Recognising the limitations of the traditional ‘fortress approach’ to governance of protected areas has led to a new model that seeks to reconcile environmental conservation with human development and promote participation by local populations. Based on a comparative analysis of four case studies in Bolivia and Peru, the present article shows the processes, problems and potentialities that emerge from the inclusion of indigenous peoples in the governance of protected areas. It demonstrates that there are many political, economic, social and cultural obstacles to reconciling conservation with development. The article identifies four critical points that need to be addressed in order to understand and mitigate these obstacles: 1) the discontinuities between formal legal frameworks and local practice; 2) the difficulties of integrating conservation with economic activities; 3) the challenge of establishing an intercultural dialogue among the actors involved; and 4) the preponderant but ambiguous position of the state. In each of these points, the conflicting interests of and the unequal power relationships between the state, indigenous peoples, conservation organisations and extracting companies are the key drivers that create the obstacles.

Keywords: Protected areas; indigenous peoples; participatory conservation; governance; social conflicts; natural resource management; Amazon; Andes.
### 32.1 Introduction

Protected areas are created in order to safeguard biodiversity in a context of growing global demand for natural resources and pressure on land. However, they also have negative impacts on the livelihoods of local people. In this sense, protected areas represent a response to as well as a constituent element of global change (Galvin and Haller 2008). Before the 1980s, the dominant method of governing protected areas was shaped by the ‘fortress approach’, which emphasised state control, restricted the use of resources, and sometimes displaced local populations from these areas (Stevens 1997). In many cases, this focus led to an increase in social conflicts that gravely compromised the long-term effectiveness of protected areas and was also ethically questionable (Brechin et al 2002). Many scholars and practitioners have since proposed responding to this problem by seeking to reconcile environmental conservation with human development, and promoting the participation of local populations in the management of protected areas. This has resulted in a change of analytical paradigm, reinforced by the emergence of the concept of ‘bio-cultural diversity’ in the 1990s, which is based on the recognition that there is a link between biological and cultural diversity (Posey 1999). This is partly why we now see a proliferation of ‘nature–society hybrids’ in the world of conservation (Zimmerer 2000) which recognise that sustainable use of biodiversity and natural resources can be compatible with conservation.

In South America, the inclusion of indigenous peoples and peasant communities in conservation efforts, recognising the contribution of their traditional activities in sustaining biodiversity, has been increasingly promoted by international conservationist organisations. However, this tendency contrasts with the increasingly weak role of the state in the management of protected areas as a result of privatisation and deregulation policies that have tended to benefit both the legal and the illegal private sector (Nelson and Sportza 2000). Under these conditions, there is persistent uncertainty about the efficiency of protected areas in integrating conservation with long-term local development.

An in-depth analysis of case studies in protected areas carried out by the Swiss National Centre of Competence in Research (NCCR) North-South (Galvin and Haller 2008) showed that participatory conservation is possible if it brings economic and political benefits to the local people(s) involved. However, it also showed that the paradigm shift towards more equitable and efficient implementation of protected areas through participation is far from complete.
The objective of this article is to describe the processes, problems and potentialities that emerged from inclusion of indigenous peoples in the governance of four protected areas, two in Bolivia and two in Peru. This analysis led to the identification of four critical points that must be addressed when seeking to reconcile conservation with development in the South American context: 1) the discontinuities between formal legal frameworks and local practice in the management of natural resources; 2) the difficulties of integrating conservation with economic activities; 3) the challenge of establishing an intercultural dialogue between the actors involved; and 4) the ambiguous position of the state.

### 32.2 Analytical framework and methods

Our analysis contains several theoretical references under the broad heading of political ecology, taking an approach based on institutionalism that focuses on the management of common-pool resources (Ostrom 1990) as a starting point. Furthermore, the case studies were analysed using an actor-oriented approach (Long 1992; Wiesmann 1998) that focused on different actors’ perspectives on resource management as expressed in their discourses, narratives and practices. This actor-oriented approach was given further depth by theoretical contributions from ethno-science (Atran 1991; Rist and Dahdouh-Guebas 2006) which helped to understand how actors construct their discourses, narratives and practices using specific forms of knowledge and perceptions of the relationship between society and nature.

Finally, the governance-analytical framework, which refers to the way the management of protected areas is shaped by formal and informal norms that are the result of interaction among the actors involved (Hufty et al 2007; Galvin and Haller 2008), made it possible to identify the continuities and discontinuities between the case studies in a joint interdisciplinary exercise.

The research was carried out in four protected areas (Figure 1) that are part of a ‘hotspot’ of biodiversity in the area of transition between the Andean mountain ranges and the Amazon plains. These case studies were selected in order to represent a broad spectrum of geographical, cultural, political and economic contexts, including lowland as well as highland areas, Andean and Amazonian indigenous peoples, and different Bolivian and Peruvian political and economic contexts. Moreover, the selected areas reflect different stages in the consolidation of protected areas, from areas created 40 years ago, such
as the Tunari National Park (TNP), to areas still in the process of implementation, such as the Sierra del Divisor Reserved Zone (SD-RZ). The main actors involved in the four case study areas were state representatives, indigenous peoples, conservationist organisations, and extracting companies.

32.3 Results

32.3.1 The Pilón Lajas Biosphere Reserve and Indigenous Territory: between market and conservation rationale

The creation of the Pilón Lajas Biosphere Reserve and Indigenous Territory (Pilón Lajas) in 1992 was a response to a joint demand from indigenous populations (Tsimane’ and Mosetene) and from a Bolivian non-governmental organisation (NGO) involved in agro-ecology. When the Agrarian Reform Law (INRA Law) was adopted in 1996, the 400,000 ha of the reserve were regularised through a collective and homogeneous land title in the name of a
single and unique indigenous political instance, apart from local communities. This way, Pilón Lajas became an area where resource use was restricted, leading to a ‘double denial’: on the one hand, the restrictions deny the effective and growing influence of a strong lumber market in which indigenous people participate, and on the other hand, the collective title denies the need expressed by these people for greater land security at both community and individual levels (Bottazzi 2008). This situation of ‘double denial’ favours open access to forest resources in the name of integrated conservation. The absence of alternatives to an exaggeratedly collectivist vision of property over space, emanating from the ‘new conservationist essentialism’, leaves openings for the introduction of a fundamentally proprietary paradigm subject to market rationale.

32.3.2 Misunderstood worlds: urban dreams and rural struggles in the Tunari National Park

The Tunari National Park (TNP) was created in 1962 to halt the expansion of the city of Cochabamba towards the hillsides and to protect the city from natural disasters. In 1991, the current legal framework was established, prohibiting grazing and restricting agricultural and forestry activities in the 300,000 ha allocated to the Park. Over 385 Quechua peasant communities live in the TNP. They were not consulted about the creation of the Park; they opposed the legal framework and impeded its implementation, with the exception of an area close to the city (1% of the total area of the TNP). In this same area, however, the TNP has not managed to prevent illegal trafficking in land destined for urbanisation. Peasant organisations regulate the local management of natural resources through productive and social practices sustained by principles of integrality, diversification, respect and reciprocity, while maintaining high ecosystem diversity (Figure 2). These activities reflect a concept of unity between society and nature, characterised by a spiritual relationship to the land.

The government of the Department of Cochabamba – which administers the TNP – and the conservationist organisations of Cochabamba insist on strict protection of the area. Biodiversity specialists at the local university see the TNP as an opportunity to promote conservation of native forests. Both of these actors propose a separation between economic and social development and natural and recreational areas, a suggestion that contrasts with the peasant concept of a society–nature relationship (Boillat et al 2008). The TNP’s classification as a National Park entails a superposition of the rights of the
national state over the legal tutelage of local political authorities (municipalities) regarding the management of natural resources. At the same time, peasant organisations propose autonomous management of resources based on the rights granted to them by the Agrarian Reform Law.

In the wake of the change of government in Bolivia and following implementation of a partnership project supported by the NCCR North-South, some conservationist organisations began to recognise the role of the peasant population in biodiversity management in the TNP. The peasant organisations, for their part, declared themselves in favour of a change in the legal framework for the area to permit traditional agricultural activities. However, other conservationist actors fear that such a change would make the area more vulnerable to land trafficking.

32.3.3 The Amarakaeri Communal Reserve: co-management and uncertain partnerships

The Amarakaeri Communal Reserve (ACR), extending over 400,000 ha, was created in 2002 owing to the ecological and cultural value of the area it covers. It was the result of a process of indigenous political self-determination through conservation, promoted by indigenous organisations with NGO support. The Harakmbut, Matsiguenga and Yine communities are estab-
lished on the outskirts of the reserve. Their representatives constitute the Executor of the Management Contract (EMA) and have signed a co-management contract with the state. The ACR legal framework permits hunting, fishing and harvesting activities, whereas commercial activities such as logging and gold extraction are not allowed. However, illegal continuation of the latter in the area has not been completely halted. These activities are the main source of income for groups of settlers, lumberjacks and miners, mainly from the Andean areas, who prioritise short-term economic development.

Contact with the market economy has led many indigenous people to become involved in these activities as well, mostly in a situation of indebtedness and disadvantage (Alca 2008). Some indigenous people, especially youths and those more closely linked with the market economy, had great expectations regarding economic benefits from the ACR; they became disillusioned, for example, with the inefficiency of a multi-communal ecotourism company. For this reason, some indigenous people perceive the ACR as a limitation that has mainly benefited those defending the interests of conservation. The problem is aggravated by the ambiguous position of the state, which is encouraging conservation on the one hand and promoting policies focusing on extraction of natural resources on the other. In 2005 the state granted a concession for exploitation of hydrocarbons (Lot 76) that covers the entire territory of the reserve and neighbouring areas (Álvarez et al 2008). This situation shows the permanent uncertainty in which the co-management of the ACR has been implemented.

32.3.4 Are conservation and sustainable development incompatible? The Sierra del Divisor Reserved Zone (SD-RZ)

The Sierra del Divisor is the only mountainous region in the lowland jungles of Peru, on the border with Brazil. In 2006 this area covering 1,400,000 ha was classified in the transitory category of ‘Reserved Zone’, for the purpose of protecting its biodiversity and endemic species as well as providing greater protection for the Isconahua indigenous group living in voluntary isolation within the area. The question of the final classification of the area opened up a process of negotiation between the state and the different actors. During the classification process, indigenous federations expressed their profound discontent with the work of some conservationist institutions; the latter were seen as making money in the name of indigenous peoples or the environment without generating concrete benefits. The federations shared the view of other local population groups that they would get no benefit from a protected area.
The predominant impression among indigenous people was one of expropriation; they felt that classification as a protected area would mean a ban on the use of forestry resources and would pose an obstacle to their territorial demands (Oliart and Biffi 2009). Conservationist organisations recognise the sustainability of traditional indigenous practices, but do not consider indigenous people capable of resisting pressure from logging companies that hire them or bribe their leaders. In fact, there are many signs in the area of illegal felling by settlers and indigenous people hired as cheap labour. The state – i.e. the actor with the greatest decision-making power regarding the SD-RZ – has assumed an ambiguous position that is clearly perceived as such by the different actors. On the one hand, the state takes measures to protect biodiversity and indigenous rights; on the other hand, it offers excellent conditions for extracting companies. For example, a contract for petroleum extraction has been granted on two lots (135 and 138) that overlap with the area of the SD-RZ. In conclusion, the case of the SD-RZ demonstrates the absence of an alliance between conservationist organisations and indigenous peoples, as well as the conflictive and ambiguous relationships that exist between the state and other actors.

32.4 Synthesis

32.4.1 Discontinuities between normative frameworks

In the cases of the ACR and Pilón Lajas, the new paradigm of including indigenous peoples in conservation efforts is explicitly and officially expressed in the formal legal framework. In the case of the TNP, the contribution of the peasant communities to biodiversity conservation has only very recently been recognised, and formal regulations have not yet been updated. The case of the SD-RZ shows the inverse tendency to apply a more rigorous category of conservation which restricts participation by indigenous people in its management, in line with the conservationists’ ‘new enclosure movement’ (Pimbert and Pretty 1995).

All cases showed that formal regulations are usually very ineffective, regardless of the stage of consolidation of the protected area. In the cases of the ACR, Pilón Lajas and the SD-RZ, this is reflected in lumber extraction and illegal mining activities, which are not traditional activities of the indigenous populations. By contrast, in the case of the TNP, it is the banning of traditional activities that would be too conflictive to be applied in practice.
In all cases, informal regulations of access to land and resources prevail at the local level, showing a clear lack of continuity between the formal legal frameworks and local practices. These discontinuities are expressed in the superposition of contradictory norms from different sectors (conservation, land tenure, logging and mining) and at different levels (national, sub-national, municipal and local). As a consequence, even ‘inclusive’ conservation policies cannot be merged into an integral framework for the regulation of access to natural resources, and no authorities are clearly designated for the different levels of decision-making.

32.4.2 Conservation and economic activities

In the cases of the ACR, Pilón Lajas and the SD-RZ, the involvement of indigenous communities in illegal activities is clearly linked to the strengthening of their relationship to the market economy, particularly through contact with the population of settlers and immigrant extraction workers. In this framework, extraction of resources continues to be the most attractive economic activity for them, despite its illegality and the subordinate position of indigenous people in relation to other actors in the extraction value chain (Figure 3).

This situation demonstrates that the protected areas have indeed failed to bring true benefits to the least powerful social groups, and that the economic integration of conservation has not been achieved. A similar phenomenon can be observed in the case of the TNP with the spread of illegal urbanisation, which has not been stopped.

These observations show that the models of incentives promoted by conservation policies, including alternative economic activities such as ecotourism or handicrafts, have little effect and provide insufficient benefits, given the weight and force of non-sustainable, extractive economic activities.

This situation raises the need for reflection on the relationship between indigenous communities and the market economy. The hypothesis which states that by entering the market economy indigenous communities are not following a rationale of creating and accumulating capital, but are hoping to ensure their subsistence and strengthen themselves in the face of external actors (Orozco et al 2006), deserves to be explored.
32.4.3 From inter-relation to intercultural dialogue between actors

This analysis has demonstrated that a significant source of conflict in protected areas can be found in the different visions of the relationship between society and nature that prevail in conservationist and indigenous organisations. For many conservationists, the main purpose of protected areas continues to be the conservation of biodiversity, and in general it is biological criteria that drive their creation, as in the case of the SD-RZ. There is a tendency among some to idealise the traditional indigenous way of life as automatically being sustainable, while at the same time rejecting the role of indigenous people who have already entered the market economy in the conservation of biodiversity. In this setting, there is still a dual vision, of society with its economic development, on the one hand, and nature, which is to be conserved and where the ‘traditional indigenous’ is no more than an element in its preservation, on the other hand.

From the point of view of indigenous organisations, the conservation argument is mainly seen as a tool for obtaining territorial recognition, as in the case of the ACR and Pilón Lajas, where the indigenous communities do not necessarily prioritise the sustainability of their practices in a biological-
ecological sense. On the contrary, some indigenous organisations reject the conservation option when they see that this becomes a threat to self-determination where their territory is concerned. In this sense, if we acknowledge sustainability as a normative concept (Lélé and Norgaard 1996), the need to maintain self-determination over their territory and a diversified relationship between society and nature can be interpreted as an indigenous criterion of sustainability.

Finally, this analysis shows that partnership between conservationists and indigenous peoples has mainly been instrumentalised by both parties, as observed in other South American cases (Conklin and Graham 1995). This alliance has not been the result of an intercultural dialogue, where agreed forms of perception and valuation of natural resources and their dynamics are discussed, but rather of the mere identification of some specific common interests.

32.4.4 Position of the state

In the areas studied, it can be observed that the various processes for decentralising natural resource management can make local indigenous and non-indigenous populations vulnerable to external pressure to extract resources. The cases presented here have given greater visibility to the ambiguous position of the state: together with conservationist organisations, the state promotes conservation policies, but at the same time subordinates conservation to policies favouring non-sustainable extraction of resources by private companies. In this context, the state appears to be guided by short-term economic interests and thus unable to establish or apply an equitable regulatory framework for the protected areas. This situation generates distrust towards state-based regulations among the local population – whether indigenous, settlers or mestizo groups – and also among some conservationist organisations. This highlights the need to strengthen and to clarify the role of the state in creating spaces for negotiation and social control for the co-management of natural resources.
Endnotes

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Key instruments in this respect include the 2004 Convention on Biological Diversity (CBD) Programme of Work on Protected Areas and the preceding Durban agreements; see Larsen and Oviedo (2005).

For a complete review of key literature on the concept of bio-cultural diversity, see Maffi (2005).

This refers to a so-called Partnership Action for Mitigating Syndromes (PAMS), a programme component of the Swiss National Centre of Competence in Research (NCCR) North-South that serves as a vehicle for testing the practical application of development-oriented research results. PAMS are carried out by local organisations in cooperation with civil society and researchers of the NCCR North-South. Each project is designed to implement strategies developed jointly by researchers and local stakeholders. Based on a transdisciplinary approach to development research, PAMS aim at mutual learning and knowledge-sharing between academic and non-academic partners in sustainable development.
Publications elaborated within the framework of NCCR North-South research are indicated by an asterisk (*).


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