

23 **Challenges for Participatory Conservation in Times of Global Change: Lessons from a Comparative Analysis and New Developments**

Tobias Haller¹ and Marc Galvin²

Abstract

Participatory approaches to conservation have been applied worldwide by governments and non-governmental organisations. However, results from a comparative analysis of the impacts of global change on management issues in 13 protected areas in Africa, Latin America, Asia, and Europe show that in many cases the involvement of local people has remained limited, and economic gains for local livelihoods have been limited or non-existent. Viewed from a 'new institutionalist' perspective and focusing on power relations and ideologies, the results of this study carried out within the framework of the Swiss National Centre of Competence in Research (NCCR) North-South show that in African cases local people do not feel part of the process and, therefore, become disengaged. In Asia, and even more so in Latin America, local indigenous peoples and their leaders support protected areas as a means to gain political rights over areas threatened by immigration. The European (Swiss) case is the only one where political rights and economic incentives present a context in which participation is of direct interest to local people. Meanwhile, recent debates on new global conservation developments in the context of climate change policy indicate a growing tendency to treat conservation as a commodity. We argue that this can have problematical effects on efforts to devolve power to the local level in the context of conservation.

Keywords: Participatory conservation; protected area management; new institutionalism; comparative analysis.

23.1 Introduction

Many recent publications have examined changes in protected area policies, discussing in particular the so-called paradigm shift from fortress conservation to participatory conservation approaches including community conservation, collaborative conservation, or co-management (Hulme and Murphree 2001; Borrini-Feyerabend et al 2004; Borgerhoff Mulder and Coppolillo 2005; Brockington et al 2008). These works emphasise the view that keeping protected areas alive and biodiversity conservation working requires a participatory approach. Reasons given range from issues of ethics and human rights of minority groups (indigenous peoples) to economic management for sustainable development based on the argument that local involvement in protected area management in the context of decentralisation reduces transaction costs to states (Stevens 1997; Gibson 1999; Hulme and Murphree 2001). If such local involvement is taken seriously, its establishment calls for an active political process of decentralisation and accountability (Ribot 2002, 2003; Geiser and Rist 2009), allowing local-level actors and groups to define what is to be conserved, and how it shall be conserved (Haller 2010b).

Galvin and Haller (2008) conducted a comparative study of cases researched by the Swiss National Centre of Competence in Research (NCCR) North-South in Africa, Latin America, Asia, and Europe in order to understand processes of participation in protected area management (Figure 1). This study is a unique case of qualitative comparison, addressing these issues in comparable settings of protected areas which are formally managed based on more or less participatory approaches. The present article partially draws on this previously published information (Haller and Galvin 2008a, 2008b), highlighting the most important findings; in a second part, these findings are discussed in the context of new literature on protected areas and on conservation in general. We argue that in the cases compared, participatory approaches failed to bring any economic gains for the local population and, for the most part, were less participatory than formally declared; at the same time, however, they offered political gains in Latin America, where the political notion of ‘indigenous peoples’ was employed strategically by the grassroots level and its elites. Similarly, one case studied in depth in Switzerland and a short outlook on new Swiss cases (in the context of a newly established “Regional Nature Park” label) indicate that formal constitutional democratic procedures empowering local-level actors are key to participatory processes, but nevertheless cannot guarantee full participa-

tion unless the heterogeneous expectations of the different groups involved – local groups as well as the government and national non-governmental organisations (NGOs) – are debated and negotiated in a transparent decision-making process. Moreover, new developments in conservation, such as climate change mitigation initiatives stressing forest protection and the commoditisation of conservation, pose major challenges to the development of truly participatory approaches based on democratic principles and downward accountability. The results from case studies in Latin America indicate that land rights and institutions based on principles of equity are key to mitigating these new problems of global change for local populations in and around protected areas.

23.2 Between development, the re-emerging fortress, and empowerment: different perceptions of participatory processes

In the scientific literature on participation processes in protected areas that involve some sort of co-management or community management elements, we can distinguish three types of policy propositions for local-level engagement advanced by researchers: 1) development, 2) re-emerging fortress and no local involvement, and 3) political empowerment.

The first position advocates projects that integrate conservation and development schemes in a fruitful manner, based on the vision that projects increasing local livelihood options will result in rising standards of living, which, in turn, will provide incentives for local participation in conservation efforts. Such projects can range from health and infrastructure schemes to building up businesses in order to decrease local pressure on conserved areas where it was previously increased by poverty (McShane and Wells 2004). Some community-based natural resource management schemes in Southern Africa could fall under this category, as they frequently promote gains from tourism and tourist game hunting rather than real local resource management initiatives per se (Hulme and Murphree 2001; DeMotts and Haller 2009; Saum 2010).

The second position is advanced by scholars and conservationists who warn that outreach projects will lead to a neglect of conservation goals, and argue in favour of a return to the fortress approach to save the last remnants of wilderness. The same criticisms are advanced with regard to local empower-

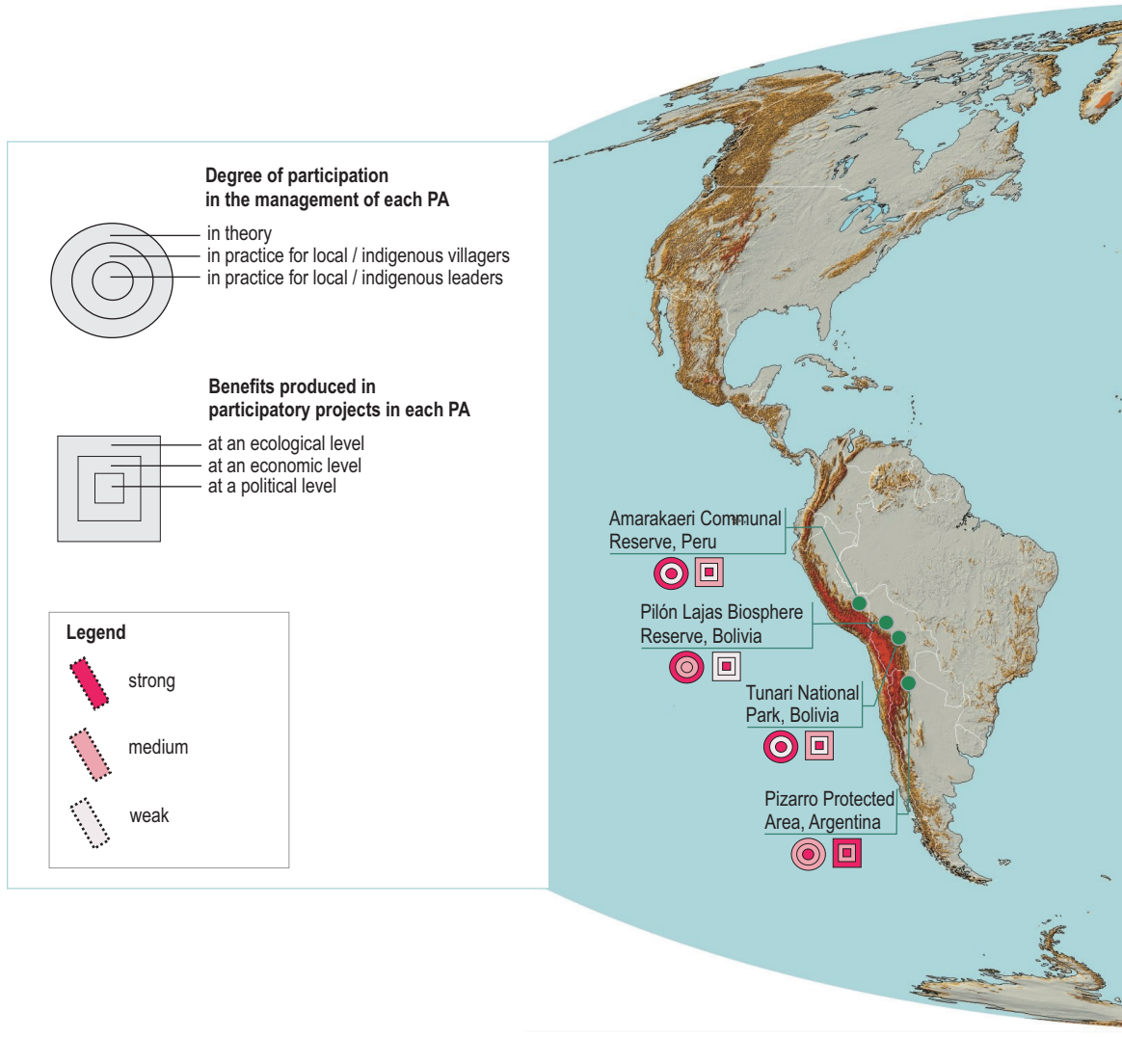
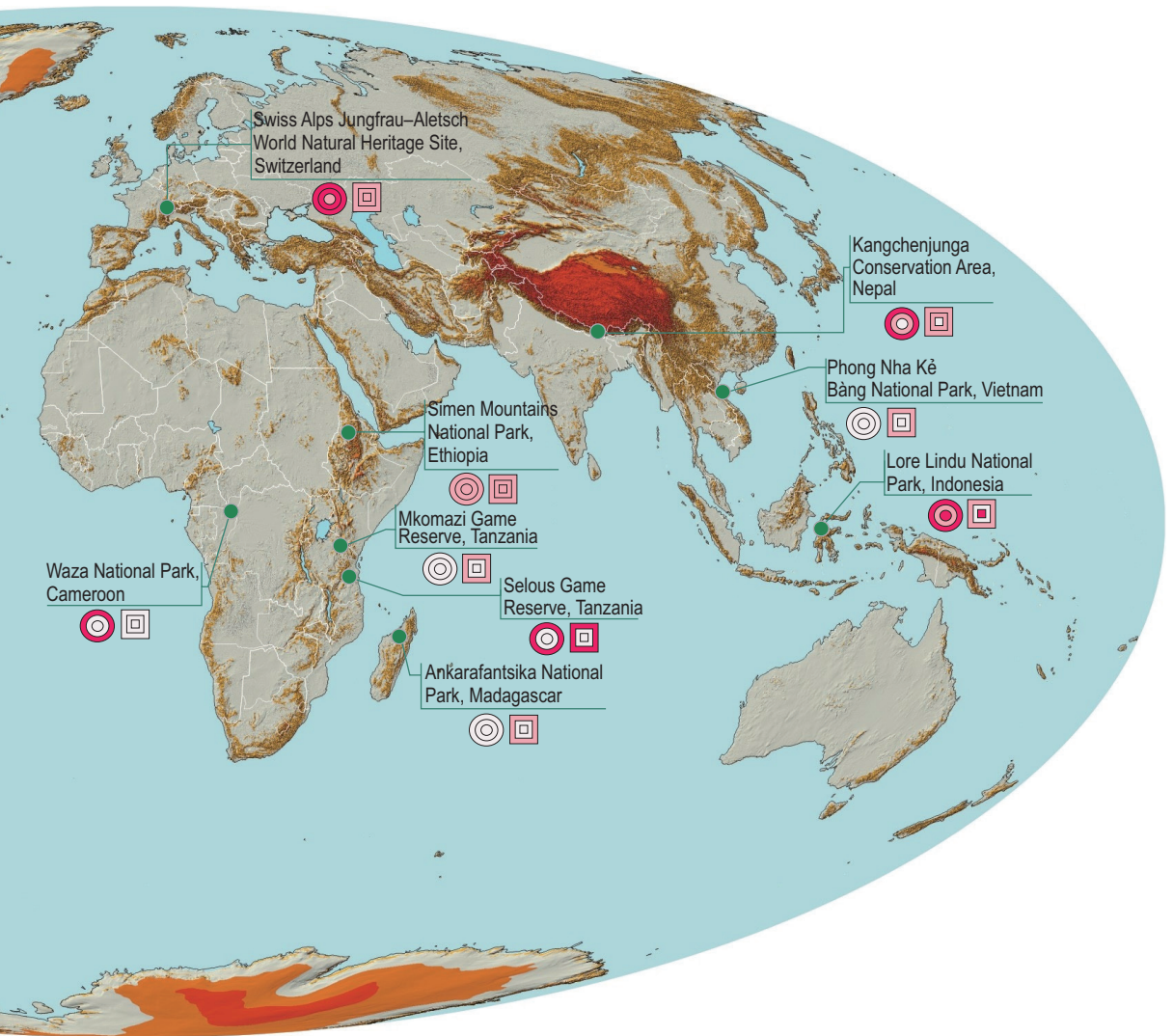


Fig. 1
Location of the 13 protected areas studied. (Map by Albrecht Ehrensperger and Ulla Gaemperli, Centre for Development and Environment (CDE); first published in Haller and Galvin 2008b, pp 524–525, slightly adapted)



Map sources: Terrain data: Resampled from the GTOPO30 Digital Terrain Model (DTM) produced by US Geological Survey (USGS) using a model by Kopas et al 2000. Elevation (metres): Derived directly from the DTM. Slope (degree): Derived directly from the DTM. Elevation range (metres): Maximum elevation difference in a 5km radius. Derived from DTM.

Hydrographic data: ESRI Data and Maps, World CD.

Administrative data: ESRI Data and Maps, World CD.

Map scale: approx. 1:100,000,000

Map projection: Mollweide

Authors: Research, GIS, cartography and layout: Albrecht Ehrensperger (CDE) and Ulla Gaemperli (CDE)

ment, which is seen as being too anthropocentric and disregarding the urgent need for rapid conservation of nature (for a hint on this point, see Brockington et al 2006; Brockington et al 2008).

The third position is based on a critique of the first and involves a political economy/ecology and discursive stance: It gives first priority to the questions of how a protected area has been set up, whether and how local people have been or are evicted from it, or whether or how they pay the greatest costs for conserved areas due to land, crops, and lives lost (animal damage and attacks). Therefore, issues of social justice arise simultaneously with debates about what kind of nature is really conserved (Neumann 1998; Brockington et al 2006; West et al 2006). Such issues, including questions of land rights and trustful empowerment of local actors by governments during decentralisation, are seen as key to creating an enabling environment for local participation. One of the critical issues in this approach is the question of how local people shall be empowered and how local as well as outside elite capture can be prevented while promoting a viable political process (Ribot 2003). This is important because, as Piers Blaikie (2006) has put it, community conservation approaches in the context of participatory projects (community-based natural resource management) are like Trojan horses for powerful actors: via participatory approaches they are able to pursue their own goals in local people's environments and generate income from donors (different government and NGO sectors) at the same time (Blaikie 2006; see also Haller et al 2008).

23.3 A new institutionalist analysis of the implementation of participatory approaches

In the above-mentioned comparative study by NCCR North-South research teams we addressed elements of the third approach and tried to explain why different cases of protected area management involving local participation performed differently. The comparative work was conceptualised by focusing on a livelihoods approach, on the one hand, and on a new institutionalist approach, on the other. In the latter, external factors such as changes in national and international economies, the environment, demography, and technology are seen as having an influence on relative prices for goods and services related to protected areas (donor money, tourism, etc.) and thereby having an impact on internal factors in protected areas, such as organisation, bargaining power, institutions (understood as the rules of the game), and ideologies (world views) (Ensminger 1992; Haller and Galvin 2008a, 2008b).

Under this approach, therefore, protected areas have a history and are to be understood as the result of the interaction of external historical developments and internal processes of organisation (protected area itself) and institutions (rules and procedures on how to manage the protected area). Taking this approach thus also means having a look at how the interest in protected areas and related goods and services develops in terms of price changes, and how this affects the bargaining powers of different actors and the different ideologies, discourses (Foucault 1981), and narratives to legitimise a protected area and the way it is managed. Linking these aspects is important because it gives key information on what strategies different actors historically involved in protected area management were and are pursuing.

The study thus compared the historical development, institutional settings under precolonial local management and governments, and different actors' strategies and ideologies in the protected areas studied. One of the major challenges was to obtain a rough cost–benefit analysis for each case in order to assess what kinds of incentives or disincentives local people perceived when being linked to a protected area (Haller and Galvin 2008a, 2008b). The analysis included not only economic but also political benefits. This was important in order to see for whom conservation works, and what kind of ideologies, discourses, and narratives are used by different actors to control and benefit from the conservation constellations. Likewise, it was important to consider the historical processes in which all protected areas in the case studies are embedded, and to understand by whom the protected areas were implemented and how they are perceived by local people. Indeed, this was of particular interest, as there is always a difference between a formally outlined concept of participation and how it is perceived at the local level, based on local people's realities. In the following section, the findings from the comparative study are presented in overview tables and briefly explained, before we turn to the major findings and discussions and how these relate to new developments in conservation issues.

23.4 Results from the NCCR North-South comparative study

An overview of the cases studied and compared is given in Table 1. The protected areas under study cover a great variety of ecosystems, ranging from tropical forests (4 of the protected areas under study) to dry forests, savannah grasslands and floodplains (6), and high-altitude forest grasslands with or without glaciers (3). Moreover, they cover all three syndrome contexts

defined for NCCR North-South research: the highland–lowland context (6), the semi-arid context, which includes floodplains (5), and, less typically, the urban and peri-urban context (1). The case study areas are rich in so-called common-pool resources³ such as forests, water bodies with varieties of fisheries, wildlife, and more or less fertile agricultural land and grasslands with pastures. The different ethnic groups found in the study areas are often, but not always, defined by their form of resource use. In all 4 Latin American cases and in the Vietnamese case there are hunter-gatherers, as well as farmers practising swidden/shifting cultivation. By contrast, these categories were not found in the African cases, where agriculture, fishing, and pastoralism are the dominant forms of resource use. The same is true for the Swiss and the Nepalese case. All above-mentioned resources have been managed under common-property regimes in the past, suggesting that despite greater mobility in some cases in precolonial times, groups in those times conceived of specific territories or areas as linked to seasonally available resources, and associated with them a type and extent of resource use, as well as a sense of ownership by a specific group. The management schemes chosen were usually common-property regimes, regulating use by membership and invitation as well as by season, and involving locally developed institutions for monitoring and sanctioning resource use internally (see all articles in Galvin and Haller 2008).

Table 1

Environment, common-pool resource management, cultural landscapes, and historical background.

Protected area, country, year of implementation; references	Ecology and syndrome context	Resource users and use	Institutional setting	Issues of cultural landscape	Colonial background
Latin America					
Tunari National Park, Bolivia (1958) Boillat et al 2008	Tropical forests, watersheds (urban and peri-urban)	Different small ethnic groups, hunters-gatherers, swidden	Common-property regimes	Yes, but viewed as nature, urban setting after colonial times	Colonised by the Spanish
Pilón Lajas Biosphere Reserve and Communal Lands, Bolivia (1992) Bottazzi 2008	Tropical forests (highland–lowland)	Different small ethnic groups, hunters-gatherers, swidden	Common-property regimes	Yes, but not an issue	Colonised by the Spanish
Amarakaeri Communal Reserve, Peru (2002) Álvarez et al 2008	Tropical forests (highland–lowland)	Different small ethnic groups, hunters-gatherers, swidden	Common-property regimes	Yes, but not an issue, viewed as jungle and wild area by colonialists and settlers	Colonised by the Spanish, later by settlers
Pizarro Protected Area, Argentina (1969/2006) Hufty 2008	Forest (semi-arid)	Traditional agriculture	Common-property regimes	Yes, put on the agenda immediately	Colonised by the Spanish, later by settlers

Comparative Analysis of Participatory Conservation Case Studies

Africa					
Selous Game Reserve, Tanzania (1922) Meroka and Haller 2008	Forest, grassland and floodplain (semi-arid)	Ethno-professional groups, agriculture, fishing, hunting, gathering	Common-property regime of ethno-professional groups, ritual for resource use coordination	Resource use created landscapes	Colonised by the Germans, later British
Mkomazi Game Reserve, Tanzania (1926) Mbeyale and Songorwa 2008	Grassland and floodplain (semi-arid)	Pare, agriculture, forests; Maasai, grazing	Common-property, coordination, unity of highland–lowland slope, floodplain as dry-season pasture	Landscapes in mountains and plains (irrigation and grass cover), not recognised by reserve authority	Colonised by the Germans, later British
Ankarafantsika National Park, Madagascar (1927/2005) Muttenger 2008	Forest and floodplain with grasslands (semi-arid)	Sakalava, cattle economy, grazing; later immigrants, intensive rice cultivation on floodplain	Pastures and forests are common property, rice fields are private property	Yes, landscape influenced by pastoral and rice cultivation, not recognised by authorities	Colonised by the French
Simen Mountains National Park, Ethiopia (1941/1969) Hurni et al 2008	High-altitude grasslands and forests (highland–lowland)	Amhara and Agaw, highlands for grazing, lowlands for rainfed agriculture (barley, tef, maize, sorghum)	Pastures are common property, fields are common and private property	Cultural landscape formed by local use (high agro-biodiversity), problem of soil erosion in cleared forest areas	Not colonised, Ethiopian Christian Monarchy; occupied by Italy in 1935
Waza National Park, Cameroon (1934) Fokou and Haller 2008	Grasslands and floodplain (semi-arid)	Kotoko, Arab Choa, Mousgoum, Fulbe, ethno-professional groups, fishermen; agriculture and fisheries, grazing	Pastures and fisheries as common property under control of Kotoko sultan (coordinates use of fisheries and pasture)	Cultural landscape, grass cover, and depressions for fisheries are anthropogenic; not or insufficiently recognised by park authorities	Colonised by the French
Asia					
Kangchenjunga Conservation Area, Nepal (1997) Müller et al 2008	High-altitude forests, glaciers (highland–lowland)	Sherpa, Rai, Gurung, irrigated agriculture and transhumant pastoralism, hunting, labour migration	Pastures are common property, fields are private property of family units	Landscape formed by agriculture and pastoralism, no use in higher, glaciated areas	Colonised by the British, later kingdom
Lore Lindu National Park, Sulawesi/Indonesia (1993) Acciaioli 2008	Floodplain, forest (semi-arid)	To Lindu and immigrated other groups from island and other areas of Indonesia, agriculture and use of forest products	Fields in floodplain are common property of To Lindu, forests are common property, linked to ancestral spirits and sacred places	Landscape formed by agriculture and forestry, partly recognised as effort of indigenous To Lindu people	Colonised by the Dutch, later independent state of Indonesia; transmigration programme is bringing in new people
Phong Nha Kẻ Bàng, Vietnam (1986/1998/2003) Larsen 2008	Karst forest system and riverine landscape (highland–lowland)	Hunters and gatherers, swiddeners, small ethno-professional groups	Wildlife and forests for swiddening are common property, fields (swidden) are private property	Landscape formed by swidden and specific land use	Colonised by the French, later under US influence, Vietnam war

Europe					
Swiss Alps Jungfrau-Aletsch World Natural Heritage Site, Switzerland (2001) Wallner et al 2008	Glaciers, pastures, and forests (highland-lowland)	Peasant farmers and transhumant pastoralists, later tourism industry	Common-property regimes for forests and pastures, meadows and agricultural fields are private property	Yes, key issue; local stakeholders (peasants and others) underline cultural landscape, conservationists view landscape as pure nature	No colonisation

Source: Case studies presented in Galvin and Haller 2008.

This indicates another specificity of protected areas: use of common-pool resources under common-property regimes created changes in what we call ‘nature’: Pristine ‘nature’ no longer exists as it has long been transformed into cultural landscapes (see also Haller 2007; Haller and Galvin 2008a, 2008b). If we consider the largest protected area in Africa, the Selous Game Reserve in Tanzania, for example, which is well known for its abundance of wildlife, it must be emphasised that at the time of colonisation, the area did not consist simply of savannah with large habitats of wild animals. It also had settlements of the local Warufiji people. During the colonial period, more than 40,000 people were evicted from the area they had previously transformed into a cultural landscape by using it for agriculture, hunting and fishing, extensive grazing, and clearing of underwood. After people were evicted from the area, the combination of flora and fauna changed: bushy undergrowth developed, limiting grass populations and increasing invasion by tsetse flies. Interestingly, wildlife in search of food were likewise forced to move outside of the protected area to feed in areas cleared by humans (Meroka and Haller 2008).

Another set of information indicated in Table 1 and further detailed in Table 2 consists of historical facts regarding the implementation of the protected areas under study and the legitimisation of this implementation. With the exception of the Swiss case, all areas were colonised by different European powers in the past, leading to different patterns of protected area creation. In Latin America and Asia, the oldest protected areas date from the late 1950s and the 1960s, but the majority were established in the 1990s and after the turn of the millennium. In Latin America, this is due to the fact that conservation had never been an issue for the Spanish colonisers and after independence remained unimportant to governments for a long time. In British- and French-controlled Africa, by contrast, conservation and protection measures were taken as early as the 1920s and 1930s; these initiatives were

based on fear and misconception about local people overusing resources (Fairhead and Leach 1996; Neumann 1998). The Ethiopian case is an exception in this regard, even though first steps towards its implementation were likewise taken in the first half of the 20th century. The African cases thus have the longest protected area history and suffer more from the colonial legacy than other areas. In 4 out of 5 cases (2 Tanzanian, 1 Cameroonian, 1 Madagascan) the German, British, and French administrations were interested in conserving nature without people, since they viewed local groups as destructive to pure wilderness areas and sought to conserve resources for their own elites and their industries. Along with this there were several other reasons for implementation; in Ethiopia, the main focus eventually shifted from wildlife to soil erosion. In 4 cases, conservation was pushed by colonial administrators, and in one case (Ethiopia) by the emperor and a group of Swiss scientists.

Table 2

Protected area, country, year of implementation	Reason for implementation, external or local	Size increase/evictions	Environment, common-pool resource management, cultural landscapes, and historical background.
Latin America			
Tunari, Bolivia (1958)	Logging; external but accepted by local stakeholders	No/no	
Pilón Lajas, Bolivia (1992)	Logging; local	No/no	
Amarakaeri, Peru (2002)	Logging, mining, oil drilling; local	No/no	
Pizarro, Argentina (1969/2006)	Logging, large-scale farming; local	No/no	
Africa			
Selous, Tanzania (1922)	Poaching; external	Yes (over 50%)/yes	
Mkomazi, Tanzania (1926)	Poaching, overgrazing; external	Yes (over 50%)/yes	
Ankarafantsika, Madagascar (1927/2005)	Logging, agriculture; external	Yes/yes	
Simen, Ethiopia (1941/1969)	Poaching; external	Yes/yes	
Waza, Cameroon (1934)	Poaching; external	Yes (over 50%)/yes	
Asia			
Kangchenjunga, Nepal (1997)	Poaching; external	Yes/yes	
Lore Lindu, Sulawesi/Indonesia (1993)	Logging; external but accepted by local stakeholders	Yes/no	
Phong Nha Kẻ Bàng, Vietnam (1986/1998/2003)	Poaching, landscape conservation; external	Yes/yes	
Europe			
Swiss Alps Jungfrau-Aletsch, Switzerland (2001)	Landscape conservation (for tourism); external and local	No/no	

Source: Case studies presented in Galvin and Haller 2008.

In the Asian and Swiss cases the reasons behind conservation efforts were more diverse. Protected areas in Nepal, Vietnam, Indonesia, and Switzerland were mainly motivated by a desire to protect glacial and mountain landscapes, forests, and wildlife. In the Latin American cases, the main reason for the establishment of protected areas was a desire to protect high-biodiversity forests from settler agriculture, pollution by oil companies and gold miners, and deforestation for large-scale agricultural plantations. This reason was shared by conservationists and local ‘indigenous’ peoples.

Finally, Table 2 contains information on a further important aspect: that of how the size of the protected areas developed over time, and whether these developments led to evictions of local people. Unlike in the Latin American cases, the protected areas studied in Africa and Asia were eventually enlarged, in some cases up to double their initial size. In addition, in all African and Asian cases (except for Sulawesi, Indonesia) evictions of local people took place – not only during colonial times but also in the recent past.

23.5 Governance, institutional pluralism, and core problems

In connection with the historical implications and enlargements of protected areas described above, the development of governance mechanisms and plural legal norms since colonial times is another important aspect in explaining the core problems that the protected areas under study face today. Table 3 summarises governance issues, issues of institutional pluralism, and core problems in the protected areas compared. Concerning governance issues, the comparison reveals that in most Latin American cases a community approach was taken from the outset, whereas all of the African protected areas studied began with a fortress approach, which was retained up to the 1980s. But even later, an official co-management or community approach was adopted in only two cases (Selous and Waza), while the other three had park outreach models or a participatory type of consulting (Mkomazi, Ankarafantsika, Simen). Different situations can be observed in the Asian cases, all of which started out with a fortress approach. This has been retained only in Vietnam, however, while in Nepal it was replaced by a development and park outreach model. The case of Sulawesi (Indonesia) follows the Latin American pattern based on indigenous groups trying to actively participate in order to ensure their rights. The Swiss case, finally, is the only case with fully formalised recognition of participation, which is based on Switzerland’s political system of direct democracy.

Table 3

Protected area, country, year of implementation	Governance approach		Institutional pluralism	Core problems
	Up to 1980	1980–2006		
Latin America				
Tunari, Bolivia (1958)	Fortress	Participatory ++	Yes	Logging
Pilón Lajas, Bolivia (1992)	–	Participatory ++	Yes	Logging
Amarakaeri, Peru (2002)	–	Participatory +++	Yes	Logging, pollution
Pizarro, Argentina (1969/2006)	Fortress	Participatory +++	Yes	Agricultural schemes
Africa				
Selous, Tanzania (1922)	Fortress	Participatory +	Yes	Poaching, animal attacks, crop loss
Mkomazi, Tanzania (1926)	Fortress	Fortress	Yes	Poaching, crop loss
Ankarafantsika, Madagascar (1927/2005)	Fortress	Participatory	Yes	Unsustainable use
Simen, Ethiopia (1941/1969)	Fortress	Fortress	Yes	Unsustainable use
Waza, Cameroon (1934)	Fortress	Participatory +	Yes	Poaching, loss of resources
Asia				
Kangchenjunga, Nepal (1997)	Fortress	Participatory	Yes	Poaching, loss of resources
Lore Lindu, Sulawesi/Indonesia (1993)	Fortress	Participatory +++	Yes	Logging, settlers
Phong Nha Kẻ Bàng, Vietnam (1986/1998/2003)	Fortress	Fortress	Yes	Poaching
Europe				
Swiss Alps Jungfrau-Aletsch, Switzerland (2001)	–	Participatory	Yes	Uncontrolled use for tourism

On a formal level, participation issues have been discussed and put on paper in 11 of the 13 protected areas under study. But what does participation mean in these areas and in their complex economic and political contexts? Guided by this question, we analysed the legal and institutional settings from a critical new institutionalist perspective, including the notions of power and ideology (Ensminger 1992). According to this perspective, legal and institutional clarity provides security for local actors with regard to how participatory protection is intended to work. In many cases, historical changes had weakened local common-property institutions, and new protected area

Governance approach, occurrence of institutional pluralism, and core problems.

Source: Case studies presented in Galvin and Haller 2008.

regulations in the context of state management of resources across various government departments (wildlife, fisheries, agriculture, veterinary services, tourism, etc.) have resulted in legal and institutional pluralism (see also Haller 2010a). This pluralism is further increased by the involvement of new actors such as NGOs and new international environmental treaties (see also Brockington et al 2008).

A look at the *African* cases one by one is revealing. In the Selous Reserve, decisions on how participatory involvement shall take place are made by the Tanzanian government's wildlife and tourism departments, foreign development agencies, and NGOs; differences between the Reserve itself and adjacent Wildlife Management Areas (WMAs) cause confusion about possible participation by local people (Ashley et al 2002; Goldman 2003; Meroka and Haller 2008). In the Ankarafantsika National Park in Madagascar, the Forestry Department installed a buffer zone, creating confusion about how it can be used and what rules shall apply (Muttенzer 2008). Similarly, in the Waza Logone case in Cameroon the adoption of a participatory approach in 1990 created confusion among different administrative stakeholders (forestry and water, wildlife, agriculture, and development departments) and local people (Fokou and Haller 2008; Fokou 2010). The most extreme case in the analysis was Ethiopia, which has seen many different governments and changing policy situations as well as a total absence of the state during times of civil war and rebellion. The impact of these extreme governance situations and the plurality of legal institutions throughout history still needs to be examined today (Hurni et al 2008).

The comparison also revealed that the *Latin American* cases shared a common pattern, which can be summarised as follows: Indigenous peoples and conservationists had successfully lobbied to create institutions which seemed to combine indigenous rights and conservation of what is said to be nature (see both Bolivian as well as the Peruvian and the Argentinean cases). It is therefore possible, with respect to these cases, to speak of a kind of social learning process (Rist et al 2003).

The *Asian* cases are highly diverse in terms of governance and legal pluralism. The Kangchenjunga Conservation Area was set up by the King of Nepal, together with the World Wide Fund for Nature (WWF) as the basic NGO partner. The park was to be managed partly with local people, but outreach projects were considered more important than participation. Local people as well as officials saw these projects as a kind of payment for not

interfering with the park. Institutional and legal pluralism (Meinzen-Dick and Pradhan 2002) in this protected area occurs in connection with community involvement in monitoring: this is a contradictory issue, given that local people do not have the right to control the area themselves (Müller et al 2008). In the other two Asian cases, the issue of indigenes re-emerges, but in a somewhat different way than in the Latin American cases. In Indonesia, the government acts in a contradictory way by encouraging immigration and thus promoting settler movements on the Island of Sulawesi as well as in other places, while at the same time desiring to protect nature through different government agencies assisted by NGOs. To Lindu people tried to manoeuvre between these two policies to promote their own interests: while they have to accept immigrants, they stress environmental views as a strategy to control and limit the use of land by these immigrants. This is done by referring to the local, so-called 'traditional', *adat* law (Acciaioli 2008). In the case of Phong Nha Kẻ Bàng in Vietnam, legal and institutional pluralism involves government departments and different NGOs as well as the entire tourism sector, which is interested in generating income from the protected area, especially since it achieved the status of a United Nations Educational, Scientific and Cultural Organisation (UNESCO) World Heritage Site in 2003. It remains to be seen how this institutional change will strengthen local people's opportunities for participation (Larsen 2008).

The only *European* case, in Switzerland, is based on solid formal institutions rooted in the principles of decentralisation and subsidiarity in cantons, regions, and communes. In this setting, decision-making involves all stakeholders from all spheres of society, be it government, business, conservation, or the grassroots level, which makes it an inclusive process. At the same time, however, great diversity among and within different actor groups makes it difficult to establish binding institutional structures. Still, the possibility for such institutions to be nested (Ostrom 1990) makes them very resilient (Wallner et al 2008).

As mentioned above, legal pluralism – which turns into institutional pluralism unless institutions are nested (as in the Swiss case) – and legal insecurity add to the problems experienced at the local level with regard to resource management and protected area management. How are local people to help conserve resources if procedures for their involvement are unclear, or if the only thing that is obvious is the fact that not much can be decided at the local level? This adds to the core problems, which are mostly related to overuse of natural resources or the fear of natural resources being overused. In a nut-

shell, the comparison of case studies revealed the following pattern: In the Latin American cases, external as well as internal actors opting for conservation consider logging and the activities of new settlers, including mining and oil drilling, to be the core problems; in Africa, poaching and overgrazing are regarded as the core problems from an external perspective, while change in common-property institutions and exclusion from the use of resources coupled with high costs are seen as the main core problems from an internal perspective. In the Asian cases, core problems experienced in protected areas are a mixture of wildlife, landscape, and logging and settler problems.

23.6 Costs and benefits: trying to understand a complicated picture

Table 4

Costs and benefits of protected areas.

Based on Table 2 in Haller and Galvin 2008b, pp 518–519.

Before we discuss how participation is structured and justified in different ideologies, discourses, and narratives, a close look has to be taken at the cost–benefit balance of proposed participatory management schemes in protected areas. An overview covering economic, political, and ecological benefits is provided in Table 4.

Protected area, country, year of implementation	Economic benefits	Political benefits	Ecological benefits
Latin America			
Tunari, Bolivia (1958)	No	Yes	Yes
Pilón Lajas, Bolivia (1992)	No	Yes	Yes
Amarakaeri, Peru (2002)	No	Yes	Yes
Pizarro, Argentina (1969/2006)	No	Yes	Yes
Africa			
Selous, Tanzania (1922)	No	No	Yes (high costs)
Mkomazi, Tanzania (1926)	No	No	No
Ankarafantsika, Madagascar (1927/2005)	No	No	No
Simen, Ethiopia (1941/1969)	No	No	Yes
Waza, Cameroon (1934)	No	No	No
Asia			
Kangchenjunga, Nepal (1997)	No	No	Yes (high costs)
Lore Lindu, Sulawesi/Indonesia (1993)	No	Yes	Yes
Phong Nha Kẻ Bàng, Vietnam (1986/1998/2003)	No	No	Yes (high costs)
Europe			
Swiss Alps Jungfrau-Aletsch, Switzerland (2001)	No (but hopes for future)	Yes	Yes

Analysis based on an actor-oriented cost–benefit approach showed that there was not one case in which direct economic benefits justified local participation in the management of protected areas. Even worse, in 7 cases (all African, one Latin American, and one Asian case) economic losses by far exceeded the gains despite a participatory management approach. In the African cases where it was possible to calculate the costs incurred by local people, 70–80% of these costs remained uncovered. Such costs include, for example, crop damage caused by wild animals, but also loss of access to common-pool resources such as small wildlife, fish, forest products, and valuable land. However, calculations often fail to include lives lost in accidents with wild animals (crocodiles, elephants, hippos) as well as opportunity costs. Losses proved to be smaller in the remaining cases, or there was a temporary gain due to a highly development-oriented approach, including, in the Nepalese case, insurance schemes against damage resulting from the protected area and its animals. It must be emphasised that, interestingly, the Nepalese and the Swiss cases were the only ones in which there were economic gains that could be seen as subsidies or insurance schemes and that were part of the protected area management system (in Nepal) or the government system (in Switzerland; here, farmers receive subsidies for maintaining landscape functions in the ecosystem). However, these payments are often not enough to compensate for other uses. In these cases, an analysis of opportunity costs could provide more clarity.

Economic costs and benefits are, however, only one part of the story. One major feature described extensively elsewhere is that in most *Latin American* cases the concept of indigenusness in combination with the support received from conservation NGOs helped local communities to use protected areas as a form of land right protection against outside encroachers, be they settlers or large land owners. Despite the fact that indigenous groups had been marginalised in the past, an international movement, and increasingly also national movements in the respective countries, led to recognition of their rights (including land rights), frequently based on the ratification of Convention 169 of the International Labour Organization (ILO). Over the past thirty years, the political status of these groups has thus been enhanced – especially in alliance with conservationists, with whom they share the same enemies: oil companies are perceived as adversaries by both local groups and conservationist groups due to the damage they cause by drilling (Haller et al 2007). In addition, the search for ‘noble savages’, who incorporate nature in their way of life, was an attractive asset in boosting environmental and human rights issues. Such a concept of indigenusness linked to political rights cannot be found in the African cases. Economic losses in connec-

tion with protected areas thus cannot be compensated with the same political gains that indigenous groups in Latin America have when a protected area is established. Hence, in the *African* cases, local people perceive protected areas as imposed on them by external forces. They have no political benefits to outweigh their economic losses, whereas government agencies, conservationists, and tourist companies profit a great deal from the concept of participation, which gives them political leverage to enlarge protected areas and ensure low-cost monitoring and donor money.

The *Asian* cases as a whole are situated in the middle between the two extremes described above. The To Lindu in Sulawesi can profit as well from their identity as an indigenous people and were able to integrate their status in the management design based on local knowledge of the area. In Vietnam, by contrast, evicted groups have no similar political options. In Nepal, the issue of political control has only just begun to emerge, as the area was under the control of an NGO and the monarchy up to the latter's fall from power. After this major change in government, WWF has sought to place the project in local hands. It remains to be seen whether this will make a difference with regard to locality-based identities. In the *Swiss* case, all stakeholders were involved from the beginning, and it has been difficult, for example, to establish a clear alliance between government agencies and conservationists, on the one hand, and local people, on the other. Although the federal government and the cantonal (district) governments have an interest in conservation, they also have economic interests in the area. Facilitation of a platform for all stakeholders, including economic and political interest groups, to debate on common ground limited dominance by any one interest group and also empowered local people to take part in the debate.

Last but not least, the comparative study examined the question of ecological benefits of participatory approaches. This proved to be a complex issue. Some ecological benefits can be observed in *Latin America*, when deforestation is reduced by keeping settlers and large companies out of protected areas; in the *African* cases, however, with in reality less participatory approaches or even de facto fortress approaches, ecological gains can only be maintained by providing sufficient means for external conservation measures, such as scouts, fences, costly monitoring, and others. It is thus possible to achieve ecological gains, but this will not be sustainable once investment is stopped and local people are left without sufficient incentives to do the job. In the heterogeneous *Asian* cases, the findings from the other continents apply as well, depending on how participatory the conservation

model: Less sustainable ecological benefits will be likely in the fortress case in the long run compared to the cases in Nepal and in Sulawesi, Indonesia. The Swiss Alps Jungfrau-Aletsch World Natural Heritage Site in *Switzerland*, finally, gives an indication of the difficulties involved in assessing ecological benefits. Glaciers have not been under much direct human pressure, although they have suffered from great pressure due to climate change (high temperature). Extreme sports such as heli-skiing, however, disturb endemic wildlife, and a reduction of such activities based on the area's status as a World Heritage Site will bring benefits (for a more extensive discussion, see Haller and Galvin 2008b).

23.7 Ideologies, discourses, and narratives

Analysis of ideologies, discourses, and narratives was integrated into the research based on the adoption of a new institutionalist perspective. In this perspective ideologies, defined as the different actors' world views, are considered as an important aspect in justifying action; they can increase actors' bargaining power in the process of setting up institutions, and provide legitimacy for a structure from which these actors profit most (Ensminger 1992; Haller 2007; see Haller and Galvin 2008b for further discussion). Ideologies can be altered if there is substantial change in relative prices, but the transformations that institutions then undergo are not linear and may be delayed or produce a different outcome from what was expected.

In the present analysis, however, the term is used in its strategic sense and as a larger concept made up of different elements, including discourses and narratives (as outlined in Haller and Galvin 2008a and 2008b): Discourse is understood as a specific way of linking issues and rationalising topics in a logical way, often in spoken language or in writing; logic in this sense means that in a rather closed system of meaning, discourses contain fragments that refer to a larger framework (ideology). The ideology of modernity, for example, is linked to the discourse of development in the way that links positive values to any kind of development advocated in an area. Another ideology is the critique of modernity, which perceives the world as being in peril and argues that there is a pure, pristine nature 'out there'. The discourse corresponding to this ideological framework would be conservation and protection measures. A third ideology relevant in the present comparison is the notion of the positive value of the traditional way of life, which is often used locally. The main discourse related to this ideology would be that tradition

means conservation and that nature will be protected through application of ancient wisdom.

Narratives, finally, explain for different actors why the situation is as it is perceived. According to the ideology of modernity, underdevelopment is due to lack of modernity and development, meaning that ‘traditional’ people are backward. In the ideology of ‘pure nature’, ‘pure nature’ is in peril because of development or because of dynamic demographic forces (local developments or immigration). In the ideology of traditionalism, resources are being overused and poverty is increasing because of submission and disempowerment of traditional societies by outside forces, dismantling the traditional way of life.

Ideology and the discourse and narratives linked to it have to be analysed as part of the interaction among different stakeholders in the process of institutional change. It is these aspects that shed light on the question of why there are winners and losers in the process of institutional change from fortress to participatory approaches such as community or co-management conservation. Whether or not actors are capable of harnessing gains from the new approach to managing protected areas depends on how they are able to use ideological resources in line with discourses and narratives to justify and legitimate an institutional design favourable for them. In more abstract terms, changes in relative prices (e.g. money spent on participatory conservation schemes, tourism, forestry, and biodiversity protection, directly or via funds) and ideologies provide actors with differential bargaining power to strive for specific forms of organisation and craft specific institutions. Table 5 provides an overview of ideologies, discourses, and narratives used by external and local actors in the various case studies.

In the *Latin American* cases, local actors define themselves as indigenous peoples and ally themselves with the worldwide conservation movement. At the same time they are able to participate in crafting institutions from which they will benefit politically, even though there will be little direct economic gain. Local indigenous peoples argue via their representatives that they are part of nature and have lived ‘in harmony with nature’ over centuries. This is a powerful discourse and a powerful narrative that both can be used, especially by leaders, to pursue the political gain of securing their traditional territories against encroachment by immigrants and other extractive users.

Table 5

Protected area, country, year of implementation	Ideologies		Discourses		Narratives	
	External	Local	External	Local	External	Local
Latin America						
Tunari, Bolivia (1958)	Nature	Traditions	Nature protection	Indigenous conservation	City	Settlers
Pilón Lajas, Bolivia (1992)	Nature	Traditions	Indigenous conservation	Indigenous conservation	Settlers, miners	Settlers, miners
Amarakaeri, Peru (2002)	Nature	Traditions	Indigenous conservation	Indigenous conservation	Settlers, miners, logging companies	Settlers, miners, logging companies
Pizarro, Argentina (1969/2006)	Nature	Traditions	Nature protection	Indigenous conservation	Farmers, large agri-schemes	Farmers, large agri-schemes
Africa						
Selous, Tanzania (1922)	Pure nature	Traditional landscape	Community protection	Poverty alleviation	Halt poaching	Gains to government
Mkomazi, Tanzania (1926)	Pure nature	Traditional landscape	Nature protection	Poverty alleviation	Halt poaching	Gains to conservationists
Ankarafantsika, Madagascar (1927/2005)	Pure nature	Traditional landscape	Nature protection	Loss of land	Land use	Gains to government
Simen, Ethiopia (1941/1969)	Pure nature	Traditional landscape	Development, protection	Loss of land	Land use	No rights
Waza, Cameroon (1934)	Pure nature	Traditional landscape	Protection, development	Poverty alleviation	Land use	Gains to conservationists
Asia						
Kangchenjunga, Nepal (1997)	Pure nature	Traditional landscape	Protection, development	Development	Halt poaching	Gains from projects
Lore Lindu, Sulawesi/Indonesia (1993)	Pure nature	Traditions	Nature protection	Indigenous conservation	Settlers	Control settlements
Phong Nha Kẻ Bàng, Vietnam (1986/1998/2003)	Pure nature	Traditional landscape	Nature protection	Loss of land	Local poaching and land use	Loss of rights
Europe						
Swiss Alps Jungfrau-Aletsch, Switzerland (2001)	Landscape	Landscape	Participatory conservation, negotiations	Participatory conservation, negotiations	Uncontrolled land use	Uncontrolled land use

In the *African* cases, the ideology of pure pristine nature (or pure wilderness in danger) and the colonial image of the poaching African are still very frequently used in simplistic terms. The development and participation discourse frequently used by governments and NGOs fails because cost–benefit analyses are not carried out locally and, despite the discourse of participation and development, most local people do not feel heard and hence do not feel

Ideologies, discourses, and narratives with regard to the 13 protected areas under study.

Based on Table 2 in Haller and Galvin 2008b, pp 518–519.

empowered. However, it would be naive to think that sharing power was the aim of such participatory projects. The discourse of participation has been used by local government agencies and NGOs to capture donor money in order to extend and at the same time externalise control over protected areas, as well as to enlarge them. With the exception of pastoralist peoples such as the Maasai, who are linked to the international indigenous movement, ethnic groups cannot and do not claim the status of indigenity in the political sense. However, they try to advance the discourse of autochthony – with mixed success. Being linked to protected areas makes it very difficult for them to engage in independent action, because all superior levels in the political system have realised that there are gains to be made from the concept of participatory projects, especially if linked to tourism. Moreover, local people face a dilemma, because focusing on autochthony might lead to a colonial tribal discourse and generate high levels of conflict, which would be counterproductive. Their only hope thus lies in allying themselves with one of the political ‘big men’, who, if elected, will generate profits via this channel. Their hope of ever profiting from participatory approaches in the context of protected areas has been severely eroded in recent years – especially in the two Tanzanian, the Cameroonian, and the Madagascan cases. On the contrary, the basic narrative referring to this difficult situation from the local point of view is often that poverty exists because of conservation. One of the few reactions to this is that people refer to themselves as poachers. However, in many cases they are not in a position to challenge either foreign poachers or the state when interests in wildlife become economically relevant (see Haller et al 2008 and, for other countries such as Zambia, Haller and Chabwela 2009).

Asia is again by far the most heterogeneous of the continents. The protected areas studied have a wide range of approaches, from fortress to park outreach and integrated development to more participatory approaches in a political sense. Therefore, the states, related NGOs, and scientists act on different ideological levels. Fortress approaches prevail in the Nepalese case and even more so in the Vietnamese case, whereas in the Indonesian case, surprisingly, we observed by far the most open views about the ideology of ‘pure nature’ and its controlled management. In Vietnam, the state draws power from a ‘pure nature’ ideology in combination with a fortress conservation discourse, leading to evictions of local people. In the Nepalese case, attention was drawn to the need to protect both nature and livelihoods. Major financial inputs and sponsoring of projects that had much more to do with any kind of development approach (credit associations, mothers’ groups, etc.) than with direct conservation per se (monitoring groups) have led to a situation where people do not see a need to access resources in the

protected area directly. The reason for this is that prohibition of resource use has been combined with development projects and that the protected area project itself has developed what most cases in Africa are lacking: an insurance system for damage caused by wildlife. Moreover, project officials try to sell conservation to local people by providing direct development benefits. This seems to work for the moment, but it is questionable whether it will be sustainable in the future: The quotation used in the title of the contribution by Müller and colleagues (2008) – “Because the project is helping us to improve our lives, we also help them with conservation” – could also be understood in the sense that “we will stop helping them (the conservationists) to protect nature if they stop helping us with development”.

Comparing the cases in the three Southern continents, we thus observe that in the Latin American cases indigenous peoples use the same arguments as scientists and the governments do and succeed in organising themselves fairly easily. In the African and Asian examples, by contrast, being local and indigenous does not bring any political benefits. Ideologies in the Swiss Alps Jungfrau-Aletsch World Natural Heritage Site in *Switzerland*, finally, differ from all other cases studied. The political context is vital to the case. Swiss direct democracy means that government ideologies are always subject to local consensus. Instead of self-interested discourse by the state, there is evidence of a genuine dialogue. The basic ideology recognises that the area is a mixed cultural and natural landscape that depends on smallholder farming. The aim of development is conservation and tourism. In the view of local actors, the new label does little harm and at best brings economic gains for tourism. Nature protection and economic development can be linked via tourism if gains are distributed equally. This brings into play the discourse of community conservation based on fairness.

23.8 Analysis and conclusions: positioning protected areas with regard to participation and sustainable development

The final conclusions of the comparative study were visualised in a matrix showing the degree of participation and the extent of sustainable development activities for each of the cases examined (Figure 2). The matrix shows two aspects of the findings. The unshaded circles indicate the placement of the various cases in the matrix based on formal statements by governments and NGOs: With the exception of two cases – Mkomazi in Tanzania and Phong Nha Kẻ Bàng in Vietnam – which follow a clear fortress approach

and involve less participatory activities oriented towards sustainable development, all are formally (in official documents) declared as more or less participatory and involve more activities and incentives for sustainable development. The shaded circles indicate the placement of cases based on findings regarding the local perspectives as presented in the edited volume by Galvin and Haller (2008) and show quite a different picture. While the two cases with a relatively strict fortress approach – Mkomazi in Tanzania and Phong Nha Kẻ Bàng in Vietnam – remain situated where they are in the matrix also from a local perspective, the other cases move from a formally more participatory approach to more of a fortress approach in reality: two African cases (Waza in Cameroon and Ankarafantsika in Madagascar) as well as Kangchenjunga (Nepal) move from collaborative management with negotiation including individual incentives according to official statements towards a park outreach approach and partially collective incentives from a local perspective. In this situation, local people face the dilemma of enjoying involvement on paper but not in reality, since they lack real decision-making power with regard to protected area management. The divergences are even worse in cases that formally appear to be among the most participatory: Selous (Tanzania) shifts from power-sharing to a fortress approach with medium collective and individual incentives due to the fact that locals have no real decision-making power regarding management plans and hunting quotas. The only case from the African continent that becomes more participatory is Simen, which used to have a lower level of participation and appears to have become more participatory in recent years (Hurni et al 2008). The Latin American cases, in which formal statements indicated collective incentives and community conservation via power transfer, were also found to have a much lower level of participation in reality, with local people having a lesser say than anticipated with regard to concrete management of the protected areas. Among the formally more participatory cases, the Swiss Alps Jungfrau-Aletsch World Heritage Site in Switzerland and the Lore Lindu National Park in Sulawesi, Indonesia, are the only ones with relatively small differences between their positions as formally declared and as locally perceived. In Switzerland, this is due to the fact that local people have considerable institutional power to address problems based on the political system of direct democracy. In Indonesia, it is a result of the clever manoeuvring of To Lindu elders trying to control the area based on their own personal interests. In both cases, the small divergence between official statements and local realities is a result of a political system and an ideological setting in which local actors have increased bargaining power to influence the institutional design and try to gain political power from the protected area system.

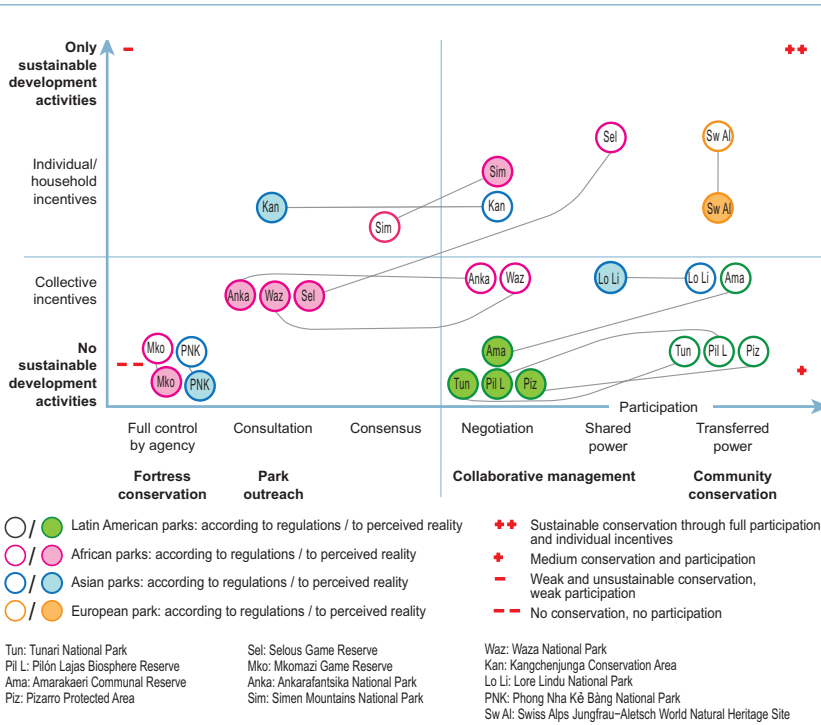


Fig. 2 Comparative matrix showing the extent of participation and sustainability in the 13 protected areas under study, as stated by the park authorities and as perceived by local people. (Source: Haller and Galvin 2008b, p 544, slightly adapted)

Our study indicates that a participatory approach to protected areas and conservation generally has some potentials on paper, but that at the local level people often lack the power to tap this potential and to challenge more powerful actors from outside the area. But the Latin American cases, the case of the To Lindu (Sulawesi, Indonesia), and the Swiss case indicate that even if economic gains from participatory conservation are low or non-existent, it can be helpful to prevent other users from entering the area or at least control their activities. Indeed, this already appears as a big achievement compared to the other case studies. What does this tell us in the context of new developments in protected area and conservation issues worldwide? The final section of this article offers a review of more recent literature that appeared in the three years since the study was first published. It outlines three new topics which have to be debated in connection with protected area management and conservation: projects related to climate change, commodification of protected areas and conservation, and the debate over local land rights.

23.9 New developments faced by protected areas and conservation initiatives: climate change, commodification, and land rights

23.9.1 Impacts of the climate change discourse on protected areas and conservation

Climate change has become one of the central discourses over the last three years, and this development provides both risks and opportunities for local actors confronted with protected areas. The rise of climate change as a discourse in protected area management stems from debates taking place at a global scale. However, global responses to climate change, such as trade in emissions permits, as well as emissions themselves affect protected areas at the local level. Gomera and colleagues (2010) discuss this phenomenon specifically for Africa, but similar lessons apply to Latin America and Asia as well. Climate is now seen as a global commons, and climate change in this discourse will affect everybody as it provides legitimacy for globalised action. The focus in this regard is on forests and protected areas with a link to forestry.

In the negotiations for a post-Kyoto protocol under the UN Framework Convention on Climate Change (UNFCCC), forestry issues are considered highly relevant to mitigating climate change and, accordingly, receive major attention. They are addressed by means of the so-called Reduced Emissions from Deforestation and Forest Degradation (REDD) programme. The aim of REDD is to find market solutions to the problem of deforestation, especially in nations and local communities affected by these changes. In the context of REDD, decisions are taken on how to regulate access and distribute costs and benefits. Payments for ecosystem services – in other words, a market for dealing in carbon emissions – is thought to give climate and climate change issues the right level of value in order for international actors to respond to the threat. This market is now generating a value higher than the financial aid Africa receives annually. It contains several mechanisms, such as 1) a so-called Compliance Market (in the Kyoto Protocol), 2) emission trading platforms, and 3) trade in emissions outside the Compliance Market. The latter includes, for example, REDD initiatives to increase forestry production (also referred to as “carbon farming”).

This ongoing debate on climate change and its new economic value will have an effect on access to land in cases such as those studied in the NCCR North-South’s comparative study. Climate change mitigation initiatives can be

used by government elites to make a profit while excluding local inhabitants (Gomera et al 2010). According to the international discourse, deforestation accounts for 17% of the global greenhouse gas emissions, the second largest share after that caused by energy supply (25.9%) (IPCC 2007). Consequently, forestry is a major focus when it comes to reducing emissions. Experts expect that governments will expand forest conservation areas, in this way possibly diminishing local people's access to land worldwide (IPCC 2007; see also Agrawal et al 2008; Sunderlin et al 2008).

23.9.2 Increase in NGO activity and commodification of conservation

Another recent tendency is the increase in size and spread of conservation NGOs, which, according to Brockington and colleagues (2008), are becoming less and less downward accountable. Research has shown that their spending has been insufficient, has not matched priorities, and, in some cases, has been too closely linked with large industries and corporations. Brockington and colleagues (2008) argue that conservation NGOs are frequently involved in 'greenwashing' activities as a new opportunity for capitalist engagement in conservation based on newly created commodities. One such commodity is coercive state power: conservation NGOs profit from it 'offstage' while using the discourse of participatory community conservation and highlighting community-friendliness onstage. This finding is in line with the results from our study and has much more to do with the structural problem of conservation becoming a donor commodity than with an intention to hamper local livelihoods. Nevertheless, in many cases local livelihoods are impaired, as an overview on conservation and evictions by Brockington and colleagues (2006) shows. Interestingly, some conservation organisations claim the opposite to be a problem. Conservation International (CI) was founded in 1987 by people who broke away from WWF because their preference for community approaches rather than 'purely scientific' approaches had become incompatible with WWF's official policy – which corresponded to the second position outlined in section 23.2 above (critically discussed in Brockington et al 2008). Thus, the little that is done for local communities is perceived as too much by some organisations. By contrast, our study demonstrates that 1) in most cases local costs of participatory conservation in protected areas are too high; 2) community involvement by large conservation NGOs is more a means for legitimising conservation activities than a new policy recognising local people's role in conservation; and 3) natural landscapes are insufficiently recognised as cultural landscapes (Fairhead and Leach 1996; Haller and Galvin 2008b).

A new form of extending the influence of external state and non-state actors in the context of conservation are transboundary protected areas (also called transfrontier conservation areas in the Southern African context). These protected areas are intended to provide an opportunity for biodiversity conservation at an increasingly large scale and across state boundaries. Critical voices argue that this masks the aim to control difficult areas and, ultimately, to grab land from local people in frontier zones. Again, the official discourse is about community participation while in fact this masks opportunities for further-reaching control by organisations and nation states. Critical authors see the extension of state control in the name of conservation as one of the major donor and state elite strategies in a new public–private partnership (Neumann 2003). However, the focus in this partnership is not restricted to transboundary areas: Indeed, entire nations come into focus, such as, for example, Madagascar, which as an island state is narrated to be one of the most important spots worldwide for biodiversity conservation. Such narratives trigger large sums of donor money which are spent in public–private enterprises that are often North–South driven. In the case of a Swiss zoological society (Zurich Zoo) and the area of Masoala in northeastern Madagascar, this led to the creation of a small artificial ecosystem in the Zurich Zoo with animals and plants from Madagascar. This raises the zoo’s attractiveness and boosts conservation awareness in the North, while helping to implement a conservation policy at the local level that harms local livelihoods by excluding local people from their former area and prohibiting local small-scale slash-and-burn agriculture (Keller, in press).

We argue that such developments are in fact to be seen as the downside of Northern economic interest in the South, of which conservation is now a logical part: The worldwide use of natural and mineral resources for the world market creates pressure on nature – which cannot be changed – hence the even greater need to set aside some portions of ‘pure nature’. As Brockington and colleagues (2008) convincingly argue, it would thus be wrong to consider the negative aspects of the commodification of conservation as separate from the market economy and the logic of capitalism. Indeed, these authors go even further by drawing on the work of Marx, Guy Debord, and Jean Baudrillard, arguing that gains are to be made from ‘spectacle of nature’ images, and that this is firmly in the capitalistic hands of transnational conservation organisations as well as celebrities, who increasingly invest in conservation and sell their image based on this engagement in conservation (Brockington et al 2008; Brockington 2009).

Brockington and colleagues point out a crucial fact that is also visible in our studies: Important initiatives such as decentralisation and devolution of power in protected areas have gone only halfway and have failed to empower local heterogeneous communities in a way that would have been profitable for them, instead creating ‘docking stations’ for capitalism. In line with scholars such as Ferguson, who describes the “development apparatus” in Lesotho as a “machine for reinforcing and expanding the exercise of bureaucratic state power” (1990, p 254), Swatuk, who sees participation as a “political cross-conditionality in current North–South inter-state relations” (2005, p 99), and Blaikie, who describes participation as a “Trojan horse” disguising powerful interests (2006, p 1952), Brockington and colleagues argue that co-management actually masks hidden interests – which are frequently external. From a new institutionalist perspective, based on the notion of changes in relative prices influencing the bargaining power of actors, this view of strategic action can be seen as an integral part of the new institutional theory adopted in this article. In the past, tourism and ecotourism, as well as initiatives such as community-based natural resource management projects, have developed into interesting markets, leading to an increase in their relative prices. As we have shown in the NCCR North-South study in the Tanzanian cases (Mbeyale and Songorwa 2008; Meroka and Haller 2008), but also in other cases, such initiatives do not really devolve power, but create costs at the local level while offering gains for more powerful actors (state or private). Now, new gains can be made from what is called “disaster capitalism” (Klein 2007): In a world of hyperreality (Baudrillard 1981) – meaning that reality is completely constructed but made to be real – conservation services, such as reducing the ecological footprint, saving animals and forests, or even creating small projects for local people, become a commodity to be sold internationally (Brockington et al 2008). We have argued that this is especially true in the African cases, while in Latin America indigenous peoples could profit from their internationally accepted political position. However, it is unclear what future effects the new developments in carbon markets and certification processes and the increase in private parks will have. Generally, it can be said that the corresponding increase in relative prices of conservation services, by fostering conservation – even if linked with a participatory approach – creates pressure on local communities and their land. It is doubtful that ‘conserved pure nature’ as a commodity to be sold will provide any opportunities for them.

23.9.3 Re-emergence of the land rights debate

The new commodification of conservation does not mean that the direct pressure on landscapes will be reduced. On the contrary: As argued above, the market economy and pressure on landscapes are two sides of the same coin. New direct pressure on landscapes stems from a new and growing interest in land for agricultural and raw material production. In particular China and other emerging markets such as India and Brazil contribute to an increasing worldwide demand for such resources, boosting relative prices for land, renewable, and mineral resources. This will cause severe pressure in the future, for example in areas where water is abundant, such as in wetlands (Haller 2010b). Against this background, we argue that from a local people's point of view the issue of land rights is (again) crucial to successful participatory conservation, and central to all concerns we have seen emerging on the agenda of the debate on participatory management of protected areas. Land rights and institutions must be developed in genuinely participatory processes; this is a key challenge, but at the same time a *sine qua non* for an equitable and sustainable development of cultural landscape management. In the context of ongoing land grabbing, the demand for land rights to be established in a participatory process is even more important.

However, the issue of land rights is complex, as clear land rights and land titles not only solve problems but also create new ones. Heterogeneity of interests within a community can be increased by establishing fixed land rights that complicate collective action. In addition, the questions of who is to legitimise access and exclusion and who will deal with the related power issues (elite capture by local, business, or government elites) need to be resolved in cases where there is no democratic system in place and downward accountability is not provided (Ribot 2002, 2003). Indeed, these highly important questions with respect to alternative protected area management have yet to be answered. Nevertheless, there are some results on which further research can build. One discourse presented by Nelson (2010) highlights worldwide studies in forestry which have indicated that if collective land rights and land tenure institutions are clear and recognised – and, as a hypothesis, also locally developed (Haller and Galvin 2008b; Chabwela and Haller 2010) – community-based management of forestry, wildlife, and fisheries proves to provide better results in terms of local benefits, ecosystems, and common-pool resources than state management. This position is also supported by Wily (2000).

The problem outlined by Ribot (2003) as well as Geiser and Rist (2009), however, concerns the paradox that, on the one hand, secure land rights and a notion of territoriality are prerequisites to well and sustainably functioning institutions – see also Ostrom’s design principle of “clear boundaries” (Ostrom 1990, pp 90–91) – while, on the other hand, fixed land rights, territoriality, and boundaries (all having different implications but being linked with one another) also bear the risk of hindering commoners’ access to resources. Studies of traditional common-property institutions in African floodplains have indicated that boundaries exist, but are adapted to flooding patterns and frequently permeable, allowing for reciprocal access by different local groups to their respective territories, and thus to resources, including not only land, but also related resources such as water, pasture, fisheries, wildlife, veldt products, etc. (Haller 2010b). Another critical argument could be that fixing boundaries will lead to maladaptations and to the exclusion of commoners and invited users whose use in the past was not open but locally managed and monitored. This again calls for detailed studies and a locally rooted participatory approach to land rights, territoriality, and boundaries (see also Wily 2000). Such processes require ample attention, and we see two ways in which they should be approached: First, it is necessary to make a sound assessment of the given local legal and power settings, taking account of the past and of different scales of governance; and second, local awareness of this process must be created and existing opportunities harnessed in order to establish a platform for negotiations towards an institutionalised and constitutionalised local consensus (Chabwela and Haller 2010; Haller 2010b). A prerequisite for such a decentralisation and democratisation process is what Ribot has called a five-level programme: 1) democratic local government, 2) multiple accountability, 3) transfer of power before transferring burdens, 4) transfer of power before building capacity, and 5) local autonomy nested in national objectives (Ribot 2003). This can lead to village land rights or group resource rights, to locally adapted by-laws to existing laws, etc. (Haller and Chabwela 2009; Haller and Merten 2010). In other publications we have referred to this process as “constitutionality”, where institutions are locally crafted and embody local ownership of this process and of the outcome, which then has to be backed up by state recognition.

It remains to be seen whether a new Swiss initiative of the Federal Office for the Environment to establish so-called Regional Nature Parks – a label for sustainable landscape management that communes and groups of communes in areas of weak industrial development (frequently mountain areas) can apply for in order to boost conservation and at the same time benefit

from it for local tourist development – will have the desired effects. To date, 20 areas have applied for the Regional Nature Park label or have already been awarded the label.⁴ Like in the Swiss case presented above as part of the NCCR North-South's comparative study, recognition of parks is contingent upon a participatory process at the local level. Preliminary anthropological research⁵ in four areas indicates that although this procedure is promising, the heterogeneous interests of the different actors involved also pose a considerable challenge: Some pursue direct personal material gains, others (in particular conservation NGOs) emphasise the need to protect 'nature', and yet others are motivated by the hope for general economic and development gains from boosting the economy of these marginal Swiss mountain areas. Nevertheless, the procedure is embedded in a decentralised national legislation that respects local land rights and participation to a much higher degree than in any other case in the world. Further studies are needed to determine whether this Swiss initiative can provide elements for design principles to guide the crafting of sustainable institutions for the protection of diverse culturally modified landscapes and their biodiversity.

Endnotes

Full citation for this article:

Haller T, Galvin M. 2011. Challenges for participatory conservation in times of global change: Lessons from a comparative analysis and new developments. *In*: Wiesmann U, Humi H, editors; with an international group of co-editors. *Research for Sustainable Development: Foundations, Experiences, and Perspectives*. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 6. Bern, Switzerland: Geographica Bernensia, pp 467–503.

Acknowledgements:

The authors acknowledge support from the Swiss National Centre of Competence in Research (NCCR) North-South: Research Partnerships for Mitigating Syndromes of Global Change, co-funded by the Swiss National Science Foundation (SNSF), the Swiss Agency for Development and Cooperation (SDC), and the participating institutions.

¹ Tobias Haller is Associate Professor at the Institute of Social Anthropology, University of Bern, and lecturer at the Swiss Federal Institute of Technology Zurich, both in Switzerland. He did fieldwork in Cameroon and Zambia and has specialised in economic and ecological anthropology: common-pool resource management, New Institutionalism and local perception of the environment, farmers and agro-pastoralists, fishermen, oil exploitation, and protected areas and community-based natural resource management.

E-mail: haller@anthro.unibe.ch

² Marc Galvin studied anthropology at The Graduate Institute in Geneva, Switzerland, where he worked as a Senior Researcher for several years and now heads the Publication Services division. E-mail: marc.galvin@graduateinstitute.ch

³ Common-pool resources are resources which are difficult to defend by individuals because they are widely scattered; which can be managed better collectively; and which are subtractable, meaning that once a resource unit is used, it is no longer available for the ongoing seasonal period (Ostrom 1990; Haller 2007).

⁴ For the most recent developments, see press releases of the Swiss Federal Office for the Environment at <http://www.bafu.admin.ch/dokumentation/medieninformation/index.html?lang=en> (accessed on 8 September 2011).

⁵ Five studies were conducted by students from the Institute of Social Anthropology, University of Bern, Switzerland, in a research training course led by Tobias Haller (4) and in a Master research project (1). Results have not yet been published.

References

Publications elaborated within the framework of NCCR North-South research are indicated by an asterisk (*).

- * Acciaioli G. 2008. Environmentality reconsidered: Indigenous To Lindu conservation strategies and the reclaiming of the commons in Central Sulawesi, Indonesia. In: Galvin M, Haller T, editors. *People, Protected Areas and Global Change: Participatory Conservation in Latin America, Africa, Asia and Europe*. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 3. Bern, Switzerland: Geographica Bernensia, pp 401–429.
- Agrawal A, Chhatre A, Hardin RD. 2008. Changing governance of the world's forests. *Science* 320(5882):1460–1462.
- * Álvarez A, Alca J, Galvin M, García A. 2008. The difficult invention of participation in the Amarakaeri Communal Reserve, Peru. In: Galvin M, Haller T, editors. 2008. *People, Protected Areas and Global Change: Participatory Conservation in Latin America, Africa, Asia and Europe*. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 3. Bern, Switzerland: Geographica Bernensia, pp 111–143.
- Ashley C, Mdoe N, Reynolds L. 2002. *Rethinking Wildlife for Livelihoods and Diversification in Rural Tanzania: A Case Study from Northern Selous*. LADDER Working Paper 15. London, UK: Department for International Development (DFID). Also available at: <http://www.odi.org.uk/resources/download/2927.pdf>; accessed on 30 August 2011.
- Baudrillard J. 1981. *Simulacres et simulation*. Paris, France: Editions Galilée.
- Blaikie P. 2006. Is small really beautiful? Community-based natural resource management in Malawi and Botswana. *World Development* 34(11):1942–1957.
- * Boillat S, Rist S, Serrano E, Ponce D, Delgadillo J. 2008. Struggling 'ontological communities': The transformation of conservationists' and peasants' discourses in the Tunari National Park, Bolivia. In: Galvin M, Haller T, editors. 2008. *People, Protected Areas and Global Change: Participatory Conservation in Latin America, Africa, Asia and Europe*. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 3. Bern, Switzerland: Geographica Bernensia, pp 37–80.
- Borgerhoff Mulder M, Coppolillo P. 2005. *Conservation: Linking Ecology, Economics, and Culture*. Princeton, NJ: Princeton University Press.
- Borrini-Feyerabend G, Pimbert M, Farvar MT, Kothari A, Renard Y. 2004. *Sharing Power: Learning-by-doing in Co-management of Natural Resources Throughout the World*. Gland, Switzerland: International Institute for Environment and Development (IIED) and International Union for Conservation of Nature (IUCN).
- * Bottazzi P. 2008. Linking 'socio-' and 'bio-' diversity: The stakes of indigenous and non-indigenous co-management in the Bolivian lowlands. In: Galvin M, Haller T, editors. *People, Protected Areas and Global Change: Participatory Conservation in Latin America, Africa, Asia and Europe*. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 3. Bern, Switzerland: Geographica Bernensia, pp 81–109.
- Brockington D. 2009. *Celebrity and the Environment: Fame, Wealth and Power in Conservation*. London, UK: Zed Books.
- Brockington D, Duffy R, Igoe J. 2008. *Nature Unbound: The Past, Present and Future of Protected Areas*. London, UK: Earthscan.
- Brockington D, Igoe J, Schmidt-Soltan K. 2006. Conservation, human rights, and poverty reduction. *Conservation Biology* 20(1):250–251.
- Chabwela HN, Haller T. 2010. Governance issues, potentials and failures of participative collective action in the Kafue Flats, Zambia. *International Journal of the Commons* 4(2):621–642. Also available at: <http://www.thecommonsjournal.org/index.php/ijc/article/view/189/158>; accessed on 30 August 2011.
- DeMotts R, Haller T. 2009. Dynamics of common pool resource management in the Okavango Delta, Botswana. *Development Southern Africa* 26(4):569–583. doi:10.1080/03768350903181357.

- Ensminger J. 1992. *Making a Market: The Institutional Transformation of an African Society*. Cambridge, UK: Cambridge University Press.
- Fairhead J, Leach M. 1996. *Misreading the African Landscape: Society and Ecology in a Forest–Savanna Mosaic*. Cambridge, UK: Cambridge University Press.
- Ferguson J. 1990. *The Anti-Politics Machine: "Development," Depoliticization, and Bureaucratic Power in Lesotho*. Cambridge, UK: Cambridge University Press.
- * Fokou G. 2010. Tax Payments, Democracy and Rent-Seeking Administrators: Common-Pool Resource Management, Power Relations and Conflicts among the Kotoko, Musgum, Fulbe and Arab Choa in the Waza-Logone Floodplain (Cameroon). In: Haller T, editor. *Disputing the Floodplains: Institutional Change and the Politics of Resource Management in African Wetlands*. African Social Studies Series. Leiden, The Netherlands: Brill, pp 121–170.
- * Fokou G, Haller T. 2008. Are local stakeholders conservationists? Livelihood insecurity and participatory management of Waza National Park, North Cameroon. In: Galvin M, Haller T, editors. *People, Protected Areas and Global Change: Participatory Conservation in Latin America, Africa, Asia and Europe*. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 3. Bern, Switzerland: Geographica Bernensia, pp 325–360.
- Foucault M. 1981. The order of discourse. In: Young R, editor. *Untying the Text: A Post-Structuralist Reader*. London, UK and New York, NY: Routledge and Kegan Paul, pp 48–78.
- * Galvin M, Haller T, editors. 2008. *People, Protected Areas and Global Change: Participatory Conservation in Latin America, Africa, Asia and Europe*. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 3. Bern, Switzerland: Geographica Bernensia.
- * Geiser U, Rist S, editors. 2009. *Decentralisation Meets Local Complexity: Local Struggles, State Decentralisation and Access to Natural Resources in South Asia and Latin America*. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 4. Bern, Switzerland: Geographica Bernensia.
- Gibson CC. 1999. *Politicians and Poachers: The Political Economy of Wildlife Policy in Africa*. Cambridge, UK: Cambridge University Press.
- Goldman M. 2003. Partitioned nature, privileged knowledge: Community-based conservation in Tanzania. *Development and Change* 34(5):833–862.
- Gomera M, Rihoy L, Nelson F. 2010. A changing climate for community resource governance: Threats and opportunities from climate change and the emerging carbon market. In: Nelson F, editor. *Community Rights, Conservation and Contested Land: The Politics of Natural Resource Governance in Africa*. London, UK: Earthscan, pp 293–309.
- Haller T. 2007. Is there a culture of sustainability? What social and cultural anthropology has to offer 15 years after Rio. In: Burger P, Kaufmann-Hayoz R, editors. *15 Jahre nach Rio – Der Nachhaltigkeitsdiskurs in den Geistes- und Sozialwissenschaften: Perspektiven – Leistungen – Defizite*. Bern, Switzerland: Swiss Academy of Humanities and Social Sciences (SAGW).
- Haller T. 2010a. Common pool resources, legal pluralism and governance from a new institutionalist perspective: Lessons from the African Floodplain Wetlands Research Project (AFWeP). In: Eguavoen I, Laube W, editors. *Negotiating Local Governance: Natural Resource Management at the Interface of Communities and the State*. Münster, Germany: Lit-Verlag, pp 137–180.
- Haller T, editor. 2010b. *Disputing the Floodplains: Institutional Change and the Politics of Resource Management in African Wetlands*. African Social Studies Series. Leiden, The Netherlands: Brill.
- Haller T, Blöchliger A, John M, Marthaler E, Ziegler S. 2007. *Fossil Resources, Oil Companies and Indigenous Peoples*. Zurich, Switzerland: Lit-Verlag.
- Haller T, Chabwela N. 2009. Managing common pool resources in the Kafue Flats, Zambia: From common property to open access and privatisation. *Development Southern Africa* 26(4):555–567.
- * Haller T, Galvin M. 2008a. Introduction: The problem of participatory conservation. In: Galvin M, Haller T, editors. *People, Protected Areas and Global Change: Participatory Conservation in Latin America, Africa, Asia and Europe*. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 3. Bern, Switzerland: Geographica Bernensia, pp 13–34.

- * Haller T, Galvin M. 2008b. Participation, ideologies and strategies: A comparative new institutionalist analysis of community conservation. In: Galvin M, Haller T, editors. *People, Protected Areas and Global Change: Participatory Conservation in Latin America, Africa, Asia and Europe*. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 3. Bern, Switzerland: Geographica Bernensia, pp 507–550.
- * Haller T, Galvin M, Meroka P, Alca J, Álvarez A. 2008. Who gains from community conservation? Intended and unintended costs and benefits of participative approaches in Peru and Tanzania. *Journal of Environment and Development* 17(2):118–144.
- Haller T, Merten S. 2010. "We had cattle and did not fish and hunt anyhow!" Institutional Change and Contested Commons in the Kafue Flats Floodplain (Zambia). In: Haller T, editor. *Disputing the Floodplains: Institutional Change and the Politics of Resource Management in African Wetlands*. African Social Studies Series. Leiden, The Netherlands: Brill, pp 301–360.
- * Hufty M. 2008. Pizarro protected area: A political ecology perspective on land use, soybeans and Argentina's nature conservation policy. In: Galvin M, Haller T, editors. *People, Protected Areas and Global Change: Participatory Conservation in Latin America, Africa, Asia and Europe*. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 3. Bern, Switzerland: Geographica Bernensia, pp 145–173.
- Hulme D, Murphree M, editors. 2001. *African Wildlife and Livelihoods: The Promise and Performance of Community Conservation*. Oxford, UK and Portsmouth, NH: James Currey and Heinemann.
- * Hurni H, Leykun Abunie, Ludi E, Mulugeta Woubshet. 2008. The evolution of institutional approaches in the Simen Mountains National Park. In: Galvin M, Haller T, editors. *People, Protected Areas and Global Change: Participatory Conservation in Latin America, Africa, Asia and Europe*. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 3. Bern, Switzerland: Geographica Bernensia, pp 287–323.
- IPCC [Intergovernmental Panel on Climate Change]. 2007. *Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Geneva, Switzerland: IPCC.
- Keller E. In press. *Imagining 'the Other': Representations of Nature Conservation in Madagascar and in Switzerland*. New York, NY: Berghahn Books.
- Klein N. 2007. *The Shock Doctrine: The Rise of Disaster Capitalism*. Toronto, Canada: Knopf Canada.
- * Larsen PB. 2008. Linking livelihoods and protected area conservation in Vietnam: Phong Nha Ké Bàng World Heritage, local futures? In: Galvin M, Haller T, editors. *People, Protected Areas and Global Change: Participatory Conservation in Latin America, Africa, Asia and Europe*. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 3. Bern, Switzerland: Geographica Bernensia, pp 431–469.
- * Mbeyale GE, Songorwa AN. 2008. Conservation for whose benefit? Challenges and opportunities for management of Mkomazi Game Reserve, Tanzania. In: Galvin M, Haller T, editors. *People, Protected Areas and Global Change: Participatory Conservation in Latin America, Africa, Asia and Europe*. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 3. Bern, Switzerland: Geographica Bernensia, pp 221–251.
- McShane TO, Wells MP. 2004. *Getting Biodiversity Projects to Work: Towards More Effective Conservation and Development*. New York, NY: Columbia University Press.
- Meinzen-Dick R, Pradhan R. 2002. *Legal Pluralism and Dynamic Property Rights*. CAPRI Working Paper No. 22. Washington, D.C.: Consultative Group on International Agricultural Research (CGIAR) Systemwide Program on Collective Action and Property Rights (CAPRI). Also available at: <http://www.capri.cgiar.org/wp/capriwp22.asp>; accessed on 23 November 2009.
- * Meroka P, Haller T. 2008. Government wildlife, unfulfilled promises and business: Lessons from participatory conservation in the Selous Game Reserve, Tanzania. In: Galvin M, Haller T, editors. *People, Protected Areas and Global Change: Participatory Conservation in Latin America, Africa, Asia and Europe*. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 3. Bern, Switzerland: Geographica Bernensia, pp 177–219.

- * Müller U, Gurung GS, Kollmair M, Müller-Böker U. 2008. "Because the project is helping us to improve our lives, we also help them with conservation": Integrated conservation and development in the Kangchenjunga Conservation Area, Nepal. In: Galvin M, Haller T, editors. *People, Protected Areas and Global Change: Participatory Conservation in Latin America, Africa, Asia and Europe*. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 3. Bern, Switzerland: Geographica Bernensia, pp 363–399.
- * Muttenzer F. 2008. 'Integrated fortress conservation' in the buffer zone of Ankarafantsika National Park: Malagasy narratives of conservation, participation and livelihoods. In: Galvin M, Haller T, editors. *People, Protected Areas and Global Change: Participatory Conservation in Latin America, Africa, Asia and Europe*. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 3. Bern, Switzerland: Geographica Bernensia, pp 253–286.
- Nelson F, editor. 2010. *Community Rights, Conservation and Contested Land: The Politics of Natural Resource Governance in Africa*. London, UK: Earthscan.
- Neumann RP. 1998. *Imposing Wilderness: Struggles over Livelihood and Nature Preservation in Africa*. Berkeley, CA: University of California Press.
- Neumann RP. 2003. The production of nature: Colonial recasting of the African landscape in the Serengeti National Park. In: Zimmerer KS, Basset TJ, editors. *Political Ecology*. New York, NY: Guilford, pp 240–255.
- Ostrom E. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge, UK: Cambridge University Press.
- Ribot J. 2002. *Democratic Decentralization of Natural Resources: Institutionalizing Popular Participation*. Washington, D.C.: World Resource Institute (WRI). Also available at: http://pdf.wri.org/ddnr_full_revised.pdf; accessed on 23 November 2009.
- Ribot J. 2003. Democratic decentralisation of natural resources: Institutional choice and discretionary power transfers in Sub-Saharan Africa. *Public Administration and Development* 23(1):53–65.
- * Rist S, Delgado F, Wiesmann U. 2003. The role of social learning processes in the emergence and development of Aymara land use systems. *Mountain Research and Development* 23(3):263–270.
- Saum R. 2010. Promise and reality of community based natural resource management in Botswana: Common-pool resource use and institutional change in Ikoga, Okavango Delta (Panhandle). In: Haller T, editor. *Disputing the Floodplains: Institutional Change and the Politics of Resource Management in African Wetlands*. African Social Studies Series. Leiden, The Netherlands: Brill, pp 361–412.
- Stevens S, editor. 1997. *Conservation Through Cultural Survival: Indigenous Peoples and Protected Areas*. Washington, D.C.: Island Press.
- Sunderlin WD, Hatcher J, Liddle M. 2008. *From Exclusion to Ownership? Challenges and Opportunities in Advancing Forest Tenure Reform*. Washington, D.C.: Rights and Resources Initiative. Also available at: http://www.rightsandresources.org/publication_details.php?publicationID=736; accessed on 30 August 2011.
- Swatuk LA. 2005. From "project" to "context": Community based natural resource management in Botswana. *Global Environmental Politics* 5(3):95–124.
- * Wallner A, Rist S, Liechti K, Wiesmann U. 2008. Protection: A means for sustainable development? The case of the Jungfrau-Aletsch-Bietschhorn World Heritage Site in Switzerland. In: Galvin M, Haller T, editors. *People, Protected Areas and Global Change: Participatory Conservation in Latin America, Africa, Asia and Europe*. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 3. Bern, Switzerland: Geographica Bernensia, pp 471–504.
- West P, Igoe J, Brockington D. 2006. Parks and peoples: The social impact of protected areas. *Annual Review of Anthropology* 2006(35):251–277.
- Wily LA. 2000. *Making Woodland Management More Democratic: Cases from Eastern and Southern Africa*. London, UK: International Institute for Environment and Development. Also available at: <http://pubs.iied.org/pdfs/9029IIED.pdf>; accessed on 30 August 2011.