him to join the meeting. Once he and his secretary arrived, the representatives of WWF and GADES informed them about the strategies to follow and the way PES funds should be used. The structure of the meeting between the *comisariado* and the

operational committee made it difficult to discern operational regulations from suggestions from the operational committee. The *comisariado*, recently arrived to the position, attended and expressed his willingness to go along with the plans proposed by the operational committee with no further discussion or changes. Nowadays, all decisions and projects promoted by external agencies need to be validated by the assembly of the communities involved. Thus, if the *comisariado* gives his approval, the topic of the proposal is added to the agenda of the next auxiliary secretaries' assembly for discussion and validation. As previously explained, communal committees have stopped calling general the assembly regularly to keep flexible decision-making processes without the risk of violence. This is relevant for El Reten, since the general assembly has not taken place on a regular basis for the main decisions related to it, creating reactions amongst local people. Still, decision-making in San Miguel adds another stage to the process since before auxiliary secretaries can validate anything, they should report back to their settlements and get their approval. Figure 6.4 illustrates the different stages required for the flow of information and decision-making processes in San Miguel; it points out at the frequency of the different assemblies that make deliberation in the community a long process.



**Figure 6.4 Decision-making process and time-frameworks in San Miguel.**

Even though the task of auxiliary secretaries is to represent the position of their own local assembly, different secretaries have different priorities and capacities to stand for their points during auxiliary secretaries' assemblies. There are also difficulties emerging from the communication process due to the different interpretations that auxiliary secretaries make out of the information received during the assemblies, and the information they actually transmit to their own settlements' assemblies. These obstacles can extend the decision-making process and have immediate effects on the participatory process of El Reten as well as a negative effect on natural resource management decisions. As will be further explained the communication process for decision-making and the lack of deliberation capacities in San Miguel make informed, equitable and legitimate decision-making regarding the management of El Reten difficult.

Therefore, during the meeting between the operational committee and the recently elected communal committee, it was agreed that the budget expenditure plan for the PES would be presented to the auxiliary secretaries' assembly in December 2010, five months after the meeting. The first auxiliary secretaries' assembly I attended was on December 10<sup>th</sup>, 2010. This was the third assembly in San Miguel since the new communal committee was elected. The consultancy GADES was, at the time, the main link between the community and the operational committee on the one hand, and between the eastern settlements and the communal committee as well, since it was also in charge of the operation and technical advice for the activities developed in El Reten. During the assembly of December, among other points, auxiliary secretaries were informed about the distribution of the money from PES that was discussed five months before between the operational committee and the *comisariado*. The information was provided to the representative of the different settlements of San Miguel at a time when the works and investments had already been started. Still, after this meeting, auxiliary secretaries had to take the information back to their settlements, report and get feedback from them. Due to the distance between settlements, the communal committee's agenda and the scheduling of the assemblies, the next opportunity for discussion happened in early March 2011. Thus, the members of the community were able to provide feedback on this

decision only until the auxiliary secretaries' assembly occurred nine months after the operational committee meeting, when the budget plan had already been applied.

Despite of the mismatch in times for discussion and decision-making, people from San Antonio, Benito Juarez and Sol y Luna met previous to the auxiliary secretaries' assembly, in a parish outside San Miguel. The aim was to establish a common front and to assign a commission group that would defend their standing points regarding the expenditure of the PES and also about the land tenure conflict. This group would travel to San Miguel along with the auxiliary secretaries to ask the communal committee to assign more funding from PES to the eastern region and to ask for more support from the communal authorities to the land tenure conflict. The day of the assembly on March 4<sup>th</sup>, 2011, people from the eastern region arrived to the meeting in a group of approximately 15 people. From the beginning of the assembly, members of this group constantly made the claim for the resources from PES to be mainly invested in the area of El Reten (i.e., San Antonio, Benito Juarez and Sol y Luna). Nevertheless, the agenda of that meeting was not to discuss a plan that was already being applied. Instead, the operational committee was introducing a new program of Matching Funds, by *Fundacion Comunitaria* that was a similar framework but under different operational rules. Thus, every time members of the commission started to talk about the way resources from the PES were being managed, the representative from GADES reminded the attendants that the operational rules of PES established where the resources should be invested. The representative from GADES explained briefly how the decision to distribute the PES was made when the auxiliary secretaries' assembly decided to support the technical assistance, the restoration and conservation in Cerro Prieto (more than a year before), and argued that there was nothing to discuss. In order to go back to his agenda, he called back and argued that if the discussion continued they would leave, and underlined:

*... "this is why, if you agree with the comisariado to sign the agreement, we can go ahead; but if this is going to be a fight, Fundacion Comunitaria will not feed conflicts, this is a proposal we bring. It is not*



*an imposition; it is an investment that they are doing” (PR, San Miguel, March 4<sup>th</sup>, 2011).*

The meeting continued in two different directions, with members from the eastern settlements raising their opposition to the way PES money was being spent and the way that decision was made on the one hand; while on the other, the extensionist insisted in persuading them to accede and to secure a new source of funding, in which GADES would also be the consultancy in charge.

Out of insistence of the commission, the representative of GADES explained that the operational committee modified the budget from the original Better Management Practices Plan in order for the *comisariado* to be able to report to CONAFOR, so PES could keep arriving to the community. For the rest, he argued that everything was a proposal and they were there to discuss it, but once the agreement was achieved there were obligations that would affect everybody, even those who were not present. When asked to accede to the new program, people from the eastern region insisted in their claim to be more involved in the decisions for the distribution of the benefits, as the following statement shows:

*“It is not true that we come to a meeting in which all of us are going to decide how the resources will be managed. We come... and everything is already there... that is why there are always problems... - either we take it or we leave it in peace -... if we decided among us it would be something different. We as auxiliary secretaries have seen that this is not about an agreement, but [instead] we are told what has to be done” (SR, San Miguel, March 4<sup>th</sup>, 2011).*

The representative of GADES argued that the activities and assignation of resources were based on the operational rules of the programs and according to the Master Plan. He also reminded the assembly that all these subjects had been already discussed during the workshops previous to the establishment of El Reten (at least 3 years before). However, an auxiliary secretary suggested that before approving any new program, such as the one from *Fundacion Comunitaria*, workshops should be held in each settlement in which mechanics and rules of the

program could be clearly explained to everybody. In this way, the decision would not be rushed, he added:

*“The problems with the conservation are there because there has not been enough information, or because there were people who did not understand everything from the beginning, which is why there are so many struggles”* (RS, San Miguel, March 4<sup>th</sup>, 2011).

Despite this suggestion, the representative of GADES emphasized the fact that if the decision was not taken that day, the call for projects from the funding agency would be closed by the time the workshops in each settlement would be finished. However, he assured that there would be sets of rules and new Better Practices Plans within a structure that would be discussed later:

*“In the first place, what you have to do is to authorise your comisariado so that he can sign the agreement [for the project]... Then, we can elaborate the Better Practices Plans, instead of discussing endlessly how the resources will be distributed...There is already a structure and the comisariado will make you the proposal”*. (PR, San Miguel, March 4<sup>th</sup>, 2011).

In the face of the pressure and with a strong emphasis on the new sources of funding that would arrive to the community, auxiliary secretaries voted and accepted, enabling the *comisariado* to sign the agreement for the new project. At the end of the four-hours long meeting, everybody was so tired that the PES budget was not further discussed.

During the meetings mentioned above, it was possible for me to observe that first the operational committee determines the agenda of the auxiliary secretaries' assembly related to El Reten. Second, that the participatory aspect of the process is largely reduced to a validation, which is displayed to comply with legal regulations, and third, that there is a total mismatch between the institutional times for applications for funding and the consultation process required for this consultation to be regarded as legitimate. Furthermore, during my time in the community and in the meetings I attended, I could not find a single case where

proposals were posed, discussed and then adapted to the feedback provided by the members of the assembly. Instead, the processes were focused more on validation of pre-designed plans to apply for funding within institutional timeframes that were presented to strong and actively involved people in a “take it or leave it” frame (Rahnema 2010). Hence, the space and time available for discussion was scarce, increasing local tension and mistrust. This emphasised a frequent situation within community conservation in which brokers accumulate decision-making power by rushing processes in order to get access to institutional sources of funding (Corbera et al. 2007). This often means that there is no process that allows for a common understanding of the regulations and commitments involved until communities are already engaged, undermining legitimacy (Adger et al. 2003). The latter is also related to the extension of the state to places where it could not reach before through conservation projects, regulations and practices (Durand et al. 2014). This mismatch between institutional times and community decision-making process undermines the local ability to engage in an informed, active and meaningful manner through collective action (Ostrom 2002).

Thus the current decision-making process in El Reten, driven by the operational committee, has increased coordination and joint management efforts for the VCA. This has implied a re-consideration of the politics in place and the inclusion of wider networks for natural resources management (Pimbert and Pretty 1995). It also saves time and energy in discussion with locals to achieve agreements more effectively, fulfilling institutional requirements on time. This, ultimately, makes funding available for the application of management plans and alternative income projects to be developed in the settlements around El Reten and in the central region of San Miguel where the communal committee is located. Nevertheless, the constitution of a single operational committee diminishes the potential for dialogue and negotiation between external agencies and community members. The local sense of involvement in the design of the proposals and the decision-making process is also diminished. Hence, by working as a single block with pre-defined strategies and actions, the operational committee has increased efficiency in local-decision making processes regarding El Reten but at the expense of deliberation and legitimacy of the plans and programs being applied. In this case,

greater pluralism means that rights and responsibilities are constantly negotiated (Fritzen 2007). From the communal structure's perspective, this example highlights on the one hand, the need for local capacities to develop decision-making processes capable to be representative and allow for deliberation but with accurate facilitation since often in assemblies discussions go around in circles with little achievement. Furthermore, it requires communal authorities to truly be representative of their community instead of automatically conforming to the funding requirements, perpetuating the client-patron relationships in the region.

On the other hand, in the eastern settlements, local settlement assemblies were concerned about the implementation of conservation activities related to forest fires prevention. Since the fires of 1998, CONAFOR installed an office in the nearby municipality of Zanatepec; this office has its own workers who belong to a syndicate. Also, during the three driest months of the year CONAFOR pays a group of six people from each settlement, San Antonio and Benito Juarez to patrol the mountains around El Reten in order to prevent forest fires and illegal logging. Even though these arrangements provided temporary sources of paid work, they were established without consideration of the local structures of *tequio* and, consequently, enhanced more division within the settlements. According to local accounts, settlements have been divided between those who defend that the patrolling and forest prevention should keep being part of the duties of every community member, and those who receive an economic incentive to do it and who now refuse to go and control fires if there is no payment involved. In both cases, community members disagree with the fact that CONAFOR prefers to pay external people who have no further incentive to control fires but who are protected by a syndicate, than paying local people to do the work. Once more, this decision was made by CONAFOR and delivered to the eastern settlements without any further discussion. Thus, even though the operational committee represents coordination, planning and implementation advantages, the delivery style used implies that the communal authorities and GADES are the main interlocutors between the community and the operational committee. This limits the interaction of external agencies with the community to a minimum, which might be time and energy-efficient but limits the input that community members can

provide to the implementation of programs. These situations only increase the questions amongst community members about the legitimacy of the operational committee and its decisions.

The situations described above illustrate how externally designed programs attend bureaucratic times and requirements defined by administrative agencies with little or no consideration of local community's dynamics. Consequently, external agencies in the operational committee promote decision-making in local assemblies within institutional times and regulations providing only the information that will allow them to reach consensus, avoiding further deliberation. In the rush of getting agreements the agencies often omit important details or information about the projects or programs being discussed, such as operation rules; moreover, the time and spaces for deliberation and discussion are also limited. Notwithstanding the fact that discussions within assemblies are usually time and energy consuming and easily politicized, the deliberation process is important for community members to feel involved in the decision-making process, regardless of the efficiency of the discussion. Thus, even though management decisions require more effective decision-making process about the implementation of externally designed programs in the community, a balance is required for external agencies to really devolve power and become transparent and accountable to local communities. The starting point would be to enhance really informed decision-making instead of avoiding contentious subjects to reach agreements faster. Even when processes are called participatory, in practice, decision-making is mainly limited to the operational committee and funding bodies deciding unanimously. This is consistent with Corbera et al. (2007) who argue that equity and legitimacy are compromised when decision-making powers are accumulated by the brokers. Consequently, the viability and sustainability of the conservation and natural resource management efforts are not consistent with the principles that the common pool resource theory defines to prevent the tragedy of the commons and the "prisoner's dilemma" prevents any meaningful collective action (Becker and Ostrom 1995; Ostrom 2002). These practices have no relation to the principles of Indigenous Community Conserved Areas (Borrini-Feyerabend et al. 2004). Moreover, the implications of the current arrangements

for decision-making processes are reflected in the management of El Reten, more emphatically in the distribution of benefits and responsibilities, as will be explored below.

#### **6.4.2 Economic benefits: Scale and sharing dilemmas**

The origins of economic resources derived from El Reten are another relevant aspect to its current management and influence directly the governance arrangement of the VCA. The process of certification of El Reten has been accompanied not only by new institutional arrangements but also by a series of economic incentives and programs aimed to persuade local engagement and participation, this a common practice in Mexico to face community opposition (Durand et al. 2014). These mechanisms are mainly designed at national level but adapted and negotiated at the regional and local levels, according to the funding agreements. They are generally managed by the external agencies, through the members of the operational committee, GADES in this case, who is the consultancy in charge of monitoring the compliance and accountability of the projects. The four main funding programs operating in El Reten at the time of my stay in the community were:

- (1) The Temporary Employment Program (PET) and the Program for Conservation through Development (PROCOCODES), from CONANP.
- (2) Payments for Environmental Services, from CONAFOR.
- (3) Matching Funds, from CONAFOR and other funding bodies through which a project to develop alternative sources of income in San Antonio and Benito Juarez through pine-resin harvest was developed.

##### **6.4.2.1 Temporary Employment Program and Program for Conservation and Development (PET and PROCOCODES)**

In El Reten, CONANP applied mechanisms like the Temporary Employment Program (PET) and PROCOCODES that fund the implementation strategies for fire prevention and control. PET is designed to provide a source of income when demand of unqualified workforce is lower in districts classified as extremely poor. The instrument is used by different governmental entities, but in the case of

CONANP it is applied to support conservation related activities like forest fire prevention and patrolling around protected areas. According to operational rules, the economic support provided by PET is equivalent to the 99% of the minimum wage \$59.08 pesos (~£2.8 GBP) per day, for up to 88 days per year, per person (SAT 2012). Up to 2010, CONANP contracted through PET a brigade of ten people in San Antonio to develop monitoring activities within the area of El Reten, prevention of forest fires, logging and hunting. The activities were mainly surveillance walks through different areas of El Reten. The brigade was divided into two teams that walked the VCA twice per week, located the points they visited with GPS and reported back to CONANP. The salaries provided by these activities were \$150 pesos (~£7 GBP) per day during up to 90 days, which totals \$13,500 pesos (~£618 GBP) per member of the brigade per year. In 2010, CONANP withdrew the funding arguing that the community could, from then on, fund those activities through PES.

On the other hand, PROCODES aims to promote ecosystem conservation through local population's involvement in land management; natural resources appropriation, management and protection; as well as the economic valuation of ecosystem's services. It does so through the generation of alternative productive activities in order to improve the livelihoods of the people living around protected areas and other forms of conservation. PROCODES supports economically the development of technical studies, community projects and training courses related to conservation within priority areas. The amount of resources and the kind of projects supported include a wide range of features, but in the case of community projects the program requires that applicants are able to contribute 20% of the total cost of the project. The maximum limit for funding through PROCODES is \$2,100,000 pesos (~£99,590 GBP). Although the amount of money invested in El Reten through PROCODES, local accounts state that PROCODES funded the material to build firewood saving stoves, orchards in household backyards and feasibility studies for an ecotourism project and an Environmental Management Unit (ES, San Miguel, November 6<sup>th</sup>, 2010). The feasibility studies were developed by consultancies hired by CONANP, but the results had not been

communicated to the community or made available for consultation, and have not been implemented to date.

#### **6.4.2.2 Payments for Environmental Services**

Since 2003 the National Institute of Ecology designed the PES program which has been implemented by CONAFOR since then. The program has had an iterative learning process. Nowadays, it has clear eligibility criteria on a points-based system according to the type of ecosystem, the forest cover, the deforestation risk, economic, marginalisation and water capture parameters (Rolon-Sanchez 2009). PES are distributed on a yearly basis and the price per hectare is defined according to the type of ecosystem and the surface under protection. The PES scheme pays for a maximum area of 3,000 has of a designated area for a maximum a five years period with possibility of renewal. Also, since 2003, programs of economic incentives and productive alternatives in communal lands have enhanced official recognition of VCAs in Mexico. Since CONANP lacks enough resources to provide economic incentives for conservation and to support the implementation of VCAs, institutional links and operational alliances have been developed with other government agencies, NGOs and private funding bodies. Thus, although PES, from CONAFOR, and VCAs, certified by CONANP, do not have any formal link, within priority regions for conservation, CONANP and CONAFOR work together to offer the program of PES. The implementation of PES is similar to subsidies that provide alternative sources of income to people who are engaged into conservation schemes. PES programs last for five years and involve a commitment from the community to engage into activities that help to conserve forest cover in areas that are important for water-capture or biodiversity. CONAFOR expects that by the end of the five-year period, communities and local networks will have developed capacities and agreements in order for economic resources to continue representing an incentive for locals to prevent land-use change in the long term.

The PES scheme pays for a maximum area of 3,000 Ha of a designated area. Thus, out of the 15,328.54 ha certified in El Reten, San Miguel as a whole community receives annual PES equivalent to \$1,200,000 pesos (~£57,047 GBP) for a portion of 2899.00 ha of that area. Despite the fact that PES currently represent the



biggest source of economic resources derived from El Reten in San Miguel, the benefits do not appear as evident to community members. According to the survey carried out at household level in the settlements of San Antonio and Benito Juarez, respondents reported that they did not receive economic benefits from PES. This probably reflects the fact that if even if those \$1,200,000 pesos were divided among the 1,584 households of San Miguel each year (INEGI 2010) the amount would not be very significant (~£34 GBP per household per year). Furthermore, the distribution of these resources has highlighted some of the key issues in community-conserved areas and benefit-sharing dilemmas in conservation, as will be explained below.

#### **6.4.2.3 Matching Funds**

Additionally to the programs mentioned above, over the last eleven years, CONAFOR promotes a scheme of matching funds, which aims to give continuity and to consolidate PES. Thus, CONAFOR contributes with up to 50% of the investment and encourages private companies or “environmental services users” to match the other 50% to fund projects that contribute to the conservation of river streams, biological corridors or priority areas (CONAFOR 2012). In the eastern region of San Miguel, the matching funds scheme and other funding bodies have allowed the implementation of a resin harvest project with the investment of *Fundacion Comunitaria*. During the data collection period for this research, the resin harvest started to represent an alternative source of income for local livelihoods. As will be detailed in Chapter 7, this project is more recognised than PES by local people, despite (or because) it has required more time, resources and organisational processes. It is already delivering interesting outcomes in terms of economic alternatives, local appropriation and changes in the local perception towards the forest.

## **6.5 Closing section: Multi-scalar governance arrangements and local decision-making**

Chapter 6 has elaborated on the governance structures in San Miguel that have been relevant to the establishment of the VCA El Reten. The chapter has also explored the process leading to the establishment of El Reten as a VCA as well as the multiplicity of actors, scales and funding programmes involved in it. The local institutional context in which El Reten is being implemented has been explained as well as the practical implications emerging from the early interactions of local and external governance structures. The implementation of El Reten illustrate practical issues of multi-scalar governance arrangements for conservation in terms of access, the definition of right-holders and resource boundaries as well as decision-making for joint use, representation, monitoring, sanctions, conflict resolution and legal recognition (Ostrom 1990, referenced by Abrams *et al.* 2003). The regulations for natural resource management in El Reten lack of coordination amongst those involved, distribution of responsibilities and trust amongst actors, as well as clear means for enforcement and sanctioning (Ostrom 2002). Even though this condition was previous to the establishment of El Reten, the expectation of the operational committee that by creating economic alternatives local dynamics will turn to environmental sustainability is not realistic. Furthermore, by avoiding political sensitive issues such as general assembly management and land tenure conflicts, external agencies neglect the incentive systems for natural resource overexploitation. According to Fischer *et al.* (2007) interventions at the operational levels that ignore the system of incentives underneath, such as conflicting or contradictory rules, help to consolidate the pattern of over-exploitation of natural resources rather than providing a solution.

In the Chimalapas region participation “has recently come under fire for being co-opted and mainstreamed by governmental and nongovernmental agencies, part of a new development “tyranny that betrays the concept's populist roots” (Walker *et al.* 2007). People in Chimalapas are “*empowered, organized, knowledgeable, and highly sceptical*” (Walker *et al.* 2007: 12). Communal structures have not only resisted the imposition of external development and conservation projects, but developed their own ones in order not to lose local control over decision-making

and natural resources management. With the establishment of El Reten and the arrival of PES and other conservation-related projects, there is a trade-off of powers between local governance structures and the externally designed ones. This is consistent with the critiques to the expansion of the state through conservation projects (Li 2002; Durand et al. 2014). These power interactions are asymmetric and the state is a strong agent (Adams and Hutton 2007; Adger et al. 2005; Lebel et al. 2006; Rhodes 1997). However, as Kenway (1990) pointed out, power is not located in a central apparatus; instead, there is a relationship between all the points of the social totality. The community leaders have three empowering experiences that accompany them to participatory spaces: the long-term involvement and negotiation with state institutions and programs, a transforming legal framework fostered by the rise of indigenous politics, and negotiations with national and international NGOs in the region (Walker et al. 2007). This has allowed them to contest the imposition of external regulations and discourses in the past (Doane 2007). Yet, the implementation of the VCA depends on the institutional choices influenced by national elites and donors (Ribot et al. 2008) and, thus, is not achieving the equity and legitimacy that VCAs portray as their advantage in comparison to top-down approaches to conservation. (Adger et al. 2003)

The multi-scalar nature of the El Reten as a VCA, with a coordinated group of external agencies illustrates a form of elite capture by external agencies (Platteau and Gaspart 2003). The decision-making processes illustrated in this chapter show that the implementation of the VCA omit local heterogeneity in order to give way to homogenized dominant discourses and management practices legitimised by validation processes that are portrayed as community-driven (Sachs 2010). In these dynamics, there is not a retreat from the state but a re-definition of its role, while NGOs become the link between the state and the community, legitimising its discourses (Arts 2004; Rahnema 2010). Thus, even when processes are called participatory and even community-driven, in practice, decision-making is mainly limited to the operational committee and funding bodies deciding unanimously. This is consistent with Corbera et al. (2007) who argue that equity and legitimacy are compromised when decision-making powers are accumulated by the brokers.

Consequently, the viability and sustainability of the conservation and natural resource management efforts are not consistent with the principles that the common pool resource theory defines in order to avoid the tragedy of the commons and the “prisoner’s dilemma” prevents any meaningful collective action (Becker and Ostrom 1995; Ostrom 2002). These practices have no relation to the principles of Indigenous Community Conserved Areas (Borrini-Feyerabend et al. 2004). Moreover, the implications of the current arrangements for decision-making processes are reflected in the management of El Reten, more emphatically in the distribution of benefits and responsibilities, as will be explored below.

This chapter has explored the issues emerged from the establishment and implementation of a VCA through a multi-scalar governance arrangement. The historical context for the evolution of relationships between the local governance structures and the operational committee for the Chimalapas around El Reten has been detailed as well. The early implementation of El Reten illustrates the challenges of that ‘community-driven’ conservation projects have in terms of attracting external actors with their funds and time frameworks and the implication for decision-making and legitimacy. This chapter has mapped the multi-scalar institutional arrangement in place for the operation of El Reten and regulatory frameworks that have been developed through time. Finally, the practical interactions between these formal, externally designed arrangements and the local governance structures have been exemplified through the data gathered during meetings, auxiliary secretaries’ assemblies, local settlements’ assemblies and unstructured interviews with local informants. These interactions emphasise practical issues of decision-making, particularly regarding representation and legitimacy of the processes (Adger et al. 2003) since the decision-making process around El Reten lacks the principles that have been identified to enhance sustainability and trust amongst different actors. The last chapter of this dissertation moves on to analyse the arrangements for benefit-sharing, accountability and the implications for the overall sustainability of the VCA.

## **Chapter 7: Multi-scalar governance in practice: fuelling the tragedy of the commons**

So far, this dissertation has provided different examples of the early implementation of the VCA in El Reten along with the issues emerged in terms of multi-scalar governance arrangements, decision-making and the interactions between local and external governance structures. Chapter 7 analyses the benefit-sharing, accountability and self-regulatory issues. Even though technical and organisational support for the operation of El Reten are indeed important for the community to continue receiving the benefits of formal conservation and the market economy, local claims for self-organisation and self-regulation require further attention. Furthermore, the final data chapter of this dissertation will explore if the devolution of a '*bundle of rights*' (Ribot and Peluso 2003) implied the VCA mechanism is enough to guarantee the legitimacy, equity and sustainability of this conservation governance arrangement (Corbera et al. 2007; McDermott and Schreckenberg 2009) Features related to accountability, transparency and self-regulatory structures will illustrate how the implementation of this '*community-driven*' conservation project is failing to prevent the elite capture (Fritzen 2007; Platteau and Gaspart 2003). The early operation of El Reten and the implementation of projects to generate alternative sources of income require the coordination of the different actors involved in the multi-scalar governance arrangement at different stages. In this VCA, promoted as a community-led initiative, the inter-institutional operational committee keeps discretionary powers while neglecting local and regional power interactions. Furthermore, this arrangement is developing a "co-production" of rules (Ostrom 1996) that do not fit local dynamics. The issues encountered in this multi-scalar conservation practice provide illustrations regarding the importance to recover and to develop local capacities for self-organisation and regulation if these conservation approaches really aim to become community-led and self-sustainable.

## **7.1 Scale and benefit-sharing dilemmas**

The decision-making processes around El Reten that were explained previously, cause frictions between communal structures and external agencies, especially about benefit-sharing issues. During the negotiation process for the establishment of El Reten, external institutions put a strong emphasis on financial incentives in the form of future jobs and economic alternatives to gain local support for the certification of the VCA (RS, San Miguel, October 22<sup>nd</sup>, 2010). This is a common practice amongst conservation practitioners in order to face resistance and to achieve consensus, especially in sceptical localities like those in Chimalapas (Durand et al. 2014; Walker et al. 2007). The fact that a certified VCA would make San Miguel eligible for payments for environmental services (PES) was a powerful incentive for local people to give their support (LA, San Miguel, March, 17<sup>th</sup>, 2011). In addition, the VCA's management would integrate conservation and sustainable use, prioritising the conservation of ecosystems and environmental services, while allowing commercial use for the benefit of local inhabitants in the eastern region of San Miguel (SB, San Miguel, December 11<sup>th</sup>, 2010). During unstructured interviews, informants mentioned projects such as a water bottling plant; an ecotourism project; an environmental management unit (wildlife breeding centre); avocado plantations; horticulture for women as well as resin and palm harvest projects (SC2, DC, RS, LA, SB, MA, UP, ES, GM2, ST, PR). At the local scale, the economic possibilities that the development of those projects could represent for local livelihoods worked as incentives for the assemblies of San Antonio and Benito Juarez to reach consensus and agreement for the establishment of El Reten (RS, San Miguel, October 22<sup>nd</sup> 2010). However the regulatory conditions and time-frames of these projects for alternative income were not specified. For example, PES are delivered for San Miguel as a community, and according to local accounts this was not indicated clearly enough during the negotiation process. Consequently, the distribution of responsibilities and benefits amongst different community members and the struggles about what corresponds to particular settlements and what to San Miguel as a community is one of the current sources of controversy in the operation of El Reten.

As has been described before, once the agreement to establish El Reten was reached in San Antonio and Benito Juarez, the final consultation was taken for validation to the auxiliary secretaries' assembly, where most of the people involved in previous negotiations were not present. Thus, even though the negotiation took place with the two settlements surrounding El Reten, the final decision was made in the centre of the community, enhancing mistrust towards the external agencies involved and a lack of legitimacy in the process amongst people from San Antonio and Benito Juarez. Other non-eastern settlements also felt neglected for not being considered as options to establish a VCA. In conversations with *comuneros* about the reasons for external agencies to discuss with local settlements' members and make the official decisions in the centre, their perspective was that external agencies use the auxiliary secretaries' assembly for validation to avoid the resistance of the general assembly (LA, San Miguel, March, 17<sup>th</sup>, 2011). According to some informants, the plans and strategies validated reflect only the interests promoted by the external agencies who are also getting economic benefits from the funds derived from the VCA (SB, SC, San Miguel, December 10-11<sup>th</sup>, 2010). In this sense, some of the community members expressed their disagreement arguing that external agencies were obtaining economic benefits from the communal efforts, but neglecting local needs and governance structures, as the following statement illustrates:

*"[External agencies] forget their role and put the community as a third party; they do not pay attention to the community structure. What they try to do is to channel resources to their own interests; then, they get all the recognition while the community is restricted"* (SB, San Miguel, December 11<sup>th</sup>, 2011).

The operational committee has linked all the economic mechanisms mentioned above to El Reten in order to provide sources of economic resources for operation and to fund alternative activities for livelihoods in San Miguel, especially those living in the eastern region of the community. In general, there is no public information about the total amount of economic investment that has been made by external agencies for the certification and implementation process of El Reten

to date. However, it is common knowledge that all this funding comes through the community-led conservation discourse portrayed from WWF and CONANP to funding bodies. This is consistent with the elite capture through the selective distribution of limited knowledge in both ways: to donors and to beneficiaries (Platteau et al. 2014). Economic inputs promoting conservation and development in the Chimalapas region have been continuous since the end of 1980's. Then, after the fires in 1998, the institutional presence of government agencies and NGOs as well as the diversity of funding programs progressively increased, especially in the eastern region, where the land tenure conflict is also located. The planning, negotiation and certification of El Reten took from 2004 to 2010, and it is reported that only in 2004 the investment that different external agencies put into the process in the Chimalapas region was of \$71,379,106.30 pesos (~£3,441,525 GBP). This quantity includes the costs of participatory processes, diagnostics and technical studies, and thus, it does not necessarily mean that community members have been directly benefited from it (Plan Maestro 2004). The economic incentives related to El Reten arrive at San Miguel at two scales, as an agrarian community, in the case of PES, and to San Antonio and Benito Juarez being the two settlements most directly related to El Reten, in the case of PET, PROCODES and the pine-resin harvest project.

The distribution of economic benefits from PES provides evidence of the scale, benefit-sharing and equity issues encountered in the early operation of El Reten. In 2008, the first PES was delivered to the community adding to PET and PROCODES (Section 5.1). Since 2008, the distribution of PES in San Miguel has been very different from year to year. From the beginning of the program in 2008, there have been two successive communal committees in charge of the administration of the resources. Both committees have had two different styles of distributing PES among settlements. Until 2009, the documents for Management and Better Practices Plan for El Reten were still being developed by the operational committee and thus, the guidelines for the application of the resources were rather loose (PR, Juchitan, July 7<sup>th</sup>, 2010). After receiving the first PES of \$1.2 million pesos (~£ 57, 279 GBP) in 2008, the auxiliary secretaries' assembly decided that the PES would be used to pay neighbouring settlements



(San Antonio and Benito Juarez) for the fire breaking breaches on the perimeter of El Reten. After the forest fire prevention activities were financed (~\$140,000 pesos/~£6, 683 GBP), the communal committee and the auxiliary secretaries' assembly decided to distribute \$408,000 pesos (~£ 19,470 GBP) among the 17 settlements (\$24,000 pesos, ~£1,145 GBP each). According to some community members and external informants, the remaining ~\$600,000 pesos (~£ 28, 640 GBP) were not accounted for by the previous *comisariado*, implying a misuse of the funds (CA, San Miguel, November 3<sup>rd</sup>, 2010). Furthermore, although \$24,000 pesos were distributed to each settlement, people interviewed in the settlements could not recall receiving PES or how the money was spent.

The first meeting I attended with the operational committee in July 2009 was focused on the application of the budget from the PES and problems related to funds and reports missing from the previous communal committee (2005-2009). The representative of CONANP explained to the other members of the operational committee that the subsidies paid to the community by CONAFOR in 2007 to develop activities of reforestation had not been accounted for (the money was delivered but the activities were not developed), and the authorities at the time did not provide any formal report. Besides, during the first two years of PES for El Reten the budget had been distributed with only a proportion of it being applied in conservation activities, while some of the money was missing. Therefore, the operational committee wanted to take the opportunity that the change in communal authorities represented in order to improve the accountability and transparency in the use of PES in San Miguel. They did so by taking a bigger stake in the decision about where the resources from PES should be invested, using the operational regulations of PES and the Better Management Practices Plan as their arguments. By 2010, there were new communal authorities and GADES was in charge of developing a budget plan based on a social diagnostic, the Master Plan for Chimalapas, and the needs expressed by the new communal committee. In the new budget, the distribution of resources among the 17 settlements was reduced from \$24,000 (~£1,145 GBP) each to an aid for transportation for auxiliary secretaries to commute to the assemblies (\$6,000 pesos/~£ 286 GBP per year, per settlement). The rest of the resources were distributed for specific purposes

including activities of the communal committee, technical advice (provided by GADES), funding for alternative productive activities, and wages for fire fighting and monitoring activities (Figure 7.1).

<b>Actions</b>	<b>Concept</b>	<b>Quantity</b>	<b>Units</b>	<b>Unit Cost</b>	<b>Total original</b>	<b>Total adapted</b>
Forest Fires Protection	Break-fire lines	10	km	5,500.00	55,000.00	55,000.00
	Maintenance of break-fire lines	20	km	3,500.00	70,000.00	70,000.00
	Burning of break-fire lines	5	km	4,000.00	20,000.00	20,000.00
	Training of brigade members	1		1,500.00	1,500.00	1,500.00
Biodiversity Conservation	Establishment of the surveillance committee in Benito Juarez	1		1,500.00	1,500.00	1,500.00
	Surveillance activities	12	Month	5,000.00	60,000.00	60,000.00
	Sign posting of the PES Area	5	Sign post	6,500.00	32,500.00	32,500.00
	Transportation of the posters	1		3,000.00	3,000.00	3,000.00
	Constitution of the Community Conserved Area in La Cristalina	1	Establishment	25,000.00	25,000.00	25,000.00
Non-timber forest resources' management	Technical and administrative/accountable assistance for the Rural Production Societies in San Antonio and Benito Juarez	12	Month	10,000	120,000.00	120,000.00
Restoration	Development of a Restoration Program in Cerro Prieto	1	Program	75,000.00	75,000.00	75,000.00
Communal committee	Acquisition of vehicle for official use (later adjusted to the repair of the communal car)	1	Vehicle	60,000.00	<b>115,000.00</b>	<b>60,000.00</b>
	Repairs of the communal house	1	Repair	50,000	50,000.00	50,000.00
	Operation expenditures of the communal committee	12	Month	35,000.00	420,000.00	420,000.00
	Communal statute	1	Process	25,000.00	25,000.00	25,000.00
	Communal census	1	Process	25,000.00	25,000.00	25,000.00
	Auxiliary Secretaries expenditures	6	Assembly	17,000.00	<b>60,000.00</b>	<b>102,000.00</b>
	Technical Services	1	Annual	57,500.00	57,500.00	57,500.00
				<b>Total</b>	<b>1,216,000.00</b>	<b>1,203,000.00</b>

**Table 7.1 Proposal for the distribution of the resources from PES in San Miguel in 2010, adapted from GADES. Coin is in Mexican Pesos (Unpublished document).**

Once the budget was discussed, the *comisariado* was called to join the meeting where the representatives of CONANP and WWF explained him the general conditions for the PES to continue. The *comisariado* was reminded about the commitments of the Better Management Practices Plan, which required the community:

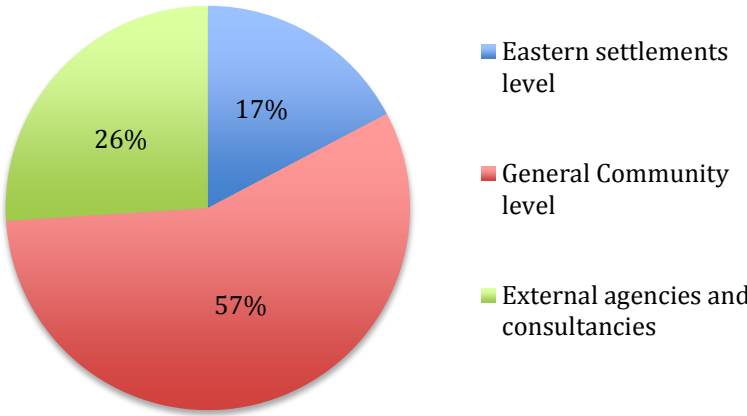
- (1) To hire a CONAFOR's service provider to report forest conservation activities developed.
- (2) To formally establish a social enterprise and to hire the accounting services for the economic alternative projects being developed in the eastern region.
- (3) To hire a consultancy to develop workshops informing people about the responsibilities and commitments of the certification.

It was implied that all these services would be provided by GADES who would then elaborate the funding reports for CONANP and CONAFOR.

The incoming members of the communal committee in 2010 argued that there were no reports left about the use of PES for 2008 and 2009 by the previous committee. However, due to local dynamics and in order to prevent any retaliation, neither the operational committee nor the new communal committee would proceed legally against the previous communal committee members; this situation seems to be common in the community, as the following statement suggests:

*... "[Communal authorities] come and go, they do not give reports, and we cannot get into personal problems [trying to get explanations], all what we want is to work" (CA, San Miguel, November 3<sup>rd</sup>, 2010).*

The proportion of the distribution of PES in 2010 based on the budget that was developed by GADES and consequently presented to the auxiliary secretaries' assembly is presented in Fig. 7.2. It illustrates the proportion of resources arriving to San Miguel at the community level and those that actually land as economic incentives on the eastern settlements next to El Reten.



**Figure 7.1 Proportion of the PES invested at different levels in**

The distribution of PES and the auxiliary secretaries' assembly of March 2011 have been partly described in the previous section in terms of decision-making. Thus, this section focuses on the scale and benefit-sharing dilemma created where economic benefits from PES are distributed at the community level but the responsibilities over the area rely mostly on two settlements only. The size of San Miguel (134,000 has) and its complicated topography have enhanced a scattered distribution of the population. In the case of the settlements in the eastern region of San Miguel, where El Reten is located, its remoteness and position next to the area under land tenure conflict make the fair distribution of responsibilities and benefits difficult. The distance between settlements means that only two out of 17 settlements, San Antonio and Benito Juarez, are directly located within the surroundings of El Reten in the eastern region of the community. Even though El Reten is part of the communal lands and certified as an area conserved by the community of San Miguel, in reality, San Antonio and Benito Juarez, with frequent participation of Sol y Luna are the main settlements involved when it comes to the actual implementation of the VCA. This arrangement leaves the other 14

settlements and the centre without direct responsibility to the area, but still holding an equal share on the benefits. This is a common difficulty in development projects, since programs like PES are based on constructed images of community (Li 1996) and applied by extensionist without further consideration of local dynamics where," as Lummis (2010) pointed out, "*to treat [people] as if they were the same is not necessarily to treat them justly*".

According to the communal committee, and to data recorded through direct observation of meetings and assemblies, there is a common feeling among the settlements other than San Antonio and Benito Juarez that all the benefits derived from El Reten and alternative production projects are directed to the eastern settlements. Even though it makes sense that economic incentives for conservation and alternative sources of income are focused on the area where the highest conservation priorities are located, the current distribution of economic benefits creates disagreement in two senses. On the one hand, people from settlements not involved with El Reten argue that all the community should benefit equally from it, since the VCA is located within communal lands. On the other hand, people from neighbouring settlements, San Antonio and Benito Juarez, think they should be the most benefited from PES and other funds, since they hold most of the responsibilities related to El Reten. These contrasting perspectives create friction and polemic during local settlements and auxiliary secretaries' assemblies. This equity issue has derived from the fact that the benefit distribution mechanisms and management decisions have not been determined by the local governance structures but, in this case by the inter-institutional operational committee, which is a consistent practice in Mexico (Corbera et al. 2007).

Regarding the perceived fairness of the cost-benefit sharing (Brown and Corbera 2003), inhabitants from San Antonio and Benito Juarez, next to El Reten have coped with having to claim those lands from the logging companies, living under constant conflicts with the *ejidos* and police from Chiapas. They are also in charge of fighting the fires in the area and of protecting it from foreign hunters. Thus, the argument of the eastern settlements is that the fact that El Reten is still considered a conservation priority is mainly due to their efforts and at the expense of their

constant conflict with the *ejidos* from Chiapas. Therefore, *comuneros* from San Antonio and Benito Juarez feel that they should receive the bulk of the benefits from the establishment of the VCA. Claims due to the imbalance between the costs of living next to the area under conflict and the benefit-sharing are phrased as environmental concerns by *comuneros*, as was expressed during one of the auxiliary secretaries' assemblies:

*"In the eastern region, we have been protecting El Reten with no payments... we want to conserve. If that money gets distributed [among the 17 settlements], who is really going to protect El Reten?"* (MG2, San Miguel, March 4<sup>th</sup>, 2011).

The economic benefits of PES are targeted at the community scale and, according to the members of the operational committee, a proportion of them must be used for conservation related activities. In a large area with scattered population and relying only in two settlements for the stewardship and management of El Reten, the challenge for the communal and operational committees is to deliver not only equitable, but also fair benefits derived from the VCA to the community. This creates a dilemma for the communal authorities and resentment among the inhabitants from San Antonio and Benito Juarez. Nevertheless, people from other settlements of the community are also marginalized, and receive even less institutional attention due to the lack of important areas for conservation in their lands (LA, San Miguel, March 17<sup>th</sup>, 2011). For non-eastern settlements, it is important that the resources from the PES for El Reten are distributed among all the members of the community. In the words of a *comunero* from La Compuerta:

*"It is good that a project benefits all community members... after all, all of us are hungry"* (TC, San Miguel, March 4<sup>th</sup>, 2011).

But for members from Sol y Luna is not so easy. Sol y Luna is also located in the eastern region, but the settlement was not considered for alternative income activities, even though they participate in the fire fighting activities for El Reten. Since they have not been included in the current projects related to the VCA, the auxiliary secretary of the settlement refused to receive the aid of \$6,000 pesos per year offered to each auxiliary secretary for transportation to the assemblies

from PES. When asked about the reason for refusing taking the money, the auxiliary secretary from Sol y Luna replied:

*“[We don’t want to receive the money because]...it is not a gift, we are the ones who have to stand strong, people from the centre [of San Miguel] do receive [PES] as a gift” (RE, San Miguel, March 4<sup>th</sup>, 2010).*

The arrival of economic benefits enhances different interests and questions amongst community members. However, the current benefit distribution has also fragmented the group of four eastern settlements (San Antonio, Benito Juarez, Sol y Luna and La Cristalina) who have worked together through time looking for solutions to the agrarian conflicts affecting them. The fact that only two out of four are receiving institutional attention has had an impact on the relationship between them, as the following phrase of a key informant states:

*“There is fractioning between settlements due to the different treatment that the communal committee and... [External agencies] give to different settlements” (SC, San Miguel, December 12<sup>th</sup>, 2010).*

Moreover, the differences around benefit-sharing go further that between neighbouring and non-neighbouring settlements to El Reten. Additionally to these claims there is also a division caused by the differences in economic incentives arriving to San Antonio and Benito Juarez. Despite being part of the same community and being next to El Reten, San Antonio and Benito Juarez are different in ethnic composition, local organisational arrangements and ways of interaction with external agencies. According to local accounts, Benito Juarez is mainly inhabited by *Zoque* people who migrated from the centre of San Miguel (SB, SC, ES, GM2, MA). Contrastingly, San Antonio’s population is mainly constituted by families who migrated from Chiapas and Michoacan as workers of the logging companies, but who agreed to be part of San Miguel once the community claimed the lands (MA, UP, SC2, GM2). These differences in backgrounds also mean differences in the ways both settlements relate to communal authorities, and external agencies. At the end of 1990’s, after the forest fires, brigades were created



by SEDAF<sup>9</sup>, to control and prevent forest fires. This implied that only a certain number of community members would get paid to control and fight fires in each settlement. People from Benito Juarez did not agree, they argued that community members' collaboration to control fires was part of their customs, and if payments were added to this arrangement it would not be *tequio* anymore, making the responsibility rely only on four or five people. On the other hand, San Antonio agreed and accepted while Benito Juarez decided that they would keep controlling fires as *tequio*. This event is identified as a breaking point between and within both settlements. Since then, people from San Antonio are perceived by Benito Juarez as betrayers to the community, while people from Benito Juarez are perceived by external agencies as rebels. Later on, when CONAFOR implemented its own brigades to control fires within and around El Reten, both communities decided to participate with six *comuneros* being paid each season to control fires in El Reten. Hence, despite the economic opportunities the temporary employment represents, it is also affecting the local structure of the *tequio*. Nowadays, each time a big fire threatens the region and exceeds the capacity of the twelve *comuneros* hired by CONAFOR, there are heated debates in the local settlement assemblies about whether fire-fighting in the VCA should be done only by those receiving a salary, or this activity should stay as a part of the *tequio*, regardless of the payment. Local opinions on this matter are divided.

More directly related to El Reten, based on field observations, there were differences in institutional presence and benefits received between the two settlements; consequently, awareness and involvement in the VCA differed as well due to two main reasons:

- 1) the distance to the area, as San Antonio is located adjacent to El Reten while Benito Juarez has less proportion of the area inside its perimeter, and
- 2) the different interactions that both settlements have with communal authorities and agencies in the operational committee.

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<sup>9</sup>The Oaxaca Agency for agriculture and forests.

The differences in involvement with activities related to El Reten could be explained by the differences in the way both settlements interact with the external agencies as I could acknowledge during my stay. The predominant feature of the assemblies in Benito Juarez is that people are more reactive in terms of their interaction with external agencies and the projects delivered, to a point they can be confrontational. Previous conflicts between the Benito Juarez and CONANP representatives, which involve the murder of a member of the settlement that was working as representative of CONANP at the time, have resulted in Benito Juarez being ruled out from the agency's programs. Even though people in Benito Juarez disagreed with the projects not reaching the settlement, they also recognise that this is due to their relationship with the extensionists. Beyond previous conflicts, comuneros acknowledge that contrary to other settlements, people in Benito Juarez refuse just to take anything external agencies want to promote, as the statement of a comunero reflects:

*"...Since we have always confronted the vertical way in which they work, they say 'let's not even touch Benito Juarez'...and there is a different treat to settlements... they keep bringing their projects from up there, which nobody wants or is interested in... institutions treat each settlement as a community by itself" (SB, San Miguel, December 22<sup>nd</sup>, 2010).*

People from San Antonio, generally sympathetic to the dominant political party in San Miguel, the PRI, has traditionally received more attention from the communal authorities. As I could confirm through direct observation, through time, people in San Antonio have had a closer relationship with both authorities, communal and municipal, providing votes for the PRI. Consequently, San Antonio has had more projects and subsidies arriving to the settlement through time, such as the tomato orchards and the firewood saving stoves. These projects did not reach Benito Juarez, which population is more aligned with the central-left political party, PRD. As a result of the different treatment San Antonio and Benito Juarez receive, there are clear and constant disagreements between both settlements. Nevertheless, Benito Juarez hold stronger organisation and when needed, i.e. in times of conflict with ejidos, Benito Juarez holds the leading role.

Once more, the fact that community members are paid to fight fires is portrayed by external agencies as participation. On the ground, this “participatory” program has been applied as a “tool” and a discourse to achieve the voluntary submission of people to external regulations and achieve externally designed goals (Pimbert and Pretty 1995; Walker et al. 2007). It does so at the expense of local uses and customs, diminishing local reciprocity, trust links, the stability of the group and thus, limiting the potential for collective action for natural resources management (Becker and Ostrom 1995).

The situations presented in this section illustrate the difficulty that ruling over such a large area poses in order to define the boundaries of the community as well as the cost-benefit sharing of natural resources management. Further challenges emerge regarding the accountability of different community members, included the communal authorities. Scale issues in the community are also reflected by the implementation of El Reten, emphasising the differences between local settlements’ structures and the communal structures. These differences become more evident when looking at the challenge that the fair distribution of responsibilities and benefits regarding El Reten represents for the communal authorities and the operational committee. The following and final data section will then explore the practical implications that multi-scale governance arrangements have in three relevant governance features: accountability, transparency and rule of law.

## **7.2 Accountability and transparency issues in El Reten**

As has been mentioned in sections 3.4.2, regional and top-down politics in San Miguel have enhanced paternalism and a consequent deterioration of the communal structures for self-organisation, self-regulation, accountability and transparency. Thus, programs that supposedly supported by locals tend to last as long as funds do (Pimbert and Pretty 1995). This is the case especially in the central region of the community, where *comuneros* are used to the arrival of a diversity of subsidies and development projects (mentioned in Section 3.1). Once economic resources arrive to local communities, the challenge for local governance structures is to prevent and to control the elite capture and

corruption, which plays as a key factor determining the way development and conservation programmes and local agreements are implemented. The Institutional Revolution Party (PRI) has ruled San Miguel politically for the last 80 years. Hence, every municipal president in San Miguel has been aligned to that political party. Similarly, even though communal authorities are independent of politics in theory, communal committee presidents are both, from the central region and aligned to the PRI. This political party is widely known for its paternalistic approach as well as the development of client-patron relationships with rural and indigenous communities (Gledhill 2000). As a result, in rural areas like San Miguel, subsidies arriving to the community for multiple purposes have eroded community structures and productive means, as one member of the communal committee related:

*“Individualism is big, since political parties intruded in the community, people do not organise anymore... [Twenty years ago], in San Miguel used to produce... today the fruit does not go out but comes in... tomorrow, if the government wants to stop giving us [subsidies], what is left for us?... only migration”* (CyC, San Miguel, November 3<sup>rd</sup>, 2010).

Although communal structures are still strong in the eastern settlements, the same pattern is also present and, according to informants, government interventions have also created client-patron relationships and internal divisions between San Antonio and Benito Juarez (DS, San Miguel, November 26<sup>th</sup>, 2010).

The operational committee for El Reten prides itself for attempting to shift local paternalism by promoted the establishment of cooperatives for rural production (OD, Oaxaca, February 26<sup>th</sup>, 2011). This is aimed to enhance self-organisation structures at the same time of providing alternative sources of income. The generation of alternative productive projects to provide sustainable sources of income has become an important component of the economic incentives in El Reten (Section 7.1). Hence, most of the management activities in San Antonio and Benito Juarez related to El Reten are about the development of cooperatives and alternative sources of income that include the adoption of more sustainable practices (Plan Maestro 2004). However, the process to change patterns has not

considered local systems of incentives and patterns so the persistence of local elite capture has been further complicated with the capture of powers that the operational committee developed. Through the observation of the implementation of one of these projects I could observe the local reliance on external institutions and economic incentives for the operation of the projects implemented within the framework of the VCA. Moreover, I could appreciate how not only external agencies' extensionists are used to treat local people as passive receptors but how local people have learned to behave as such. This became evident during my stay in both settlements when I could observe part of the implementation process of an alternative income generation project, the Pine resin harvest. This was one of the projects proposed by external agencies to persuade eastern settlements to accede to the certification of El Reten. This project has been externally designed and funded but involved increasing local involvement as the project developed. The project reached a stage where it required local structures for accountability and transparency that were not easy to improvise through training workshops, and where local dynamics were easily reflected, as will be explored below.

### **7.2.1 The pine-resin harvest project**

Even though PES revenues are not perceived by the responses from informants, the debates about their distribution give already an idea about the problem of keeping accountability locally in San Miguel. Contrastingly, the development of the pine resin is already having positive effects as an alternative source of income, while local cooperatives promote local organisation to be incorporated into the formal economy. However, despite the positive performance of the project in technical terms, rural enterprises managing the cash start to reflect local dynamics regarding accountability and transparency in San Antonio and Benito Juarez. This section will explore the resin harvest project as an alternative source of income and a viable project enhancing shifts in perceptions towards the possible uses of forested areas. It then goes further into the dynamics in which the lack of local accountability mechanisms would seem to make external mechanisms

and regulations necessary to keep projects running and to prevent relations of trust from further deterioration, justifying external interventions.

The general belief about community market-oriented enterprises of common pool resources is that the costs of their establishment exceed the benefits perceived (Antinori and Bray 2005). The resin harvest project was first proposed as part of the alternative economic activities accompanying the certification of El Reten as a VCA. According to local informants, after a long lobbying campaign and search for funding, the project started in 2008 with the formal constitution of Rural Capital Societies (hereafter cooperatives) in both settlements, San Antonio and Benito Juarez. Technical studies developed by members of the operational committee defined the areas available for harvesting and distributed them among cooperative members in a pilot stage of the project. Then, one hectare in each settlement was established as pilot area where cooperative members were trained and learned about good practices and developed their skills in resin harvesting. Local informants reported there was a big fluctuation in local interests on the project from the start. According to initial reports, the Rural Production Societies for pine resin harvest started with 17 people from San Antonio and 19 people from Benito Juarez in each cooperative, but numbers dropped soon after the project failed to deliver immediate results. Still, thanks to the funding of external agencies through the operational committee and the technical advice from GADES, the project continued in both settlements. Between 2009 and 2010, the Spanish Agency of International Cooperation for Development and other national private funds financed the formal setting of both rural cooperatives as well as the establishment of one resin collection centre in each settlement. Simultaneously, GADES established links with a distillery company in Michoacan, which agreed to pay 10 pesos (above the market price) per litre of resin. The company also supported the cooperatives lending money for the equipment needed by cooperative members so the harvest could be started. Later that year, SEMARNAT funded the purchase of mules to support the acquisition of infrastructure for the work of the cooperatives.

By November 2010, the cooperatives were preparing for their first shipment of resin to the distillery. Once the harvest started, both cooperatives agreed with the

purchaser that he would support the capitalization of the enterprises with \$50,000 pesos for each collection centre. In this way, collection centres could pay in cash to the producers as soon as they handed their resin, and the money would be returned once the purchaser paid for the product. Each settlement elected a local committee for their own cooperative, this committee is in charge of receiving the product, paying the producers, picking up the money from the city and elaborating accounting reports to GADES. In December, a first shipment of 42 tons of resin was sent to Michoacan. The production was equivalent to an income of \$378,000 pesos (~£17,181 GBP) distributed between the members of both cooperatives according to their production (\$9 pesos/ ~£0.40 GBP per kg). Also, for each kilo of resin sold, the cooperatives agreed that \$1 peso stayed in the till, \$0.20 cents out of that peso were to be paid to the communal committee for land use rights, and \$0.80 cents were to be saved for an emergency fund. The treasurers of both cooperative committees were in charge of keeping those resources. By February 2011, two shipments had been sent and the income opportunities the project was generating were so attractive that many community members wanted to join the cooperatives. However, there were not enough plots and materials to distribute amongst the newcomers, so people started to share plots with family members and dividing the materials and the profits. GADES and the cooperatives applied to SEMARNAT for an extension of the harvest area in both settlements. The permit for extension had already been granted in May 2011, when the data collection period of this research ended. The project kept progressing and the purchaser sent his technicians from Michoacan to improve local skills in order to increase productivity and to make sure environmental regulations were being met.

At the end of the data collection period, the pine resin harvest project was already making evident differences within San Antonio and Benito Juarez. During my last visit to the settlements in May 2012, I could observe and discuss with some cooperative members the benefits that the resin project has brought to their homes. During informal conversations in both settlements and a meeting I had with the comuneros in one of the settlements, people expressed the various ways in which the cash arriving through the resin is making a difference in their

livelihoods. In the view of the housewives from the community, the resin harvest is making a difference in the sense that the household budget is less constrained, or as one put it, *'more relaxed'*. A statement from a head of household also confirmed this:

*"Now there is money in the pocket, you can buy biscuits for your coffee or a soda... before you could only watch others having them" (QO, San Miguel, May 5<sup>th</sup>, 2012).*

For another producer, the economic resources generated through the resin harvest mean increased opportunities for younger generations, as parents are now able to send money for members of the family to study outside the community at higher education levels. In general, cooperative members were very enthusiastic about the benefits that the resin harvest is bringing to the settlements. Notwithstanding all these positive effects, for some other households, it was mentioned, the increased income meant a higher alcohol intake and domestic violence related to it.

Local perspectives are particularly relevant when cooperative members compare this newly established activity with their previous sources of income. One informant, who was in jail for marijuana cultivation years ago, is now one of the most prolific harvesters and, until recently, the president of the cooperative in his settlement. He was particularly enthusiastic during our conversation about the benefits he can perceive as head of household, he expressed:

*"I'm feeling the difference, before I could not afford to have a TV, DVD, concrete floor, motorcycle, horses and cows... It is an honest, clean job. You can come and go without any concern" (DS, Benito Juarez, May 14<sup>th</sup>, 2012).*

Furthermore, there are already comparisons between the resin harvest and the extensive cattle ranching. For monetary and time reasons, the resin results more profitable to local producers than cattle ranching and logging. It also provides an incentive to prevent forest fires and to stop clearing pine forest for extensive



cattle ranching. According to one informant, harvesting one ton of resin each month and a half is tantamount to sell a stallion:

*“I have reared cattle during five years and I have only sold three of them for \$5,000 pesos each, while with the resin I obtained the same money in one shipment”* (GF, Benito Juarez, May 13<sup>th</sup>, 2012).

Thus, even though the resin harvest is the only project successfully functioning out of the many offered by external agencies as incentives, the benefits derived from it are already being perceived through an improvement in local livelihoods and local attitudes towards the forest and its resources. Furthermore, the technical advice, capital and company to set up formal enterprises and cooperatives have been crucial for the project. At the same time the cooperatives are new platforms where community members can learn new skills and negotiate with communal authorities, local assemblies and external agencies, enhancing local capacities.

However, notwithstanding the progress and benefits of the resin harvest project, the arrival and management of economic resources related to it has triggered some local dynamics providing hints about the aspects contributing to previous project failures. These dynamics, I argue, are also reflected in the local natural resource management and represent an obstacle for the long-term sustainability of the project and natural resources in El Reten. The local dynamics point to structural flaws regarding accountability, transparency and enforcement at the settlement and community scales. The first event that highlights these flaws happened at the beginning of the resin harvest project, when funds from SEMARNAT to buy mules for the cooperative members arrived. In one of the settlements, *comuneros* who were not part of the cooperatives argued that the funds should be used to buy horses -which are cheaper but less resistant- for all the *comuneros*. In normal circumstances, the pressure of particular members of the local assembly would have been enough to affect the performance of the project. In this case, it would have meant that horses, if purchased at all, could not cope with the intensity of the work, affecting directly the long-term performance of the project. Moreover, the change would have to be reported to SEMARNAT and

it would negatively affect further funding applications by the cooperatives. Once more, the representative of GADES, in charge of the technical implementation of the project, intervened so funds were applied according to the operational rules of the funding program. On the one hand, this situation could work in the long run for the benefit for the community by enhancing the trust of external agencies to the community for investment. On the other, this is another externally imposed decision that illustrates the role of NGOs imposing external discourses and priorities, legitimising state regulations (Arts 2004; Durand et al. 2014).

Another event where local transparency and enforcement challenges became evident took place when the reports for the resin harvest were delivered, in April 2012. My last visit to San Antonio and Benito Juarez happened just after the accountability report for the resin harvest project had been elaborated by GADES in both settlements. Despite numerous requisitions to see such reports in both settlements and the consultancy itself, the replies were elusive. According to key informants and corroborated by GADES later, there were \$50,000 pesos missing from the capitalisation and emergency funds for the Rural Production Enterprises in one of the settlements. This is probably one of the reasons for keeping the reports hermetic, as this information could impact negatively further possibilities of funding for this and other projects in the region. Key informants in the settlement argued that this was not the first time the performance of a project was affected by people misusing economic resources. It was always the same group of people behind these issues in the settlement, but since they were used to make use of violence, no one in the settlement dared to openly complain about their actions. In that sense, the settlement had no way to force the rule-breakers to pay for their misbehaviour, causing frustration for people who had been working hard to get the resin project working in their settlement. Therefore, already weak relations of trust and community structures for compliance in that particular settlement were further broken and members of the cooperative felt discouraged. When asked why those individuals were still allowed to hold positions that involved dealing with community's economic resources, informants stated:

*"[In the settlement] everybody knows who works and who does not; however, those who are trusted cannot hold many positions within the community at the*

*same time*" (QO, San Miguel, May 14<sup>th</sup>, 2012).

Hence, in this particular settlement, internal divisions mutually reinforce the lack of clear structures for accountability, transparency and enforcement for rule breakers. Furthermore, local groups are organised to take the positions that manage economic resources and the threat of violent retaliation also prevents other community members to act about the diversion of funds. Facing this situation, people get discouraged by the impotence of not being able to enforce the rule of law and drop from projects. The case detailed above is a common elite capture situation (Adams and Hutton 2007; Fritzen 2007), a local vicious cycle that is difficult to break by external agencies and that should have not been overlooked when designing and implementing the VCA. Therefore, despite the potential for improvement of sources of income that the resin harvest project represents, the local dynamics within the settlements already affect the performance of both cooperatives. Externally designed accountability mechanisms are failing to acknowledge local patterns with the risk of strengthening them even more (Fischer et al. 2007). Without clear structures to keep local accountability, the sustainability of the project increasingly relies on external sources of funding and accountability without further changes in power dynamics and strengthening client-patron relationships between the community and the funding agencies (Pimbert and Pretty 1995).

Even though formal requirements and regulations from externally designed projects in El Reten provide an impersonal platform that allows external institutions to keep accountability, power was being accumulated by the brokers (Corbera et al. 2007). Since formal reports are the condition for the continuity of external sources of funding to arrive to the community, these requirements have enhanced a closer interaction between communal authorities, settlements and the operational committee through GADES. The multiple links and responsibilities that GADES has within the governance arrangement increased the influence that the consultancy can have in the overall process. Moreover, issues on accountability were also evident in the relationship between the settlements and the external agencies regarding the clarity with which the external funds were being invested. The question of how much money is being received from

international and national funders by NGOs and government agencies has captured local attention. This subject became relevant to local people after an event where the collection centres for resin were inaugurated San Antonio and Benito Juarez. Besides the members of the operational committee, a representative of an international donor (the Spanish Agency of International Cooperation for Development, AECID) that had been funding the implementation of the resin project attended the event. During the inauguration, members of the operational committee emphasized the enthusiasm of AECID's representative about the community-led project. However, according to local accounts, throughout the event the representative of AECID was never introduced to the communal authorities or the community members, who did not get the chance to talk to him. As local people realized that this project, as many others in the past (Walker et al. 2007), had been funded through international aid, they started questioning the NGOs about the amounts and investments of the funding. Nevertheless, responses from the members of the operational committee were elusive, as a local community member related:

*“NGOs and embassies are supporting with funds, but those funds never fully reach their destination and we do not know how much stays where... [External agencies] tell us that they are not right the person to ask about those issues” (SMV, San Miguel, November 17<sup>th</sup>, 2010).*

Even though the economic information is openly shared within the operational committee during meetings, only filtered information reaches community members. As has been shown so far, issues in the community can easily be politicized, and the arrival of economic resources is a big source of disturbance and discussion. This can turn an obstacle for agencies in charge of the implementation, as local community members will not necessarily acknowledge all the costs and bureaucratic requirements for funding to land on a community. However, it is contrasting that in a “community-led’ conservation initiative, the mechanisms for accountability only go from the community to external agencies but not in the opposite way.

Therefore, local dynamics and the lack of clear structures for accountability affect the performance of alternative productive projects and make the local structures dependent of external mechanisms and agencies to keep processes transparent in a clear elite capture at both, the local settlement and the community-external agencies levels. The elite capture by the operational committee is kept through information distortion to the funding bodies and to local community members (Platteau et al. 2014). Information and capacities remain centralised and make the operational committee indispensable for the funding, implementation and monitoring of the VCA; meanwhile, local structures for accountability and self-regulation capacities remain behind in attention. Furthermore, there are not accountability structures between scales. Consequently, accountability structures have been developed to keep local communities accountable, to a certain degree, but there is a lack of structures to keep external agencies accountable in front of local communities. This processes portrayed as community-led to funding agencies, is imposing externally designed economic incentives that make local communities increasingly relying on external capacities for funding and reporting. Even though there are not clear data about the allocation of resources, the likelihood is that a disproportionate share of benefits is being controlled by the self-imposed elite that presents the projects as a “take it or leave it” situation (Platteau and Gaspart 2003). This ultimately affects relations of trust between the different actors involved in this multi-scalar governance arrangement and the overall performance of the VCA.

### **7.3 Self-regulatory mechanisms related to natural resource management in El Reten**

The last part of this chapter makes emphasis on the issues regarding self-regulatory mechanisms in place for the management of El Reten. The concept of ICCAs, which in principle could be considered as equivalent to the Mexican VCAs, implies the power devolution from the state to give emphasis to self-regulatory mechanisms. Accordingly, the reforms to LGEEPS imply the devolution of powers to local governance structures to establish and manage protected areas. This chapter explores whether this devolution of “bundles of powers” (Ribot and Peluso 2003) with insufficient decision-making and funding powers is enough to

sustain conservation efforts in El Reten. Hence, this final data section explores the effects of the interactions in the multi-scalar governance arrangement in place over the communal structures' capacity to regulate natural resource use and conservation around El Reten. As has been explained in Chapter 6, internal communal structures in San Miguel are adapting to respond to the responsibilities acquired by the formalisation of their VCA and the resources arriving through it. Natural resource access in El Reten is at the same time a source of conflict, the reason for external institutional support and the means of livelihoods for inhabitants in the eastern settlements. However, the lack of legitimacy of local regulatory frameworks is further complicated by the open access situation maintained by the land tenure and for natural resource access dispute in the eastern region (Becker and Ostrom 1995). While the operational committee was trying to promote the update, redefinition and enforcement of self-regulatory mechanisms in San Miguel, the participatory discourse only made the top-down strategies used more evident. This final empirical section aims to emphasise the importance of self-promoted and designed rules that move beyond the provision of externally designed priorities if the local natural resource access wants to be sustained. However, authentic local and autonomous efforts are not usually welcomed by the state and external agencies.

During the early implementation of El Reten, as links between the communal authorities and San Antonio and Benito Juarez started to be renovated, the internal community needed to define rights and responsibilities of community members stated to be promoted by the operational committee through the communal authorities. Thus, local institutional arrangements in San Miguel, and more particularly in San Antonio and Benito Juarez, were challenged to adapt to fulfil new accountability and institutional requirements and to define clear natural resource access regulations. These requirements were the result of San Miguel's formal incorporation to conservation efforts through the certification of the VCA, and to the market economy through the resin-harvest cooperatives. Community governance structures were required to adapt for the implementation of externally designed management programs; to the arrival and accountability of economic resources from PES and the resin harvest project. As described in

Section 2.2.2, the communal statute represents the regulatory basis of agrarian communities. Even though the communal statute establishes the internal regulations, and despite the fact a statute was developed in San Miguel in the year 2000, the document remained largely unknown and unapplied. Furthermore, enforcement of self-regulatory frameworks, especially those related to natural resource use such as logging remain limited as will be explained below.

In San Antonio and Benito Juarez self-subsistence hunting is practiced; however, local concerns about the lack of self-regulatory and enforcement mechanisms are focused mainly on deforestation and forest fires. The group of people who participate in the local network for illegal timber extraction is clearly identified by members from settlements, NGO members, and people living in the surrounding areas. Nevertheless, people are very cautious when talking about it, and only two large seizures of timber were mentioned during the various talks and interviews developed. The first seizure mentioned was in 1998, and the second was in 2009. According to local informants, one person in each of both settlements is the link to the buyer in the nearest town, El Jicaro, close to the highway, who then re-sells the wood to merchants from Cintalapa, Chiapas. Informants alleged that these activities are known and covered up by the police from Chiapas and Oaxaca states, the federal police and even the army, which has a surveillance point on the road down from the eastern region to El Jicaro. For security reasons, I could not explore the illegal logging more in depth. Nevertheless, it is worth to mention that I received different explanations when discussing the reasons for such illegal behaviour in the eastern region. Some of the informants expressed their frustration for not being granted a formal permit for forestry exploitation, despite numerous applications to SEMARNAT, as the following statement shows:

*“We went to a Forestry workshop and we had the intention [to apply it], but [there is no flexibility], whatever the document up there says, that is what has to be done and [the government] sends us projects that are not very useful to us” (DS, San Miguel, November 26<sup>th</sup>, 2010, 2010).*

The discontent was further enhanced after SEMARNAT, the same agency that denied a permit to San Miguel, granted a forest exploitation permit to the ejidos

from Chiapas, within communal lands. This authorisation overlooked the fact that the area assigned for timber exploitation is not only within the conflict area, but also within the perimeter of the area certified as El Reten. Hence, the lack of coherence from the government agency in charge of regulating forest resources use is part of the problem by enhancing a lack of rule of law. Consequently, collective action is discouraged and some of the inhabitants of the eastern region refuse to comply with local self-restriction regulations for forestry exploitation. Discontented inhabitants argued that they prefer to make use of the resources illegally than allowing the 'invaders' (free-riders, Becker and Ostrom 1995) to take them with the auspices of the government agencies. And even though loggers find opposition within the local assemblies, and many informants expressed their discontent about the continuous logging, the lack of coherence in SEMARNAT's actions leaves them with few arguments against the loggers, as one of the local moral leaders of one of the settlements stated:

*"Loggers tell me: 'You are envious, you do not eat and do not let the others to eat', but I don't know why the ejido is stronger than the community [in front of the government agencies]" (DS, San Miguel, November 26<sup>th</sup>, 2010).*

During one of the surveillance walks in December 2010, after we found a group of logs left abandoned, the brigade members talked about loggers, saying that the previous weekend there were members of the community exchanging tables of cedar for beer in the next settlement. But, despite its dimension, the illegal logging was not openly or thoroughly discussed, with exception of brief mentions in the local assemblies. During one auxiliary secretaries' assembly, the authorities told off the auxiliary secretary of one of the eastern settlements about a recent incident where wood coming from that locality was seized by the army. The comments of the *comisariado* were brief but emphasised his embarrassment at San Miguel being portrayed as a community conserving their natural resources while some of its members were actually doing the opposite. Nevertheless, no further penalisation was made public and I could not observe any kind of enforcement or sanctions being applied to the settlement or to particular people.



Despite environmental institutional mismatches, and convoluted local dynamics, communal authorities and the members of operational committee were applying strategies to stop illegal resource extraction in order to comply with conservation commitments. These strategies included the generation of alternatives for income and using the certification of the VCA as an anchor to update and enforce local agreements and regulations through the communal statute. Common rules and sanctions are two of the core features that enhance social capital for sustainable natural resource management by providing the incentives for individuals to invest in the common good and by making sure that rule-breakers are punished in accordance (Pretty 2003). As has been illustrated in section 7.1, there are numerous examples of a widespread lack of transparency in both external project management and local natural resource use. Informants at different levels of the governance arrangement acknowledge that government agencies and previous communal authorities share a responsibility in the deterioration of local governance structures in San Miguel. Thus, agencies in the operational committee and the new communal committee were focusing on improving institutional coordination, local transparency and accountability for the use of natural and economic common resources in San Miguel, particularly around El Reten.

In order to enhance transparency and accountability, and to promote sustainable natural resource use in San Miguel, different changes were set up at different levels of the governance arrangement. For CONANP's officers on the one hand, this shift involved sharing some degree of power and to be more clear and accountable to other members of the operational committee in charge of implementation and funding such as WWF and FONDO. During the meetings, CONANP's representative would report to them and would negotiate the share in investments over particular management actions stated on the management plan of El Reten. This was mainly rearticulated by WWF; however the state remains a power container, political regulator and economic competitor in the negotiations and decision-making (Arts 2004). On the other hand, for communal authorities the shift implied changes concerning many actors within and around San Miguel. These changes included communal authorities to stop receiving money as bravery from ejidos occupying communal lands and cattle ranchers leasing lands illegally. Changes also

included more presence of the NGOs and communal authorities in local settlements, along with the dominant discourses, where conservation is more important than local struggles. In a region where empowerment processes have been effective (Walker et al. 2007), there was resistance at different levels, from the cattle ranchers leasing lands, to people from political parties in the community and local settlements' members used to the absence of an active authority. According to informants in the settlements, until then, the prevailing pattern was for authorities to misuse the communal resources and accept money to bend internal community regulations e.g. allowing illegal logging and land invasions. In response to this lack of government, settlements like San Antonio and Benito Juarez had to develop their own strategies and structures to face their immediate realities, in which the land tenure conflict has had always a prevailing influence. As such, the subsistence and defence of the land are the first priorities to settlement members, and local assemblies have remained as the self-organisation structures in order to face the lack of attention of communal or government authorities and keeping a certain degree of autonomy from the communal committee (GM, SCLC, December 16<sup>th</sup>, 2010). Nevertheless, as has been explored in Section 7.1, local conflicts, commercial interests and internal divisions have taken their toll on the allocation of natural resource access, accountability and enforcement in both settlements, creating the ideal conditions for the tragedy of the commons (Hardin 1968).

The power of communal structures to self-regulate local natural resource use in San Antonio and Benito Juarez has been negatively affected by the lack of rule of law and the open access situation created by land tenure conflict and the external institutional mismatches. Thus, there is a double discourse that, on the one hand, gives autonomy to local communities for self-regulation, while on the other creates and perpetuates the conditions for external control through discourses like conservation and development. Hence, even though some of the local informants in San Antonio and Benito Juarez identified themselves as advocates for the long-term maintenance of El Reten, they defend their livelihoods as the first of their priorities over any external regulation that aims to restrict their access to natural resources, such as hunting and logging. Furthermore, notwithstanding their reliance on external funding and their clarity about

rejecting any imposed restriction over local natural resource use, local people also acknowledge that the lack of respect to local regulatory frameworks about natural resources access is having a negative impact on their immediate environment (CJM, San Miguel, November 27<sup>th</sup>, 2010).

The process of development of the communal statute and the challenges faced by community institutions as enforcement bodies exemplify to what extent power has been devolved to local governance structures in El Reten for natural resource access. While local structures represent a strong core for community conservation with regulations that are both culturally appropriate and locally established, the inclusion of San Miguel in formal conservation and the market economy imposes externally designed structures and regulations. Therefore, the development of an updated communal statute was also an open space for the agendas of the communal authorities, local people and external agencies alike. In December 2010 the communal authorities in charge started a process in order to update the communal statute. Communal authorities agreed with the auxiliary secretaries to visit each settlement to discuss the content of the communal statute. For the meeting to discuss the statute in Benito Juarez, only 18 out of the 70 comuneros attended. Despite the low numbers, the communal authorities who travelled to the settlement acknowledged that this was one of the most participative localities in the community. The *comisariado* did not attend, probably so the meeting could be totally focussed on the statute instead of diverting to the pending issues in the community. The president of the vigilance committee, a man with a well-established moral authority in the community, acknowledged that Benito Juarez and San Antonio still have the community structure that has been lost in the central part of San Miguel. Since urbanised areas do not attend to the communal authorities anymore, communal authorities identified this process as an opportunity to rescue the community structure by developing a communal set of rules and enforcing them. On this regard, people from Benito Juarez attending to the meeting were critical about the use of the conservation discourse and the lack of compliance of local agreements about logging, cattle management and use of fire around El Reten, as shown in the following statement:

*“It is good to have regulations and to enforce them. We talk too much about conservation and the land use planning but, is it true what we are saying? ... We still have a long way to bring the communal statute to reality”* (DS, San Miguel, December 22<sup>nd</sup>, 2011).

During the meeting, communal authorities explained the process to renovate the communal statute, which regulates co-existence in the community. Once more, the economic incentives were used in the authorities' discourse, this time to promote self-organisation through the communal statute, as the following statement shows:

*“...natural resources protection gives us a basis to develop a communal statute and to attract government investments through community organisation”* (RA, Benito Juarez, December 22<sup>nd</sup>, 2010)

This statute, according to the authorities, should also be applied to visitors for natural resources use and protection, to defend from invasions and to clearly establish the attributions of different government levels. The document should define the spaces for local participation in the community as well as the spaces for intervention of external agencies. It should also establish the responsibilities and sanctions that the lack of compliance and the impacts over the land could have. Attendants agreed that one of the main problems was the lack of enforcement:

*“...the statute has hunting ban seasons, but there is a lack of application of the written document...We need clarity on the regulations and justice in their enforcement as well as an equitable distribution of rights and obligations”* (SB, San Miguel, December 22<sup>nd</sup>, 2010).

People from San Antonio and Benito Juarez also had their own expectations on what priorities should be regulated by the communal statute. Since the forest fires in 1998, institutional presence had been more constant in the area and it is locally acknowledged that the incidence of large forest fires has been reduced. However, people still perceives the control of the fire used for renewing the grass for livestock as a priority. Along with the land tenure conflict and deforestation, the increase on the amount of cattle and the use of fire to open grazing spaces in

previously forested areas were recognised as the two main reasons for local environmental degradation around El Reten by local informants:

*“Since the communal authorities and the agencies have not paid any attention to us, we said let’s do it in whatever way. [The result is that] twenty years ago, there were trails of puma and deer everywhere, which are over now”* (BS, San Miguel, November 28<sup>th</sup>, 2010).

Community members also acknowledged that clear boundaries and regulations are needed in the community. For local people, the statute and its enforcement represent an opportunity to start recovering and restoring environmental resources and services that have been affected by the lack of rule of law as pointed out by a *comunero* during the meeting:

*“We need help establishing the boundaries of the community... Another issue we need to discuss is the plundering of timber, and the cattle ranching by the ejido from Chiapas”* (DS, December 22<sup>nd</sup>, 2010)

Thus, different members of the community acknowledge the need to regulate and respect the land use agreements and to incorporate aspects of the land use planning exercise to start applying it, especially as a way to exclude the use of the land from people from the *ejidos*, and even neighbouring settlements where peasants are extending out of their land due to population growth and land shortage. Nevertheless, the faculty to establish clear boundaries between the *ejidos* and the community goes beyond the communal authorities or the local statute. It requires the effective intervention of the Agrarian Reform Secretary and the Supreme Justice Court of the Nation, adding more scales to the process of definition of clear boundaries and land and resource access use rights.

Finally, the communal statute represents a window of opportunity not only for local people, but also to the external agencies working in place. During interviews and informal talks with representatives of government agencies and NGOs, they referred to the instability in the community and the length of the processes as their main concern for the achievement of conservation agreements and their enforcement. As mentioned before, communal committee members are due to

change every three years, and each communal committee also gets to the position with different perspectives and political agreements set up, making continuity of projects extremely uncertain. The representative from CONANP, working in the region for more than nine years, commented on this regard:

*“The constant changes of comisariado bring incertitude to us as planners. Negotiation is constant and situations grow stale”* (SC2, Juchitan, August 25<sup>th</sup>, 2010).

Similarly to the implementation within state managed protected areas, the lack of continuity and formal structures makes the negotiations at the community level to rely on personal connections, since the institutional structures in place are not suited to cope with the transitions (AI, Juchitan, July 7<sup>th</sup>, 2010). Hence, decisions and alliances between communal authorities and external agencies are mainly managed on a political manner with bonds of trust constantly being created and diluting, according to the circumstances and the interests at stake. As shown in previous chapters, members for the operational committee have developed strong relationship with the current communal committee president. Thus, the expectations of the members of the operational committee from the establishment of a communal statute were not necessarily related to the setting of more autonomous processes or stronger assemblies, but to have more certainty and clarity on the structures to continue with the conservation processes. In their view, once the local structures are locally appropriated, such structures would be relatively independent from the dynamics of the communal authorities,, but dependent of the external funding and capacities. The fact that conservation related regulations were included into the communal statute would constitute a great achievement, as one of the agency representatives stated:

*“You create the habit, and they make it law”* (MJ, Juchitan, July 7<sup>th</sup>, 2010).

The development of the communal statute holds the potential not only to regulate land and resources use and conservation. It also represents the possibility to bring back the power to communal structures to clearly determine their role and

faculties within the multi-scalar governance structure in place. However, on the other hand, by being promoted by external agencies through communal authorities it could also enhance the capacity of the operational committee to control individuals, circumstances or resources through a process of legitimisation of the strict conservation discourses (Rabinow 1991; Weber 2005: 43). Ironically, the process for the communal statute was stopped due to the increased intensity of the conflict between San Antonio and Benito Juarez and the ejidos from Chiapas. Therefore, externally designed regulatory frameworks continued to be the reference for the implementation of El Reten. On the one hand, such regulatory structures provide an impersonal platform that allows their implementation with lesser risks of personal retaliation in the community. Nevertheless, the lack of communal statutes in practice means that the conservation process is likely to keep heavily relying on external agencies for monitoring and enforcement, providing a justification for the state and external agencies to keep discretionary powers regarding the VCA (Ribot et al. 2010). This reliance on external structures, agencies and regulations is likely to have a toll on the already weakened community governance structures, undermining the possibility to really develop a community-led conservation approach, increasing paternalism (Pimbert and Pretty, 1995). Through the situations related in this chapter, it becomes evident that the implementation of a multi-scale governance arrangement for conservation is of great support for the implementation of conservation efforts, but by no means can such arrangements substitute the strength of communal governance structures. Ultimately, local struggles for rights and natural resource access continue to determine the sustainability and performance of the overall governance arrangement, regardless of the economic resources invested.

#### **7.4 Closing section: Fuelling the tragedy of the common in multi-scalar governance arrangements.**

The last empirical data chapter has presented the issues encountered in the cost-benefit sharing resulted from the implementation of El Reten. These issues relate to aspects of equity identified by Brown and Corbera (2003), namely, the benefit distribution mechanisms and management decisions have not been determined by

the local governance structures and the perceived fairness of the cost-benefit sharing. Furthermore, regarding the devolution of “bundles of powers”, in the case of El Reten, the community has limited rights to access, withdrawal, management, exclusion, alienation and authority (Corbera et al. 2007). Therefore, while this top-down approach portrayed as community-led has not been effective to devolve rights or power back to the local community, it has been effective in the expansion of an arrangement where the state and members of the operational committee other than the local community remain strong power containers and political regulators (Gaventa 2003; Arts 2004). The practices applied in this VCA are in fact expanding the presence and regulatory powers of the state; this is consistent with other cases in southern Mexico (Bray et al. 2012; Durand et al. 2014; Martin et al. 2011). These conditions continue to undermine local links of trust and reciprocity, affecting the local structures for organisation, collective action and natural resource use regulations (Becker and Ostrom 1995). Moreover, by overlooking the regional dynamics and struggles and providing alternative sources of income, these conservation efforts have increased the intensity of the conflicts within the community and between the community and the ejidos of Chiapas. Thus, while the image of VCAs has gained recognition for working in areas that had been reluctant to other protected areas categories (Doane 2007) and increasing the surface under some kind of protection at the national level, these multi-scalar efforts are bound to be unsustainable both, socially and environmentally.



# SECTION IV. Discussion and Conclusion

## Chapter 8. Discussion

This dissertation has explored the legal framework that regulates the establishment and the actual implementation of protected areas in Mexico providing a close look at the operational challenges that those in charge of protected area management have to face in terms of legal, human, technical and infrastructure limited capacities to carry out management and enforcement duties (Wells and McShane 2004). Chapter 4 has explored the pitfalls that top-down conservation has had in the Southern-Isthmus region regarding expropriation, displacement, exclusion and restriction of traditional and vital natural resource uses, leading to disempowerment, cultural erosion, human rights infringements and contravention of international laws, just as many researchers have pointed out in Mexico and around the world (Andrew-Essien and Bisong 2009; Armitage et al. 2012; Bishop et al. 1995; Brockington and Igoe 2006; Brockington et al. 2008: 93; Colchester 2004; Dowie 2005; Duffy 2005; Fairhead and Leach 1996; Pimbert and Pretty 1995; Pujadas and Castillo 2007; West et al. 2006). The legal alternatives for protected areas establishment in the country as well as the importance of multi-scalar governance arrangements to make protected areas management feasible have been presented.

Even though participatory approaches for conservation are common language for protected area managers, NGOs and funding bodies in the Southern-Isthmus region of Mexico, in practice, decision-making for protected area management remains dominated by the state and funding agencies who determine conservation priorities, management strategies and evaluation standards. This participatory rhetoric, naïvely overlooks the power relations implied (Cooke and Kothari 2001) and available spaces for local participation avoid positions that go against the interest of powerful groups (Mansuri and Rao 2004), perpetuating the incentives for natural resources over-exploitation and paternalism (Fischer et al.

2007; Durand et al. 2014). Operationally, current protected areas management involve a wider range of scales through the technical advisory boards, where academics, NGOs, municipal authorities and funding bodies can define the planning, management and evaluation of conservation in a given protected area. Nevertheless, the participation spaces for local institutions remain limited to legitimisation of pre-defined priorities and conditioned funding through a classic '*take it or leave it*' approach (Rahnema 2010). The prevailing use of local participation rhetoric is seen by protected area managers as a means to get local and funding support (Cooke and Kothari 2001; Pimbert and Pretty 1995). However, there are only a few cases where participatory processes have reached the development of local capacities for natural resource management and these achievements, ironically, have been reached by communal structures strengthened through the fights to claim their rights for natural resource access to state and parastatal agencies (Bray et al. 2003; Merino-Perez 2001; Mitchell 2006).

VCAs have been developed as a legal alternative to top-down conservation and their voluntary nature and implied power devolution to landowners make them compatible the IUCN category of ICCAs, at least in principle. Chapter 6 has elaborated on the establishment of the VCA El Reten, in San Miguel Chimalapa. The process leading to the establishment of El Reten as a VCA has involved a multiplicity of actors, scales and funding programmes preceding the current multi-scalar governance arrangement for conservation. The implementation of the VCA despite all the efforts has yet to clearly define right-holders and resource boundaries. It also faces challenges regarding decision-making, representation, monitoring, sanctioning and conflict resolution, making difficult to enhance collective action (Ostrom 1990, referenced by Abrams *et al.* 2003). The regulations for natural resource management in El Reten lack of coordination amongst those involved in the actual implementation. Moreover, there is not a clear distribution of responsibilities, clear means for enforcement and sanctioning (Ostrom 2002). Furthermore, by avoiding political sensitive issues such as general assembly management and land tenure conflicts, external agencies neglect the system of incentives underneath, such as conflicting or contradictory rules by

SEMARNAT, helping to consolidate the pattern of over-exploitation of natural resources rather than providing a solution (Fischer et al. 2007).

The early implementation of El Reten illustrates the challenges that 'community-driven' conservation projects have in terms of attracting external actors with their funds and time frameworks and the implications for decision-making, representation and legitimacy (Adger et al. 2003; Corbera et al. 2007). While the establishment of the inter-institutional operational team has defined a new political space for interaction where the state and each non-state actor has its own role and influence over the structure (Buizer et al. 2011; Bulkeley 2005), this decentralisation has involved the evident elite capture by the operational committee determining priorities, strategies and time frameworks. Furthermore, at the local settlement level, the implementation of the VCA approach tends to homogenise inequities and differences within the community (McDermott and Schreckenber 2009), undermining its social and environmental performance.

### **8.1 Common Pool Resource Theory and the implementation of El Reten**

*"Rules and their effectiveness at the local level are critical to the sustainability of complex biological resources"* (Becker and Ostrom 1995). The implementation of El Reten is thus evaluated through the light of the common-pool resource theory in order to identify if VCAs as participatory and community-led conservation alternatives are consequent with the principles of common property regimes that enhance collective action for sustainability. The principles for sustainable common resource management have been classified in two big realms: 1) those dealing with access, group and resource boundaries and, 2) those dealing with decision making for joint use, including issues of representation, monitoring, sanctions, conflict resolution and legal recognition (Becker and Ostrom 1995).

Realm	CPR Principle	Local situation in El Reten
Access	Clearly defined community and resource boundaries	<ul style="list-style-type: none"> <li>• In San Miguel, the ill-defined border between Chiapas and Oaxaca and the consequent lack of clear boundaries for natural resource access is source of constant disputes between ejidos and community members. This is further complicated by different state institutions which hold the power to acknowledge communities and ejidos, to establish protected areas and to allow natural resource extraction or infrastructure activities such as logging permits and roads overlooking local conflicts.</li> <li>• The lack of clarity about the regulations and the limited capacities for enforcement in relation to El Reten is also reflected at different scales of government agencies such as SEMARNAT. This government agency holds the greatest enforcement power of the externally designed regulations; however, the mismatch between the state (Chiapas and Oaxaca), the regional (the Chimalapas priority region for conservation) and the national offices of the same agency increases the possibility of violent conflict between San Miguel and the ejidos from Chiapas. The provision of permits for timber extraction to the ejidos on the conflict area by the national office of CONANP after the regional office denied the permits to the community provides little incentives to local inhabitants to comply with self-regulation agreements about timber extraction, leaving the communal forests as an open access resource.</li> </ul>
Decision-making	Collective-choice arrangements	<ul style="list-style-type: none"> <li>• The local and general assembly constitute the biggest features for collective choice in rural Mexico. Yet, limited deliberation capacities and local power asymmetries make them time-consuming and delicate processes. This is the case of San Miguel, where communal authorities have opted for not calling to general assembly ever when important matters for the community are being discussed. This has been supported and even enhanced by the operational committee, which constitutes an illegal practice. Even though these decision-making procedures are considered legitimate by the operational committee, they lack of moral authority to be locally validated (Weber 2007:67).</li> <li>• Implementation of cross-scale approaches in conservation remains largely depending on personal relationships and interactions between those in charge of implementation and the local community</li> </ul>

		<p>(section 5.3). The size of the area of San Miguel, the control over the agreements set by different settlements has been difficult to track through time. Therefore, the dynamics between local settlements and external agencies create a differentiated treatment that makes consistent implementation difficult (section 6.4).</p> <ul style="list-style-type: none"> <li>• The arrival of the VCA certification and PES to the community brings into play other scales and different state agencies regulating natural resource use and protection, decreasing local control in exchange of economic resources. Moreover, the setting-up of an external operational committee and its increasing involvement in the communal decision-making process in what is portrayed as a community-led conservation initiative is consistent with the critiques to the expansion of the state through conservation/development projects (Li 2002; Durand et al. 2014).</li> <li>• The involvement of the operational committee in the expenditure of the resources from PES enhanced transparency by leaving the local people affected by the decisions, the eastern settlements, out of the decision-making process, and providing distorted information to keep the current elite capture (Platteau et al. 2014).</li> </ul>
Decision-making	Proportional equivalence of cost-benefits	<ul style="list-style-type: none"> <li>• The spending powers within the governance arrangement for El Reten have been gradually claimed by the operational committee (Section 7.4). The bulk of economic resources do not arrive to the settlements where the most of the responsibility about the VCA is located. In the same way, those settlements holding the most of responsibility have little room to influence the decision about the expenditure of the resources arriving through El Reten. The multi-scalar nature of the El Reten as a VCA, with the domination of a group illustrates a form of elite capture by external and funding agencies (Platteau and Gaspart 2003).</li> <li>• There is a mismatch in the allocation of responsibilities and revenue-generating powers, providing benefits to people who hold no direct responsibility towards the VCA.</li> </ul>
Decision-	Monitoring	<ul style="list-style-type: none"> <li>• Local settlements and the communal committee relied completely on GADES for the accountability and</li> </ul>

making		reports to the operational committee, CONAFOR and SEMARNAT. Simultaneously, the operational committee relied on GADES to persuade the communal authorities and the eastern settlements during the auxiliary secretaries' assembly. These issues of legitimacy and inclusion in management decisions where power tends to be accumulated by project brokers (often NGOs) rather than on local people are common in decentralised conservation efforts (Corbera et al. 2007).
Decision-making	Graduated sanctions	<ul style="list-style-type: none"> <li>• The main local regulation is the communal statute, which in San Miguel has no legitimacy amongst local people and thus, natural resource use faces and open access situation. Yet, once the VCA was established and PES arrived to San Miguel, externally designed legal frameworks of LGEEPA and other operational regulations of the PES that regulated natural resource use according of the national legislation but neglecting local institutions such as <i>tequio</i> added complexity to use regulations.</li> <li>• In El Reten, the power of enforcement relies on local settlement's authorities and assemblies and on their capacity to sanction rule-breakers. The enforcement of the regulations on logging is limited by the conflict created by the logging permits SEMARNAT provided to the ejidos. Hence, in the current governance arrangement, structures of enforcement are related to the conditioning of the continuity of PES to promote compliance.</li> <li>• Enforcement and sanctioning to rule-breakers are undermined by fear of retaliation; the lack of motivation due to the land tenure conflict, and the lack of the communal authorities' support to establish rule of law in the eastern settlements for natural resource extraction and project accountability.</li> </ul>
Decision-making	Conflict resolution mechanisms	<ul style="list-style-type: none"> <li>• Local structures of conflict resolution lack of clear frameworks and agreements as well as means to solve conflicts (Sections 7.2-7.4).</li> <li>• In the case of the VCA of El Reten, CONANP faces the same challenges that the implementation of Biosphere Reserves represents to other protected area managers regarding bureaucratic incompetence (Durand et al. 2014). Power fragmentation within government agencies is reflected</li> </ul>

		<p>limited capacities of CONANP, for example, to contribute to the solution of the land tenure conflict; the mismatches between the logging permit denied to the eastern settlements but allowed to the ejidos by SEMARNAT; the enforcement against illegal logging, or the implementation of the forest fire prevention activities by CONAFOR.</p>
Access	Minimal recognition of rights to organise	<ul style="list-style-type: none"> <li>• According to the Agrarian Law, communal authorities of San Miguel are the bodies entitled to distribute rights for land use and access to natural resources; communal regulations are embodied in the communal statute. However, local communities do not have total control since they are nested in multiple layers of governance.</li> <li>• Regulatory and planning powers are shared by the state and NGOs in the operational committee. In these dynamics, there is not a retreat from the state but a re-definition of its role, while NGOs become the link between the state and the community, legitimising its discourses (Arts 2004; Rahnema 2010).</li> <li>• Economic benefits of PES and other subsidies represent the incentive to enforce external regulatory frameworks, which is consistent with practices in protected areas in Mexico (Durand et al. 2014). CONANP does not have a direct link to the communal governance structures but its participation in the operational committee determines what strategies are supported by the nation-state, remaining a strong agent (Adams and Hutton 2007; Adger et al. 2005; Arts 2004; Lebel et al. 2006; Rhodes 1997).</li> </ul>
Decision-making	Nested enterprises	<ul style="list-style-type: none"> <li>• The resin harvest project in Benito Juarez and San Antonio, and the organisation in cooperatives were providing revenues that encouraged more local community members to get involved the alternative economic activity (Section 7.1.1). The cooperatives interact directly with the operational committee and SEMARNAT for the resin extraction permits. However, the accountability and technical feasibility of the project heavily relied on the external operational committee.</li> </ul>

**Table 8.1 El Reten at the light of the CPR principles (Becker and Ostrom 1995)**

### **8.1.1. The role of communication and access to information for decision-making**

Ostrom's work has also emphasised the role of communication in three key points, namely: 1) coordination amongst those involved, 2) distribution of responsibilities and building trust, and 3) Enforcement and sanctioning (Ostrom 2002). Mismatches in the communication process through different scales of the governance arrangement have been explored in section 6.4. Differences between institutional times and local deliberation times are further complicated by the distance between settlements and the fact that there are no general assemblies. The situation creates a dynamic where the information available for decision-making at the local scale is often not enough to make informed decisions. In the assemblies observed, the operational committee representatives provided incomplete information, especially regarding regulations and commitments (Section 6.4.1). Consequently, emphasis is put on economic incentives in order to achieve consensus with the least debate and resistance possible (Durand et al. 2014). Community members clearly expressed their concern about the fact that since the certification, the auxiliary secretaries' assembly has established agreements without members of the local settlements assemblies having the full knowledge about the commitments and regulations. This situation has allowed advances in the creation and implementation of El Reten within institutional times. However, equity concerns emerge in terms of access to information (Corbera et al. 2007; Platteau et al. 2014), making the enforcement of illegitimate regulations difficult. Thus, the decision-making process developed by the external operational committee for the creation and implementation of El Reten unfolds issues on representation, equity, legitimacy, information-sharing and spaces available for deliberation. Keeping contentious information during the decision-making process facilitates reaching agreements or validation but undermines local understanding and appropriation of the plans and actions (Platteau et al. 2014). The fact that there are not hard copies of the Master Plan; the Land Use Planning Exercise; the Better Management Practices Plan; The Management Plan of El Reten, and operational regulations of the PES program and the VCA in the community limits the knowledge that local people can have about the regulations they are subject to. The operational team has increased the efficiency of the



decision-making process within institutional times at the expense of transparency and legitimacy. Ultimately, internal community divisions due to political parties and the lack of strong local structures to keep transparency undermine trust links within the community and the performance of alternative income projects. This context, where information is incomplete, communication limited, access rules undefined and unenforced, represents the ideal situation for the tragedy of the commons (Becker and Ostrom 1995; Ostrom 2002)

## 8.2 The actual devolution of ‘bundles of powers’ in VCAs

Property is just one of many factors that shape institutional arrangements and strategies (Ribot and Peluso 2003). Natural resources management is defined by access understood as a “*bundle of powers*” embodied in and exercised through various means, relations and processes that give users the ability to benefit from natural resources (Ribot and Peluso 2003). Multi-scalar governance arrangements imply devolutionary processes throughout diversified networks (Lockwood 2010). Effective devolution processes transfer “*bundles of powers*” to local representatives (Ribot and Peluso 2003; Ribot et al. 2010). However, in practice, devolution is developing uneven spaces and capacities for the state to act in complex matrices with multiple scales, actors, roles and dimensions (Armitage et al. 2012; Chapin III et al. 2010; Goodwin et al. 2005). The emergence of multi-scalar governance arrangements has an increasing effect on previously self-governed institutions for natural resource management. In the case of El Reten, empirical data has shown the actual powers that community members and representatives hold for natural resource management; these are summarised in Figure 8.1 (based on Brown and Corbera 2003 and Corbera et al. 2007).

Power	Local situation in El Reten
Access	Local community members hold access to communal natural resources and this access is defined through the general assembly. Due to current arrangements, the power of the assembly to define access through collective and legitimate choice as well as to enforce local regulations regarding natural resource access is limited.
Withdraw	Even though the VCA is a voluntary mechanism from which the community have the power to withdraw at any time, individual settlements or comuneros do not. This becomes particularly relevant given the perceived unfairness regarding the cost-

	benefit distribution in San Antonio and Benito Juarez.
Management	<p>The VCA regulation has a double discourse. On the one hand, it states that local landowners have the power to define their own management strategies. On the other, such strategies have to be aligned to the national legislation and the areas become subject to the regulations of federal protected areas which have pre-defined management categories and regulations.</p> <p>Throughout the process of El Reten, community members have had limited access to information and spaces for management decision-making. The management strategies have been externally designed and validated through processes that lack local legitimacy and legality.</p>
Exclusion	<p>In El Reten, due to the land tenure conflict and the lack of political will to solve it, the local community cannot exercise its power to exclude others from natural resource access in common lands. As has been explained, ejidos from Chiapas continue to access and benefit from the natural resources around and within El Reten under the auspice of regional and federal state entities such as SEMARNAT.</p>
Alienation	<p>Local agreements for transaction are allowed between community members. However, it is widely known that the rent of lands to third parties is a widespread practice in San Miguel, despite being illegal.</p> <p>The Agrarian Law and the legal frameworks for certification and PES define that the scale entitled to get into agreements regarding the land use and natural resources access is the general assembly of San Miguel Chimalapa. Thus, even when eastern settlements would like to establish their own VCA and to receive PES for it, they are not legally entitled to set that kind of agreements.</p>
Authority	<p>Sanctioning powers by the local and general assembly are limited despite recurrent faults and cases of corruption. Representation is also undermined by the fact that decisions are taken in auxiliary secretaries assemblies rather than on the general one.</p>

**Table 8.2 Bundle of powers in the context of El Reten**

As shown above, while this top-down approach portrayed as community-led has not been effective to devolve powers back to the local community, it has been effective in the expansion of an arrangement where the state and members of the operational committee other than the local community remain strong power containers and political regulators (Gaventa 2003; Arts 2004). The practices applied in this VCA are in fact expanding the presence and regulatory powers of the state; this is consistent with other cases in southern Mexico (Bray et al. 2012; Durand et al. 2014; Martin et al. 2011). Local communities in the Chimalapas

region refused the establishment of a Biosphere Reserve in previous times in order to keep decision-making power and autonomy (Anaya and Alvarez 2004). VCAs have been portrayed as the alternative to state managed conserved areas for local community institutions to maintain the decision-making and implementation powers. However, as Chapter 5 has explored, CONANP as the representative of the nation state regarding protected areas, it clashes with other government agencies that have jurisdiction over different aspects of land use due to fragmentation of power between government institutions. Therefore, the powers that CONANP can actually delegate to local communities for protected area management are limited to the validation of externally designed priorities through previously designed strategies. The different governance powers in the case of El Reten are mainly nested on the external operational committee and externally designed regulations and laws, further reducing the local authority to manage resources. This shows how limited devolution processes are in conservation policy and implementation in priority regions for conservation in Mexico. These results are consistent with the findings of Shackleton et al. (2002), which emphasise that devolution in conservation remains a rhetorical figure with little substantial changes in terms of power shifts.

### **8.3 Payments for Environmental Services and VCAs**

PES and their distribution are two of the most controversial subjects in discussions regarding El Reten. VCAs as community-led conservation are often portrayed as closer to equity than other categories of protected areas, at the same time it argues to ensure the conservation of lands beyond the boundaries of state-managed protected areas systems through the support of local empowered peoples (Brockington et al. 2008: 87). However, as the case of El Reten has illustrated, the implementation of VCAs in priority areas for conservation is also introducing inequities related to capitalism, market forces and masking social relations behind the production of environmental services, promoting power asymmetries (Brockington et al. 2008: 87; Kosoy and Corbera 2010). These welfare programmes substitute client-patron relationships with “*scientifically-based meritocracy*” (Haenn et al. 2014). The challenge practitioners’ face to link PES to rural development programs (Muradian et al. 2010) is one of the

underlying causes for PES to be used as incentives promoting consensus and community agreements. Since decisions are promoted with limited information available to local people, it can be argued that efficiency is being more valued than equity and transparency, undermining the whole objective of the PES scheme to promote collective action (Muradian et al. 2010). The case-study here presented has also shown how in order to continue to be eligible for PES schemes, communities cede some of the control over the land and the decision-making process to the external operational committee and the federal state (McAfee and Shapiro 2010). As Kosoy and Corbera (2010) pointed out, the intermediaries for the allocation of PES are likely to become 'dominant agents' with increased effects over local institutions, such is the case in the Mexican context where PES are applied as public subsidies with externally defined regulatory means (McAfee and Shapiro 2010). However, statements from local people show their awareness of the fact that ecosystems services are co-produced by nature and local communities, challenging the dominant positions of the intermediaries. Moreover, landscapes in the eastern region are locally valued for services they provide locally and the communal identity rather than for their potential to sale to outsiders (McAfee and Shapiro 2010).

The distributional implications of PES cannot be overlooked either since perceptions of fairness in the distribution define the performance of the programs (Muradian et al. 2010). Additional to the fact that this and other federal neoliberal programs have had little impact on the improvement of rural livelihoods (McAfee and Shapiro 2010), their distribution at the community level underlines once more issues of scale by failing to target the adequate local level. Thus, even though PES have managed to persuade communities that once were completely reluctant to federal control over the lands, the implementation still faces the challenge to promote institutional settings and agreements to locally regulate natural resource access and enforcement (Muradian et al. 2010). This is particularly relevant for the long-term sustainability of efforts, since PES programs in Mexico last five years in most cases. The early implementation of El Reten has also shown that communal structures and local priorities in San Miguel can also challenge external impositions (Walker et al. 2007). However, with the

arrival of PES and other conservation-related projects, there is a trade-off of powers between local governance structures and the externally designed ones. Therefore, the implementation of the VCA through subsidies depends on the institutional choices influenced by national elites and donors (Ribot et al. 2008) and, thus, is not achieving the equity and legitimacy that VCAs portray as their advantage in comparison to top-down approaches to conservation (Adger et al. 2003).

#### **8.4 Community, participation, multi-scalar governance of Indigenous Community Conserved Areas**

The implementation of the VCA El Reten does not differ greatly from previous conservation. However, it explores for the first time the practical implementation of such approach at the light of the characteristics of community-led conservation such ICCAs and the common-pool resource theory for environmental and social sustainability. The first challenge that approaches similar to the ICCA category are facing in Mexico relates to the prevailing assumption of what has been called the 'myth' of community by the literature (Agrawal and Gibson 1999). The underlying 'mythic' assumptions about what a community is are reflected in the implementation of community-led conservation arrangements like the one presented in this dissertation. Such perceptions define community as (1) a small spatial unit; (2) a homogeneous social structure, and (3) shared interests and norms (Agrawal and Gibson 1999). Opposite to approaches that portray people as an obstacle for conservation (Terborgh 1999), the image of community within literature and current policies advocating for community-conservation tends to portray people in balance with ecosystems affected by the intrusion of state and market forces (Agrawal and Gibson 1999; Kothari et al. 2012). However, if we compare the case of San Miguel with other successful examples of community conservation such as those presented from Sierra Norte and Sierra Juarez in section 5.4 (Mitchell 2006), the contrast emphasises the importance of underlying local governance structures that are coherent with the CPR theory for community conservation initiatives to succeed beyond external forces. Thus while simplified images of community have been useful to give political attention to the subject (Li 2002), the 'myth' of community is preventing community-led conservation

initiatives to acknowledge the importance that local dynamics within and between communities and other external actors and politics have over natural resource management and conservation (Agrawal and Gibson 1999; Li 2002). Moreover, the decision-making processes described show that the implementation of the VCA omits local heterogeneity in order to give way to homogenized dominant discourses and management practices legitimised by validation processes that are portrayed as community-driven, while local priorities remain neglected (Sachs 2010).

The challenges that the implementation of multi-scalar governance arrangements for community-led conservation result from the fact that 'communities' are not simple or isolated actors but complex systems embedded in larger arrangements with cross-scale relationships (Berkes 2004). While landscape conservation approaches encourage processes at increasingly larger scales, sociological approaches call for ownership and stewardship of the local relevant scales (Wyborn and Bixler 2013). The focus at the community level, once more, illustrates the fact that the simplistic view of community as a small shared space can be misleading by preventing the analysis of sub-community dynamics for natural resource management in large areas with scattered populations (Agrawal and Gibson 1999). Furthermore, the "bundles of power" explored in these complex systems show that community institutions are only one of the many levels within weak institutional frameworks (Berkes 2004; Ribot and Peluso 2003). Hence, there is a mismatch between the scale entitled to get into agreements, defining benefit-sharing and the scale in charge of enforcement. Protected area management theorists would argue that it is necessary to match the scales in order to allow the share of management power and responsibility amongst those directly related to the managed system (Berkes 2004). The need to devolve power to the appropriate scales has been highlighted within the context of Communal Areas Management Programme for Indigenous Resources (CAMPFIRE), in Zimbabwe. Murombedzi (1999) argues that devolution of rights over resources directly to the locals is more important than the distribution of revenues derived from resource use (or lack of it, in the case of PES) in order to develop local stewardship. However, for power to be devolved at the accurate

levels, first there must be political will to do so. In the Mexican case, the participation and devolution rhetoric has been used, yet again, in VCAs to legitimise imposed environmental agendas increasing the social vulnerability of rural populations and with little concern over rights and access (Fairhead and Leach, 1996; Li 2002). As it has been explored, the potential for radical social transformation of community-led conservation has been simplified as a means to achieve cost-effective objectives framed in hectares under some category of protection rather than on the local processes promoted (Mansuri and Rao 2004). Meanwhile, the nation-state slows decentralization by limiting the kinds of powers to be transferred and enhancing local institutional arrangements that are likely to serve central interests (Ribot et al. 2006). Furthermore, accountability of natural resources management remains flowing from bottom to top while “downwardly” accountability is practically non-existent (Ribot et al. 2010).

Although external alliances are a good first step to strengthen the institutional framework surrounding El Reten, Adger et al. (2005) warns about the fact that cross-scale interactions by powerful stakeholders, such as strong external alliances in the decision-making process of El Reten, is likely to undermine trust in resource management arrangements. The process can further disempower resource users when information and resources are not shared with stakeholders in what has been identified as elite capture by the operational committee and powerful people within the settlements (Platteau and Gaspart 2003; Platteau et al. 2014). The case presented in this thesis is consistent with Brockington et al. (2008) in the sense that community conservation replicates a set of inequities present in other categories of protected areas in terms of decision-making and accountability, as well as manipulating local governance structures for the processes to fit external frameworks like those defined by the PES and other subsidy schemes. The trade-offs between institutional efficiency and legitimacy and equity in community-led processes (Corbera et al. 2007; Platteau and Gaspart 2003). The latter is encouraged by the institutional and project cycles in which external institutional frameworks are embedded. Even though external alliances allow better coordination between otherwise competing governmental and non-governmental agencies by clearly distributing operational responsibilities, these alliances sacrifice legitimacy and the right to prior informed consent in order to

adjust to institutional times of funders (Platteau et al. 2014). These alliances cannot be a substitute of local structures for accountability and transparency (Ostrom and Cox 2010). Furthermore, the replacement of local structures by external regulations may be easier to enforce but only increases the reliance on external subsidies and regulatory frameworks, undermining the potential of the process to become self-sustainable (Rahnema 2010).

#### **8.4.1 The role of NGOs**

The case study of El Reten presents a clear example of the current role of NGOs in multi-scalar governance arrangements. Even though NGOs and donors hold the potential to enhance the establishment of local democratic institutions, which are the basis of decentralization (Ribot et al. 2006), their usual role is that of project implementers, replacing bureaucratic state entities as the “experts” (Mansuri and Rao 2004). NGOs in the latest history of El Reten have had have a role opening new political spaces for other governance scales than the state (Arts 2004). In the case of El Reten, the long relationship with external actors through projects and conflict-resolution processes has allowed them to develop the skills and elements to contest external impositions (Walker et al. 2007). However, the weakness of local governance structures makes San Miguel vulnerable to the imposition of external agendas.

The operational committee has developed practices consistent with a process of elite capture through the selective distribution of limited knowledge in both ways: to donors and to beneficiaries (Platteau et al. 2014). Current NGOs do have a role legitimising dominant discourses defining the local needs and strategies of action (Li 2002). Moreover, NGOs often avoid working in communities where fast and evident results can be difficult to achieve (Mansuri and Rao 2004). The same counts for strong enough communities that oppose or challenge external agendas, competing with the state (Rahnema 2010), where support is quickly withdrawn in a classic “*take it or leave it*” approach. These misnamed non-governmental organisations are part of the range of parties contributing to measure, to govern and to improve societies around the globe (Li 2005). The latter is particularly if VCAs/ICCAs are implemented in societies that tend to internalise dominant



perceptions and values due to the marginalisation they have been subject to through time (Rahnema 2010).

## **8.5 Power devolution to VCAs/ICCAs in Mexico**

ICCAs and their potential Mexican equivalent, VCAs represent a great possibility for the generation of protected areas governance arrangements that acknowledge the critical role that indigenous peoples and local communities play in the long-term conservation of bio-culturally diverse systems (Kothari et al. 2012: 9). Currently, indigenous peoples or local communities are one of many members of governance arrangements for conservation (Berkes 2009). Such collaborative institutional arrangements for protected areas governance imply a process of cross-scale devolution from the state to other actors (Lockwood 2010). However, devolution processes rarely involve the transference of sufficient decision-making and economic powers for implementation, creating uneven spaces for participation and, ultimately, leaving the powers grounded in government agencies (Abrams et al. 2003; Berkes 2009; Goodwin et al. 2005: 421; Ribot et al. 2010). The existence of communal land-tenure figures places Mexico in a privileged position for the formal recognition of ICCAs compared to other nations, where land belongs entirely to the state (Martin et al. 2010). The development of the legal figure of VCAs is a great achievement for the Mexican protected areas policy, advocacy groups and local and indigenous communities. It supposes advantages through decentralized adaptive management systems which are cross-cutting themes of the CBD ecosystems approaches for conservation (Kothari et al. 2012:40). Furthermore, in the case of El Reten, the constitution of the operational committee could represent an innovative approach for external institutions to develop coordinated actions for conservation. Consequently, funders have been attracted by the efforts and this has allowed the continuity of conservation efforts in the Chimalapas region since 2008. Nevertheless, as it has been shown in section 8.1 and 8.2, power devolution is not flowing back to local communities through the implementation of the VCA, undermining its positive potential to support and strengthen local governance structures and long term sustainability.

Even though VCAs could be comparable to the ICCA definition, the legal frameworks that give the government the role of 'certifying' ICCAs pushes governance towards a co-management situation, a risk already identified by the analysis of VCAs in La Chinantla, Sierra Norte of Oaxaca by Martin et al. (2010). Co-management arrangements are not necessarily negative for local structures and there is a diversity of degrees of co-management present in most of ICCAs (Berkes 2009; Kothari et al. 2012: 16). However, the problem emerges when external structures for co-management take over the leading role in the decision-making process and local governance structures are undermined instead of being enhanced. This is the case of El Reten, located in a community, which is in a threshold where communal structures and customary forms of organisation are not currently strong enough to guarantee effective local governance (Becker and Ostrom 1995). This is how members of the operational committee justify their excessive intervention and elite capture (Kothari et al. 2012; Platteau and Gaspart 2003). Notwithstanding the advantages that the development of the VCA figure represents, this dissertation has illustrated that the implementation of the policies supporting "community-led" conservation in Mexico is far from operating for the strengthening of local governance structures.

The case-study of the implementation of El Reten shows that this conservation effort is not consistent with the three key characteristics that define Indigenous Community Conserved Areas. Regarding the first feature, related to the profound relationship between a well-defined community and a clearly-defined site, section 7.1 has shown the complexities emerged from the recognition of a 'community-conserved area' in a large area where only two settlements are directly related to it. Since the role of the locals defining the management rules is more important than the official recognition itself (Brockington et al. 2008: 68), the implementation of VCAs should make more emphasis on the feature of ICCAs related to the rooted institutions in communities. Furthermore, the spaces for local representatives to have an input in planning and management are limited by asymmetric power structures (Adams and Hutton 2007; Adger et al. 2005; Lebel et al. 2006). Local representatives are expected to defend their stakes in boards

that bring powerful actors such as NGOs and state agents with different discursive and inclusive capacities. The procedures in the VCA are efficient for external institutional times and operation but undermine the second key feature of ICCAs where people or community should hold a major role in the decision-making, implementation and enforcement for the management of the area. Regarding the third key feature, the only communities' management decisions that were salient in this research were related to the forest fire control activities and the conservation of the area in order to protect watersheds. The mismatch between institutional times and community decision-making process undermines the local ability to engage in an informed, active and meaningful manner. Thus, even when processes are called participatory and even community-driven, in practice, decision-making is mainly limited to the operational committee and funding bodies deciding unanimously. This is consistent with Corbera et al. (2007) who argue that equity and legitimacy are compromised when decision-making powers are accumulated by the brokers. Consequently, the viability and sustainability of the conservation and natural resource management efforts are not consistent with the principles that the common pool resource theory defines in order to avoid the tragedy of the commons and the 'prisoner's dilemma' that prevents any meaningful collective action (Becker and Ostrom 1995; Ostrom 2002).

Therefore implementation of VCAs within the Mexican context fails to devolve governance powers at the diversity of scales involved, particularly to the local settlements one (Durand et al. 2014; Martin 2010). Even though institutional efforts have been invested to make conservation strategies compatible with legal requirements in terms of participation, such processes still raise issues related to the quality of participation, as well as to legitimacy and representation. Even though VCAs are being portrayed as community-led initiatives, the design and implementation of those conservation strategies are in fact, led by external institutions and locally validated in most cases. Furthermore, decision-making processes are inconsistent with the indigenous peoples' right to prior informed consent and participation (ILO 1989) by promoting community members to get into agreements with limited information. The local understanding of agreements and operational regulations is further complicated by the limited spaces and local

capacities for an effective deliberative process. These procedures are failing to comply with the United Nations Declaration of the Rights of Indigenous Peoples regarding indigenous peoples' right to self-determination (Art. 3), to participate in decision-making (Art. 18) and the right to maintain control of their cultural heritage (Art. 31). These faults turn the implementation of VCAs into a case of inappropriate recognition (Kothari et al. 2012: 63). Moreover, there is an explicit expansion of the powers of the state over these areas in terms of regulations supervision and certification under externally defined standards. The latter is consistent with the literature on the expansion and building of the state through protected areas and development projects (Bray et al. 2012; Brockington et al. 2008; Durand et al. 2014; Haenn et al. 2014; Li 2002)

Finally, this dissertation explores the reasons for the lack of effective power devolution processes present in VCAs. From a management point of view, effective power devolution requires structural changes at different scales of the governance arrangement such as shifts in institutional times and communication flows that allow for local deliberation processes and informed decision-making. At the operational scale, there is a need for new institutional arrangements and operational procedures that help to recover and strengthen communal structures and capacities for decision-making, enforcement and self-regulation. Overall, an increased valuation of the importance of strong communal governance structures is particularly relevant for power devolution processes for ICCAs operation (Dietz et al. 2003; Berkes 2004; 2007; 2009). However, a closer look through the Sociology theorists who have worked around the concept of power allows us to improve our understanding as to why power devolution is so elusive (Ribot et al. 2006).

For Foucault, power is embodied and socialised in everyday life, being the reason why often, power struggles do not lead to a change in social order (Gaventa 2003). Power is manifested in each society through regimes of truth, which are the discourses that are accepted and functioning as the legitimate truth (Rabinow 1991). "*Regimes of truth*" are a result of scientific discourse and institutions and are reinforced, negotiated and redefined through the educational system, the media and the social interactions, constituting a source of discipline and

conformity (Gaventa 2003). The “*metapower*” or “*regime of truth*” is constantly flowing and being negotiated in society through the accepted forms of knowledge constituting the term “*power-knowledge*”. Despite the potential for radical change of ICCAs, their implementation has not managed to challenge the current regimes of truth represented in current legislation and conservation agents’ practices. Actually, the opposite has happened, and the formal recognition of VCAs is replicating the “*Regimes of truth*” legitimising the discourses of the state and its regulatory frameworks in previously more autonomous communities. As the conservation discourse is assimilated and incorporated to the self-regulations, local ways of knowing, practices tend to be homogenised to the practices that are still influenced by the Western thought about pristine nature detached from human beings ((Andrade and Rhodes 2012; Sachs 2010). The latter is consistent with what Gramsci called hegemony, which is the complement to coercion in Gramsci’s arrangement of power. It is the consent of subordinate groups (civil society) to domination actively constructed by institutions, cultural practices, social interactions and different processes leading society to develop the ideologies consequent to what the dominant classes want (Kenway 1990).

Hence, power is not located in a central apparatus; instead, there is a relationship between all the points of the social totality (Kenway 1990). As a result, power cannot be deliberately provided and received from one social actor to the other. This could represent a viable explanation for power devolution to remain an administrative aspiration. Furthermore, this understanding opens the possibility for the generation of a radical change which focuses on the reflection and generation of alternative ways of knowing, constituting the counter-hegemony (Gramsci 2007:168). As Weber has pointed out, culture is a place where individuals can also find partners and solidarity on which alternatives can be generated (Weber 1946:172). Without doubt, the most bio-culturally diverse region of Mexico has examples of such alternative ways of knowing. Anthropologists argue that the alternative cultural worlds, “*located outside the state and in the margins of the Mexican society*” have solutions to offer to environmental and governance problems (Haenn et al. 2014), but this requires to

move away from the “one-size-fits-all” approach of protected areas management categories.

## **Chapter 9. Conclusion: Fuelling the tragedy of the commons through ICCAs.**

This dissertation has presented the first evaluation of a VCA in terms of its multi-scalar governance approach and its compatibility with the principles of the IUCN governance category of ICCAs. Through the exploration of the national legal frameworks, the conditions for local participation and the bureaucratic limitations for state protected areas management have been explored. The historical background for VCAs to become one of the state protected areas categories through a certification process has been detailed and the practical implications of the establishment of a VCA in a priority region for conservation in Southern Isthmus Mexico has been researched. Devolution processes in El Reten were analysed in terms of the bundles of rights or powers that local community holds for natural resource management after the certification of El Reten and during its early implementation. The research techniques applied to develop this research included: (1) document revision on national legislation for protected establishment and management; (2) forty four semi-structured interviews with conservation practitioners at different administrative levels, as well as (3) 32 semi-structured and unstructured interviews and direct observations to conform an in-depth case study of the VCA of El Reten, in San Miguel Chimalapa.

ICCAs are distinguished principally by the role of the local community as the main power-holder – the “major player” in decision-making and implementation –. The category is intended to provide a mechanism for external recognition and support for local community contributions to the global conservation project. In the context of developing countries, these approaches advocate for the devolution of decision-making powers to indigenous and traditional communities over their lands and resources. The issues examined throughout this dissertation have explored for the first time who is entitled to “give” which powers back to local communities; the actual procedures that allow these approaches to be called community-driven when ICCAs

can only retain “power” by conforming to externally defined criteria, and finally, if devolution is happening, the way “bundles of rights” - or powers - (Ribot and Peluso 2003) interact with external criteria for conservation.

Mexico is considered one of the countries with the most developed legal frameworks to formally acknowledge ICCAs and has an extensive inventory of them (Martin et al. 2010; 2011). As it has been shown through this research, the so-called participatory approaches to conservation, rather than representing alternatives, are replicating the hierarchical schemes and legitimizing state-nation discourses, ways to know and realities under new policy categories. The perceptions and experiences from conservation practitioners provide evidence of a failed state, with lack of inter-institutional coordination and insufficient powers and capacities to develop their surveillance and enforcement activities. At a regional level, it has been possible to observe the human, technical and economic needs that have made multi-scalar governance approaches for protected area management a necessity more than an evolution towards more democratic processes. Still, the state remains central within this arrangements by keeping discretionary powers to decide who is invited to participate and how. Furthermore, the legal frameworks and regulations for protected areas and VCAs have been designed for a one-size-fits-all approach, overlooking local heterogeneity and undermining the local governance structures that, in many cases, have allowed the sustainability of natural resources management.

The case study of El Reten provides a clear portrait of the implications that the formalisation of a VCA has for local governance structures. These decentralised approaches for conservation are also subject to elite captures (Platteau and Gaspart 2003), not only by local elites but by the groups of self-proclaimed “experts” determining priorities, strategies and funding for the conservation of the VCA. The decision-making process hereby presented shows the “*messiness of policy in practice*” (Leach et al. 2007) and the trade-offs between the availability of economic resources and local autonomy, as well as between administrative efficiency and equity and legitimacy. The establishment and early implementation of El Reten exhibit common



practices in protected areas management and is an addition to the literature documenting other VCAs in Mexico (Bray et al. 2012; Durand et al. 2014; Fraga 2006; Martin et al. 2011; Mitchell 2006; Pujadas and Castillo 2007). These practices include the use of economic incentives and subsidies to face local resistance; decision-making processes that lack legitimacy and equity due to information manipulation and rushed by bureaucratic times, as well as the imposition of externally designed agendas and regulations that neglect local governance arrangements.

Seen through the light of the CPR principles for institutional arrangements that enhance sustainability, the VCA in El Reten lacks of a clearly defined community and resource boundaries. This is further complicated by the ill-defined border between Chiapas and Oaxaca. The operational committee in El Reten in conjunction with communal authorities have modified the decision-making process in San Miguel in order to reach consent faster and to reduce the risk of conflict. Moreover, the information available for decision-making is limited and there are no downwardly accountability mechanisms in place, undermining trust locally and across scales. By basing strategies on simplified images of the community, the distribution of the cost and benefits of the management and protection of the VCA increases inequity in the community, enhancing internal conflicts. The monitoring strategies and evaluation criteria have been externally designed and enforced through conditioning to the regulations imposed by external sources of funding. Since regulations have been also externally designed, there is no clarity about the rules and neither local nor external agencies have clear sanctioning powers over rule-breakers. Finally, while communities have the legal right to organise and there are efforts to develop conflict-resolution mechanisms and to develop nested enterprises through the resin harvest cooperatives, the excessive reliance on external agencies capacities, funding and regulatory mechanisms, make local governance fragile. These conditions project the perfect scenario for the tragedy of the commons (Hardin 1968), where the establishment of a VCA, the arrival of economic incentives through PES, resin harvest and logging permits as well as the neglecting of the local political context by conservation agencies are fuelling the tragedy instead of alleviating it.

In Mexico, where institutional arrangements are usually related to a failed state (Haenn et al. 2014), there is a lack of conditions to enhance and promote the principles related to collective action towards sustainability through the formalisation of community-conservation efforts (Becker and Ostrom 1995). The findings of this dissertation in terms of the lack of institutional coordination, the role of participatory approaches for protected areas management as a tool for legitimisation of externally imposed regulations and discourses as well as the expansion of the state are well supported by the literature in development and conservation (Brockington et al. 2008; Li 1996; 2002; 2005). Issues on elite capture, inequity regarding access to information for decision-making, and the perceived unfairness of the cost-benefit sharing at local levels in protected areas are also a common thread in the Political Ecology literature (Adams and Hutton 2007; Brockington et al. 2008; McDermott and Schreckenberg 2009; Platteau and Gaspart 2003) and ethnographies in protected areas (Trench 2008). Nevertheless, it is the first time that this has been explicitly shown in the context of the newly developed VCA category in Mexico.

The trend of this new policy tool is that of the forestry sector, where communities are acknowledged as the owners of the forests but face several limitations to exercise that ownership through autonomous strategies (Merino-Perez 2001). The naivety or negligence of conservation agencies about the motivations and power struggles and their effect on how decisions are made and whose values prevail in conservation efforts tend to sustain inequalities and injustices, both local and global (Cooke and Kothari 2001; McDermott and Schreckenberg 2009). Nevertheless, power is constantly constructed through the interaction between all the points of the social totality (Kenway 1990). This opens the possibility for the generation of a radical change which focuses on the reflection, generation and strengthening of alternative ways of knowing able to constitute counter-hegemony (Gramsci 2007:168). Culture is a place where alternatives can be generated (Weber 1946:172). Without doubt, the most bio-culturally diverse region of Mexico still has many lessons to share about alternative ways of knowing and acting in response. Anthropologists argue that the

alternative cultural worlds, “*located outside the state and in the margins of the Mexican society*” have solutions to offer to environmental and governance problems (Haenn et al. 2014), but this requires to move away from the “one-size-fits-all” approaches and going beyond creating new protected areas management categories.

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# Appendix I. SSI guide for the bureaucratic relationships between the State, practitioners and PA managers.

The interview guides below provide a checklist of the topics to be covered during semi-structured interviews at two levels:

- (1) National and regional officials from the state protected areas authority CONANP and relevant NGOs
- (2) Managers of individual protected areas

The topics refer to perceived strengths and weaknesses of the current mechanisms in terms of a) recognition and b) implementation of the different forms of protected area or ecological easement, with emphasis on:

- 1.1 Bureaucratic requirements, local institutions and capacity of state and non-state actors to bridge the two
- 1.2 Technical approaches to natural resource management versus traditional or local knowledge and practice
- 1.3 Centralisation/decentralisation within the state system and the implications for the above;

## **(1) National and regional officials from the state protected areas authority CONANP and relevant NGOs**

Introduction to the interview:

This research is focused on the strengths and weaknesses that practitioners at different organizational levels find on the current mechanisms for recognition and implementation of different forms of protected areas and ecological easements. I'd like to ask you some questions on this respect.

### **1.1 Bureaucratic requirements**

- Experiences regarding bureaucracy and institutional barriers related to the recognition and implementation of state-managed Pas/certified areas/ecological easements.
- Systems of coordination, consultation and feedback from the PAs managers to the national level in place, if any.
- Clarity, accessibility and interpretations of the bureaucratic procedures for actors involved
  - Differences between what is stated by law and the conditions on the ground.
  - Effects on the interaction between the central offices and the PAs managers and the PA management itself.

## **1.2 Technical approaches versus traditional or local knowledge and practice**

- To what extent do you think current mechanisms and protocols are appropriate to incorporate local actor's knowledge and practices in conservation efforts?
  - Clarity, accessibility and flexibility of the current procedures and requirements for PA recognition and management to local relevant actors.
  - Do benefits offered match local actors' efforts?
- Potentials and obstacles for facilitation and monitoring of local participation in conservation.
  - Perceived attitudes of local practitioners. What capacities need to be developed within agencies?
  - Some people suggest that there might be some issues regarding the role that NGOs acting as consultancies or intermediaries in the process, what is your view about it? Should and could it be regulated?

## **1.3 Decentralisation**

- How has the decentralization process been reflected within PAs agencies and organisations?
  - Distribution of faculties, responsibilities and budgets to lower hierarchical levels.
  - Have any complexities resulted from this process?
  - How has it influenced the bureaucratic procedures of interest?
- Which programs are likely to work better in a state-led way and which are likely to work better on a decentralised way?
  - Advantages/disadvantages to strong autonomy of authorities at lower hierarchical levels.

## **1.4 Final**

- Is there anything you would like to add?

Thank you very much for your time and attention.

### **Entrevistas en español**

#### **1. Oficiales o representantes en oficinas centrales y regionales de la Comisión de Areas Naturales Protegidas (CONANP) y ONGs.**

Introducción a la entrevista:

Esta investigación busca enfocarse en las fortalezas y debilidades que los profesionales en diferentes niveles organizacionales encuentran en los mecanismos actuales para el reconocimiento e implementación de ANPs. Las siguientes preguntas giran alrededor de este tema.

#### **1.1 Requerimientos burocráticos**

- Experiencias con burocracia y barreras institucionales para el reconocimiento e implementación de ANPs.
- Sistemas de coordinación, consulta y retroalimentación del personal a nivel operativo hacia las oficinas generales y viceversa.
  - Claridad, accesibilidad e interpretaciones de los procedimientos burocráticos para los diferentes actores involucrados.
  - Diferencias entre lo que está estipulado por ley y lo que sucede a nivel operativo.
  - Efectos en la interacción entre las oficinas centrales y los administradores de ANPs y el manejo en sí.

### **1.2 Enfoques técnicos y conocimiento y practicas tradicionales o locales.**

- ¿Hasta qué punto cree que los mecanismos y protocolos actuales son apropiados o permiten incorporar el conocimiento y prácticas tradicionales o locales en los esfuerzos de conservación?
  - Claridad, accesibilidad y flexibilidad de los procedimientos y requerimientos para los actores locales.
  - ¿Los beneficios equiparan a los esfuerzos requeridos?
- Potenciales y obstáculos para la facilitación y monitoreo de la participación de actores locales en conservación.
  - Percepción de actitudes de parte de otros profesionales. ‘Qué capacidades necesitan ser desarrolladas?’
  - ¿El papel de las ONGs, debería ser regulado? ¿En qué aspectos?

### **1.3 Descentralización**

- ¿Cómo se ha visto el proceso de desconcentración o de descentralización en esta organización/dependencia?
  - Distribución de facultades, responsabilidades y presupuestos a niveles jerárquicos menores.
  - ¿Existen complicaciones que han resultado de este proceso?
  - ¿Cómo ha influenciado los procedimientos burocráticos?
- ¿Qué tipo de programas tienden a trabajar mejor de una manera centralizada y cuáles de manera descentralizada?
  - Ventajas y desventajas de la autonomía de niveles jerárquicos menores

### **Final**

- ¿Hay algo más que desee añadir?

Muchas gracias por su tiempo y atención.

## Appendix II.

### List of interviewees and coding system

Forty four semi-structured interviews were carried out with the following actors in order to explore different conservation practitioners' perspectives:

#	Position	Place of interview	Date of interview	ID code
1	CONANP National office for VCA certification	Mexico City	May 20 <sup>th</sup> , 2009	RM
2	CONAFOR representative	Oaxaca	July 31 <sup>st</sup> , 2010	SA
3	Regional Director CONANP	Tuxtla Gutierrez	August 4 <sup>th</sup> , 2010	JJ
4	CONANP's responsible for the Chimalapas Priority Region for Conservation	Juchitan	August 25 <sup>th</sup> 2010	SC2
5	Regional Technical Secretary	Tuxtla Gutierrez	August 4 <sup>th</sup> , 2010	GJ
6	CONANP Regional office for VCA certification	Tuxtla Gutierrez	July 15 <sup>th</sup> , 2010	TM
7	Fire management CONANP	Tuxtla Gutierrez	August 4 <sup>th</sup> , 2010	KA
8	State agency for PA SEMAVIH	Tuxtla Gutierrez	October 5 <sup>th</sup> , 2010	BH
9	State agency for PA SEMAVIH	Tuxtla Gutierrez	October 5 <sup>th</sup> , 2010	JO
10	State agency for PA SEMAVIH	Tuxtla Gutierrez	October 5 <sup>th</sup> , 2010	BB
11	Yagul staff	Oaxaca	September 20 <sup>th</sup> , 2010	SG
12	Naha and Metzabok (APRN) staff	Palenque	June 16 <sup>th</sup> , 2009	HJ
13	REBISE staff	Tuxtla Gutierrez	August 9 <sup>th</sup> , 2010	VA
14	REBIMA staff	Lacanja	September 10 <sup>th</sup> , 2010	NS
15	REBIMA staff	Lacanja	September 10 <sup>th</sup> , 2010	RJ
16	REBIMA staff	Lacanja	September 10 <sup>th</sup> , 2010	RChan
17	REBIMA staff	Lacanja	September 10 <sup>th</sup> , 2010	GAM



18	REBIMA staff	Lacanja	September 10 <sup>th</sup> , 2010	POM
19	REBIMA staff	Lacanja	September 10 <sup>th</sup> , 2010	FCOR
20	REBITRI staff	Tuxtla Gutierrez	August 9 <sup>th</sup> , 2010	CC
21	REBIEN staff	Acapetahua	August 16 <sup>th</sup> , 2010	EA
22	REBIEN staff	Acapetahua	August 16 <sup>th</sup> , 2010	GO
23	REBIEN staff	Acapetahua	August 16 <sup>th</sup> , 2010	CL
24	REBIEN staff	Acapetahua	August 16 <sup>th</sup> , 2010	GN
25	REBIEN staff	Acapetahua	August 16 <sup>th</sup> , 2010	CN
26	REBIEN staff	Acapetahua	August 16 <sup>th</sup> , 2010	FLR
27	REBIEN staff	Acapetahua	August 16 <sup>th</sup> , 2010	COS
28	REBIEN staff	Acapetahua	August 16 <sup>th</sup> , 2010	PRO
29	REBIVTA staff	Cacahoatan	August 6 <sup>th</sup> , 2010	PLA
30	REBIVTA staff	Cacahoatan	August 6 <sup>th</sup> , 2010	HP
31	REBISO staff	Tuxtla Gutierrez	August 9 <sup>th</sup> , 2010	ER
32	National Parks director in Chiapas	Tuxtla Gutierrez	August 7 <sup>th</sup> , 2010	GE
33	NGO representative	Oaxaca	May 25 <sup>th</sup> , 2009	CDC
34	NGO representative	Xalapa	May 20 <sup>th</sup> , 2009	CIC
35	NGO representative	Mexico City	May 26 <sup>th</sup> , 2010	SA
36	NGO representative	Tuxtla Gutierrez	June 11 <sup>th</sup> , 2009	HA
37	NGO representative	Tuxtla Gutierrez	November 5 <sup>th</sup> , 2010	GP
38	NGO representative	San Cristobal de las Casas (SCLC)	June 5 <sup>th</sup> , 2010	MO
39	NGO representative	SCLC	July 28 <sup>th</sup> , 2010	AI
40	NGO representative	SCLC	July 28 <sup>th</sup> , 2010	RFE
41	NGO representative	SCLC	December 16 <sup>th</sup> , 2010	GM
42	Owner of private reserve	Tuxtla Gutierrez	August 2 <sup>nd</sup> , 2010	MLE
43	Female <i>comisariada</i> from Chiapas.	Santa Maria Guienagati, Oax.	September 23 <sup>rd</sup> , 2010	LM
44	Owner of private reserve	Tapachula	August 6 <sup>th</sup> , 2010	NEF

Table I. Protected area staff and conservation practitioners interviewed.

## Qualitative data from in-depth case study

#	Place	Date	Identification code
1	Juchitan and Oaxaca	Juchitan, July 7 <sup>th</sup> and 22 <sup>nd</sup> , 2010	MJ
2	Juchitan	August 25 <sup>th</sup> , 2010	SC2
3	Juchitan	August 25 <sup>th</sup> , 2010	AI
4	Oaxaca	February 26 <sup>th</sup> , 2011	OD
5	SCLC	December 16 <sup>th</sup> , 2010	GM
6	Zanatepec	July 7 <sup>th</sup> , 2010	PR
7	San Miguel	October 15 <sup>th</sup> , 2010	UP
8	San Miguel	October 22 <sup>nd</sup> , 2010	RS
9	San Miguel	October 23 <sup>rd</sup> , 2010	DC
10	San Miguel	November 3 <sup>rd</sup> , 2010	CyC
11	San Miguel	November 3 <sup>rd</sup> , 2010	CA
12	San Miguel	November 6 <sup>th</sup> , 2010	ES
13	San Miguel	November 17 <sup>th</sup> , 2010	SMV
14	San Miguel	November 16 <sup>th</sup> , 2010	GRR
15	San Miguel	November 18 <sup>th</sup> , 2010	PR2
16	San Miguel	November 25 <sup>th</sup> , 2011	MA
17	San Miguel	November 25 <sup>th</sup> , 2010	SAD
18	San Miguel	November 26 <sup>th</sup> , 2010 and May 14 <sup>th</sup> , 2012	DS
19	San Miguel	November 26 <sup>th</sup> , 2010	AEM
20	San Miguel	November 27 <sup>th</sup> , 2010	CJM
21	San Miguel	November 27 <sup>th</sup> , 2010	GG
22	San Miguel	November 30 <sup>th</sup> , 2010	RA
23	San Miguel	December 3 <sup>rd</sup> , 2010	ST
24	San Miguel	December 8 <sup>th</sup> , 2010	GM2
25	San Miguel	December 10 <sup>th</sup> , 2010	SC
26	San Miguel	December 11 <sup>th</sup> , 2010	SB
27	San Miguel	January 15 <sup>th</sup> , 2011	SGU
28	San Miguel	March 16 <sup>th</sup> , 2011	JIJ
29	San Miguel	March 17 <sup>th</sup> , 2011	EAG
30	San Miguel	March 17 <sup>th</sup> , 2011	LA
31	San Miguel	May 13 <sup>th</sup> , 2012	GF
32	San Miguel	May 5 <sup>th</sup> , 2012	QO

Table II. Interviewees related to the case study in San Miguel Chimalapa.

#	Meeting	Place	Date	Subject	Attendants
1	Experience exchange of conservation and management of private reserves.	SCLC, Chiapas	July 14-16 <sup>th</sup> , 2010	Building management capacities for owners or private reserves	Owners of 15 private reserves in Chiapas. Representatives of private reserves in Costa Rica, Guatemala.
2	Planning meeting of the Inter-institutional group for sustainable	Juchitán, Oaxaca.	July 7 <sup>th</sup> , 2010.	Planning, coordination and funding arrangements for the use of PES, and the	Representatives of CONANP(1), WWF(1), GADES (1), Fondo Mexicano para la Conservación (1), Pronatura Sur (2)

	development of Chimalapas.			establishment of a VCA in La Cristalina.	and, later, the President Communal Committee of San Miguel.
3	Community conservation experience exchange	Santa María Guienagati, Oaxaca.	September 22-24, 2010.	Community Conservation and its challenges.	Community representatives of communities in Chiapas, Oaxaca, Guerrero and Guatemala.
4	Environmental Defence Workshop	SCLC	September 29-30 <sup>th</sup> , 2010	Legal aspects to deal with deforestation, land invasion and pollution inside protected areas.	Five directors of protected areas CONANP; owners of 8 private reserves; representative of CONANP's legal regional direction. One environmental lawyer.
5	Meeting in a Settlement	San Miguel	October 14 <sup>th</sup> , 2010.	Distribution of wood-saving stoves.	CONANP representative, 25 women from the settlement and three men.
6	Meeting in a Settlement	San Miguel	November 23 <sup>rd</sup> , 2010	Issues related to the resin harvest project.	14 comuneros
7	Auxiliary Secretary assembly.	San Miguel.	December 10 <sup>th</sup> , 2010.	Various.	18 Auxiliary Secretaries, the Communal and Vigilance Committees, Representatives of WWF, GADES and Pronatura Sur.
8	Local assembly.	Benito Juarez.	December 22 <sup>nd</sup> , 2010.	Communal statute.	Comuneros and communal authorities in charge of the communal statute (17 people).
9	Auxiliary Secretary assembly.	San Miguel.	March 4 <sup>th</sup> , 2011.	The arrival of a complementary project to PES to the community. PES distribution.	17 Auxiliary Secretaries, the Communal and Vigilance Committees, 10 people from the commission in the eastern settlements, Representatives of WWF, GADES and Pronatura Sur, Fundación Comunitaria.

10	Exchange Forum of Community Conservation.	Campeche.	6 Mayo 2011.	Strengths and challenges off community conservation.	INECOL, UAC, CIEco-UNAM, CITRO-UV, GDF, ICTA-UAB, UKent. Six rural ccommunities from Campeche, Quintana Roo, Veracruz and Oaxaca.
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**Table III. Meetings, workshops and assemblies attended during fieldwork.**