

Governance issues, potentials and failures of participatory collective action in the Kafue Flats, Zambia

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Abstract: Fisheries, wildlife and pastures are under massive pressure in the Kafue Flats, which is one of the largest floodplains in southern and Central Africa. This wetland ecosystem that once harboured abundant common-pool resources that was managed by local common property regimes is now being threatened with overexploitation. During the last 30 years there has been severe pressure and overuse of these common-pool resources. A historical and New Institutional analysis of the situation of common-pool resources indicates that overuse of fisheries and the mismanagement of wildlife stem from the erosion of traditional institutions by the state. Institutional weakness resulting from economic decline in the country is of major concern as the institutions can no longer effectively enforce regulations in the area, a situation which has led to a *de facto* open access constellation for common-pool resources. There have been several attempts to mitigate this problem based on conservation attempts and designed to include local level governance in the management of common-pool resources with mixed results. The paper discusses three cases: the first is the WWF-Wetland Project and the Administrative Management Design (ADMAD) initiative, was designed to deal with the management of Lochinvar and Blue Lagoon National Parks and the adjacent Game Management Area through the involvement of local chiefs and local communities. The second case refers to the Partners for Wetlands Project, which included local people represented by their chiefs as well as the public and private sectors from large agricultural enterprises on the eastern side of the Kafue Flats (Mwanachinwala Conservation Area project in Mazabuka). Both attempts yielded poor results due to misconceptions of traditional representation of local

communities and misinterpretation of local economic and political incentives for participation and sense of local ownership. Although the ADMADE programme appears to be escalating, its implementation continues to receive considerable resistance from those opposed to chiefs and later from the chiefs themselves. In the third case, the paper examines a participatory co-management process in the fisheries, which started in 2004, based on initiatives by local staff of the Department of Fisheries, local interest groups and researchers. A broad local debate on how to manage the fisheries sustainably and develop locally based by-laws for joint management of fisheries gives potential for success and appears promising for the future of fisheries in the Kafue Flats. Despite many difficulties, it is an example of local collective action to scale up governance of common-pool resources.

Keywords: Common-pool resources, co-management, floodplains, governance, institutions, participation and collective action

1. Introduction

This paper focuses on three cases of governance¹ of common-pool resources in the Kafue Flats in Zambia's Southern Province. This wetland is one of the largest in Southern Africa, and an economically important area for grazing pastures, wildlife conservation, fisheries, water resources, hydropower development and agriculture. The objective of this paper is to critique the participatory approach to common-pool resource management and raise a number of questions about how and why participatory co-management of the commons offers potentials for collective action, based on three cases of co-management attempts. A) We briefly discuss the process of institutional change and describe the co-management of wildlife under the wetlands project in the Administrative Management Design (ADMAD) programme, which was organised with the assistance of WWF-International and followed-up with a programme led by the Zambian Wildlife Authority (ZAWA). B) We present as a second attempt in wildlife management the project known as Partners for Wetlands Project, which involved the World Wildlife Fund (WWF) – Netherlands, local agri-business, communities and chiefs. C) The third case analysis is the Kafue Flats fishery by-law project, an initiative of the local Department of Fisheries in Mazabuka, Monze, Namwala and local communities along with help from researchers and the WorldFish Centre, through which the process of locally defined by-laws for fisheries management was established. We will argue that the first two cases suffer from lack of real participation while the last case offers great potential for participatory collective action by providing different local and immigrant stakeholders with the opportunity to get involved in governance.

¹ Governance refers to a constitutional set of rules and regulations while management is more on the practical level.

The primary argument in this paper is that among the reasons past projects have had poor outcomes are misconceptions about local power processes and the inability of those involved to use traditionally developed institutional settings or to transform them in a participatory way to create local ownership of the process and its outcomes. Making traditional chiefs the main representatives of divergent local stakeholders has presented a real challenge to successful co-management. Elite capture and the perceptions of local and immigrant people is that they are only partially represented have negative consequences for such a co-management approach. Whereas several institutions were established during both the colonial and the post independence periods for managing natural resources in the Kafue Flats (Haller and Chabwela 2009), very little has been achieved at the policy level, despite the three attempts discussed in this paper.

This is a challenge to the theory of collective action, because on paper all three initiatives offer options in this regard. The debate on collective action has focussed on issues of group size and incentives – small homogeneous groups finding it easier to act collectively – (Olson 1965; Ostrom 1990, 2005) and how these can be up scaled to gain significant results for governance (see also Hara et al. 2009). We argue that the example of the Kafue Flats should be seen as a kind of laboratory of participatory methods, which illustrate lessons to be learned from failure and success stories or partial success stories. It is argued that successful collective action is not limited to the size of a group, but has much to do with what Ostrom calls nested enterprises in the design principles for robust institutions (Ostrom 1990). However, if we are also looking at the phenomenon of institutional change, further elements of what is labelled New Institutionalism (Ensminger 1992, 1998; Platteau 2000; Ostrom 2005; Haller 2007b) must be considered. In this approach external factors (economy, social and political environment, technology, etc.) trigger relative prices for goods and services which then lead to the change of institutions on the local level. However, this change is not automatic, but depends on the bargaining power of the actors, of the organisations and ideology used to legitimise access and use of resources. This approach will help to explain why in the Kafue Flats common property of common-pool resources move from state property to open access and which actors are maintaining the open access situation for their personal interest. Ways to increase the bargaining power of local actors, in order to enable collective action for the crafting of institutions, will also be discussed. This means that several aspects must be considered if scaling up (or empowering) the management of common-pool resources is to be successful from this perspective. These are:

- a) That if local institutions are missing or dismantled, there is a need to revitalise them or substitute them with a locally driven process of partial consensus on the new rules of the game by different local stakeholders.

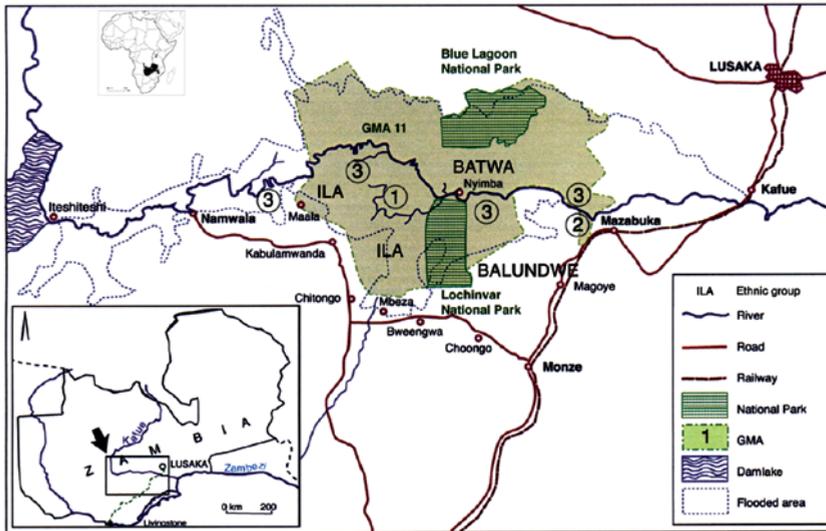
- b) That if the higher-level management at state level becomes dysfunctional, there is need for the state to provide a platform for local level management to be organised, recognised, and legitimised.
- c) That if management of common-pool resources requires local participation in planning and implementation, devolution of power to local people should be fully addressed.

This paper is based on research of Chabwela in the 1990s and of Haller between 2002 and 2007. Chabwela was once a Biologist and Director of the Department; he later moved on to the University of Zambia, Department of Biology. He was involved in several co-management processes, worked later as a consultant for WWF and IUCN and researched other issues of resource use (especially wildlife). Haller did an extensive ethnography of the chiefdom of Mbeza, of Namwala and Monze District. Ethnographic fieldwork was done between 2002 and 2003 for six months and another six months in 2004 as part of the African Floodplain Wetlands Project (AFWeP, Haller 2010). Methods used were participant observation during this total of one year of intensive fieldwork, open and semi-structured interviews, ten biographies, expert interviews, 12 focus group interviews, 250 household surveys in 13 villages including the Ila, Tonga and Batwa villages and three fishing camps. The survey included economic questions as well as questions related to changes in access to resources and changes in common-pool resources. After 2004–2007 three shorter field trips were taken by the two authors together and six to eight field discussions were held with local fishermen, agro-pastoralists and more than 20 government staff. In addition, a vast literature on the area was reviewed (summaries in Haller 2007a; see Smith and Dale 1968; LaMunière 1969; Colson 1970; Fielder 1973; Cutshall 1980; Fowler 2000).

The Kafue Flats floodplain is located in southern Zambia (Figure 1) about 50 km from Lusaka. The floodplain in total has an area of 6500 km² within the Kafue river basin (Chabwela 1982). During the rainy season and in the following months the Kafue Flats are flooded over an area of about 5000 km². After the water recedes the area, despite its modest average 800 mm annual rainfall, becomes fertile with rich pastures.

2. Floodplain communities, livelihoods and pre-colonial institutions

The first inhabitants in the Kafue Flats are said to have been the Batwa (or Twa) fishing communities (Lehmann 1977), who are now a minority of about 1000 people settled on levees along the main river channel. The dominant ethnic groups, who came to the area much later than the Batwa, are the Ila and Balundwe (Plateau Tonga) agro-pastoralists whose population is estimated at 300,000. For the agro-pastoralists, hunting and fishing were major subsistence activities in the past and



① Game Management Area Initiative ② Partners for Wetlands ③ Co-Management in Kafue Flats fisheries (by-Laws)

© Map by Miriam Wohlgenuth based on map by Sonja Merten in Haller 2007

remain so today. The Ila and Balundwe are organized into 11 different chiefdoms in four districts (Mazabuka, Monze, Namwala and Mumbwa) and came to the area between 200 and 300 years ago. They depended on fisheries, pastures and wildlife, often moving between a fixed settlement in the woodlands and cattle camps in the flats that were used after the floods had receded. Although the population on the Kafue Flats is generally sparse (<2 people per km²), the average population density of chiefdoms is relatively high. For example, settlements in woodlands and transitory areas have a density of 17 per km², mainly in chiefdom Nalubamba in Namwala, which has two-thirds of its territory in the flats (Haller 2007a).

Seasonal influx of fishing communities from other parts of the country started in the 1930s and increased from the 1950s to the 1970s. These immigrants were largely Bemba from the north of the country and the Copper belt area, and Lozi from the Lozi region in western Zambia. At the beginning of the 1970s there were 1262 fishermen living in 16 permanent fishing camps and 48 in semi-permanent fishing camps (Lehmann 1977), but the population has expanded significantly since then. Haller (2007a) gives a rough breakdown of the population at Mbeza as not <4000 fishermen confined to only four fishing camps in 2004. Currently, there are at least 11 major permanent fishing camps in the floodplain, each of which supports 500 or more fishers. In addition, there are large temporary fishing camps which are important during the dry season, and these are occupied by more than 900 households (Haller and Merten 2008). These fishers move to the flats during the dry season and move back when the area floods.

In pre-colonial times the Batwa were the initial controllers of the Kafue Flats, especially in ritual matters regarding fisheries and wildlife, while the Ila and Balundwe established themselves later and developed local institutions in the management of pastures, fisheries and wildlife in their territories and in collaboration with the Batwa (Haller 2007a). Today the Batwa are marginalised from other ethnic groups, particularly the Bemba and the Lozi fishermen who consider them inferior. This is not the case with the Ila who were once known as the richest cattle-owning group in Central Africa, with an average of 13 head of cattle per male household head (Smith and Dale 1968; Fielder 1973), although fishing and hunting played an equally significant role in their culture (Haller 2007a). This is illustrated by the pre-colonial political system, which was based on *primi inter pares*, called *mwami*, who played a leading role as ‘big men’ in defined resource territories. They competed with other ‘big men’ in order to attract followers to protect themselves against enemies, like warriors from the Lozi Kingdom, and against wild animals. These territories were vigorously defended. Leaders claimed spiritual ownership on the basis of animistic and ancestral religious systems and in this way justified the right to have a leading role in the management of the common-pool resources. Nevertheless, such leaders or ‘big men’ were not the single owner of a territory, but were the coordinators and “managers” of the common-pool resources found thereabouts. Members of the community had a sense of shared ownership of fisheries, pasture and wildlife in the area (Cutshall 1980; Haller and Chabwela 2009).² Hunting was largely regulated through the collective hunting institution called *chila*. During a *chila*, a large group of hundreds of hunters encircled herds of lechwe antelopes. The hunters were using dogs and spears to kill 2 to 3000 animals. The *chila* was organized and controlled by such ‘big men’, who then redistributed meat and skins locally. Hunting before and after a *chila* was announced in a territory was forbidden and sanctioned. Outside groups were invited to a *chila* on the basis of reciprocity (ibid).

Similarly, collective fishing (*luwando*) occurred in ponds and lagoons, river sections and tributaries. Fishing activities were regulated by traditional institutions based on territoriality, membership, controlled timing of use, gear (different gender related techniques) and rules of reciprocal access (Haller and Merten 2008). However, these institutions were not developed and enforced in order to achieve sustainable use of the resources, but were intended to gain prestige for the ‘big men’ and to ensure economically rational use. The aim was for the leader to be able to distribute goods and thus attract followers, as he was always in competition with other potential leaders (Cutshall 1980; Haller 2007a).

² A reviewer of this paper argued that this system cannot be seen as a common property system. There is no room here to go into details, but these are extensively covered by Haller 2007 in an ethnography of the area. However, it is not uncommon to have coordinators and managers in a community with more power and who do exercise control that is also based on norms commonly shared (see Moorehead 1989; Ostrom 1990; Ruttan 1998 for further discussions).

Of major importance in these traditional institutions was that co-ordination and redistribution process; rules and practices were embedded in their rituals. These had to be conducted before collective use was possible. The basis for this was the belief in ancestral spirits and their presence in the form of wild animals (crocodiles, hippopotami) provided a mechanism for control through timing and co-ordination of users. Another major aspect was that common-pool resources were managed jointly within sections of the ecosystem and not under discrete or fragmented organizational structures. Indeed, all resources within a territory were under co-ordinated management.

3. Institutional change and the status of wildlife and fisheries commons

3.1. Colonial and post-colonial changes

One major change affecting the status of wildlife and fisheries commons came with colonial control of the area, first by the British South Africa Company between 1900 and 1924 and later by the British Empire that managed what had been called Northern Rhodesia (Roberts 1976). There were four factors which led to institutional change. First, management and political control that had been in the hands of 'big men' were given to different people who became traditional leaders and received the status of a Traditional Native Authority in order to carry out the colonial mandate, help manage the area and collect taxes. This changed the power structure among the Ila, Balundwe and Batwa considerably. It was no longer the *mwami*, who were – in their contested position – partially leading the political process, but new authorities – chiefs – who were installed by the British. These new chiefs – although also called *mwami* – now had new powers given them by the colonial authorities to control members of the community, to collect taxes and to distribute access to resources. The descendents of the pre-colonial *mwami* were not integrated into the present co-management schemes of wildlife; they were only incorporated into the fishery by-law process (see below). Second, during the colonial period, the Southern province went through drastic land reforms with Crown Land along the railway line handed over to white settlers. However, these reforms mostly covered areas of the plateau Tonga around Monze and Mazabuka and for some reason lands in the Ila and some of the Balundwe areas were not affected. Third, the disruption of the territorial unity by colonial powers resulted in the creation of separate laws and management by different government departments. This meant that management of ecosystems in Kafue Flats became fragmented and local ownership of wildlife and fisheries was challenged and widely questioned. Fourth, local ownership of wildlife and fisheries was challenged and widely questioned by enacting different laws and amendments beginning in the 1930s. These wildlife and fisheries acts placed ownership and management formally into the hands of the state, by claiming fish and game to be state property and by requiring permits and licences for fishing

and hunting. Therefore, common-pool resources like wildlife and fisheries were no longer in the management of the *mwami*, nor in the hands of the chiefs – who nevertheless were closer to the government – but de facto in the hands of the colonial government (see Tuden 1968; LaMunière 1969; Cutshall 1980; Rennie 1982 for a detailed overview; also see below).

As a result of this change, by the early 1950s the hunting rights of local people were reduced and later on withdrawn and the traditional collective *chila* hunting practice was perceived as poaching, barbaric and destructive by the colonial administration (Rennie 1982; Chabwela 1992). Consequently, new formal institutional structures were established and supported by colonial legislation, which transferred ownership of wildlife to the state. This transfer of power began as early as 1925, when the first Game Ordinance was passed. It was repealed several times thereafter and incorporated into the National Parks and Wildlife Act No. 57 of 1968. These laws permitted hunting only with an expensive licence and a proper gun, and no hunting was allowed in newly created national parks. With regard to fisheries the colonial government perceived the Kafue Flats fish stock as underutilized and encouraged commercial fishing through a weakening of local regulations; fisheries became state property for which financial and infrastructure incentives were given by the state to exploit the resources in order to provide protein for the urban mining centres (Mortimer 1965; Lehmann 1977). This attracted many fishermen by the end of the 1950s, but over time there was a decline in catches due to the increasing use of fine meshed draw nets. Although there had been some legal regulation in the form of ordinances, it was not until the early 1960s that mesh sizes, closed seasons and licences were introduced and then formalised in 1974 (Mortimer 1965; LaMunière 1969; Haller and Merten 2008). During this process no attention was paid to local fisheries' institutions and the management structure that were in place by the *mwami* and the ritual masters or the Batwa.

From a New Institutional perspective, these changes are triggered by external factors of the colonial economy and legal systems, changing relative prices for fish and wildlife because of high demand in the mining centres. This change led to a first phase of overuse, for example, in the fisheries. However, the colonial government reacted with more restrictive laws.

The post-colonial government inherited all the colonial laws and new forms of control over resources while local people lost the sense of ownership of resources which they previously considered their common property. They began to perceive common-pool resources as belonging to the government and saw little difference between the colonial and post-colonial management systems (Gibson 1999; Haller and Chabwela 2009).

Faced with a declining economy resulting from the falling international price of copper upon which the country had economically relied, the state began to experience difficulties financing its own institutions, which had become increasingly costly to run (see Meyns 1995; Ferguson 1999; Anderson et al. 2000; Haller 2007a). With rising unemployment, jobless people found the commercial

use of wildlife and fisheries an option for gaining a living. The common-pool resources were even more attractive because relative prices were high for fish and game compared to other resources or livelihood options (Haller 2007a). Thus, commercial fishermen started to fish during the closed breeding season and used large draw nets made out of mosquito netting and fine meshed shade cloth, which did not comply with most of the restrictions on fishing methods prescribed by the Department of Fisheries. Meanwhile, monitoring poaching activities in the wildlife sectors became difficult because of low financial government capacities while prices for fish and game were high (Gibson 1999; Haller 2007a). As law enforcement was hampered by the financial crisis and the ever-growing demand for commercial use of common-pool resources, a major institutional change occurred. The institutional status of these common-pool resources (fisheries and wildlife) was transferred from the common property regimes, managed by the *mwami* 'big men', ritual masters and local users, to state property, allowing *de facto* open access (Haller and Merten 2008). One could argue that the changes during colonial times are less relevant than the recent changes, when state property became *de facto* open access, but one needs to be reminded that the foundation of this transformation goes back to the political changes and resource rights limitations of the colonial period. During the same period the construction of the hydroelectric dams at Kafue gorge and Itzhi-Tezhi were completed, which significantly affected the area by altering flooding regimes. As a consequence, flooding was reduced in some of the drier rainy seasons, but increased during the dry season, because water has to be released for hydropower (Chooye and Drijiver 1995). Furthermore, roads developed for tourism in national parks increased access to the area, giving seasonal fishermen, fish traders and hunters easier access. Not surprisingly, these developments also led to the degradation of resources in the Kafue Flats. Thus, the major trend for both resources has been downward: lechwe antelopes that were estimated to have numbered 250,000 in early colonial times dropped to close to 40,000 in 2002–2004 (Kapungwe 1993; Haller 2007a), while fisheries were reduced from an average of ten in the 60s and 70s to officially 6000 metric tons in the 80s and 90s. However, local staff of the Department of Fisheries (DoF) and local people estimate this being rather 2 to 3000 metric tons of catch per year (Muyanga and Chipungu 1982; Subramaniam 1992; Haller 2007a for detailed figures, Haller and Merten 2008).³

3.2. The current situation in wildlife and fisheries management

As shown in Table 1, governance of these resources in the Kafue Flats remains a major challenge. For the most part, hunting is done by nearly everyone in the area, as almost all wildlife species are hunted, including small mammals, birds and reptiles, as major sources of protein for the people of the wetland

³ The problem is that since the 1990s there have been no funds in the DoF to gather relevant data (Haller 2007a).

Table 1: A summary of the current situation of governance of wildlife and fisheries resources in the Kafue Flats (2004).

Governance	Wildlife	Fisheries
Area	Protected areas: two National Parks (860 km ²) and one Game Management Area (5175 km ²)	Fishery area covering 6500 km ²
Institutions and monitoring	Zambia Wildlife Authority is parastatal, with wildlife police officers and village scouts 30 or fewer. Use of guns to combat illegal hunting and monitor number of animals	Department of Fisheries with five or fewer fish guards. Monitor fish gear, illegal fishing methods
Legislation	Wildlife Act of 1998 and wildlife policy	Fisheries Act of 1974
Restrictions on methods of exploitation	Hunting strictly confined to people with hunting licences; non-resident and safari hunters require non-resident permits	Fishers are required to hold fishing licence, but usually they do not. District Councils sometimes impose levies on traders
Co-management and community participation	Legal arrangements for participation through Community Resource Boards	No legal arrangements for participation

(Chabwela 1992; Merten and Haller 2008). However, successful hunts are done by immigrant urban hunters with modern guns and cars (*ibid.*). Nevertheless, hunting is a very controversial issue in the Kafue Flats because wildlife is under the control of the president and the Zambia Wildlife Authority (ZAWA). ZAWA is mandated to look after wildlife in the area and is responsible for the two national parks (Lochinvar and Blue Lagoon) and the Game Management Area (GMA 11). There are currently no adequate administrative arrangements to allow local people direct access to wildlife resources and most regulations and policies have worked against them (Chabwela 1992; Subramaniam 1992; Haller 2007a). In the 1980s it became evident that in the wildlife sector state governance structures were inadequate as poaching became widespread in Zambia (Gibson 1999) including the Kafue Flats (Chabwela 1992). Illegal hunting was done not only by local people, but by commercial hunters who sought to profit from high prices for trophies and who were subject to minimal restriction because of reduced monitoring and sanctioning activities by state officials (Haller 2007a).

In the case of fisheries, the consequences were dramatic for local people in the Kafue Flats as fish caught were smaller in size and less abundant (Subramaniam 1992; Haller and Merten 2008). Fishermen spent more time and effort and used more fishing gear to catch fewer fish. Commercial fishermen said that they experienced a decline in catches on the western and the eastern side of the Kafue Flats between 1998 and 2003/2004. This resulted in the fishing becoming more

concentrated in the centre of the Kafue Flats areas of chiefs Hamusonde and Nalubamba (Haller and Merten 2008).

The institutional change from state ownership of the common-pool resources to an open access (or de facto open access) situation, despite state management, resulted in an increase in the number of conflicts. The first was a conflict between national park authorities and local people who continued to fish illegally in national parks. In the second conflict, the Ila and Balundwe as well as the Batwa people blamed seasonal immigrants as responsible for taking too many fish, resulting in a decline in supply. Local men threatened to throw immigrants into the water and immigrant fishermen threatened to beat up local people who complained about the use of fine meshed draw nets and other technologies that they considered destructive. An often-used statement by commercial fishermen in the fishing camps was that they had a licence and that they were allowed to fish as they pleased. They argued: "We are Zambians, don't tell us how to fish!" In this way, they were referring to the state, which was physically absent, but ideologically present, arguing that they should only be controlled by the state. By this means they are not asking to be protected by the state itself – for the DoF would not allow their way of fishing – but addressing the issue that they are fishing legitimately, while no one is there to enforce state law. And in case local people use violence, immigrant fishermen can still appeal, not to the DoF, but to other sectors of the State (police) for protection against violence as citizens. By making the ideological reference to citizenship, seasonal immigrating commercial fishermen increased their bargaining power compared to local sedentary groups and could therefore gain free access to the fisheries [Haller refers to this process as the paradox of the presence-absence of the state (Haller and Chabwela 2009)]. The third conflict arose among local people as they argued over the types of fishing gear used and their young men violating fishing rules like fishing out ponds before collective fishing was ritually announced. Tensions became severe as men abandoned spears for fishing and adopted women's methods of basket fishing which was quite effective. Some individuals, who previously were more engaged in subsistence, moved from subsistence fishing to commercial fishing and sold all their catches. At the same time, as fish became increasingly scarce and obtainable only with cash, some local women began to engage in fish for sex deals with commercial fishermen (for an extensive overview on these issues see Merten and Haller 2007; Haller and Merten 2008).

4. Participatory initiatives

Major conflict resolution efforts began in the 1980s when the government realized that conservation goals could not be achieved without the participation or involvement of local communities. To do this, the government not only opened up a dialogue with communities through various initiatives, such as the wetlands conservation project of WWF, but also introduced changes in wildlife policy and legislation, which aimed at bringing local people into the management of

resources. However, this proved difficult for the government, as the following examples illustrate.

4.1. Case study of Game Management Areas initiative and the wetlands project

The Game Management Areas initiative was introduced in 1983 with a view to bringing local people into the management of wildlife and sharing the benefits. The project used the Game Management Areas programme policy framework to establish a means of funding the activities of the two Wetlands Management Authorities installed by the government, based on wildlife revenues from the government's National Parks Administration (Blue Lagoon and Lochinvar). This allowed the authorities to retain some statutory (government) revenues and all non-statutory revenues from certain categories of wildlife utilization, including revenues from hunting, cropping and donations to help enforce wildlife regulations and increase the incentive to assist the wildlife department. The revenues accrued were apportioned by the authorities according to the following formula (Jeffery 1993): 40% to the local wildlife management activities, 35% to local community development activities through the chiefs, 15% to National Parks and Wildlife Services (NPWS) costs for programme administration and 10% to Game Management Areas costs for programme administration. The project ended after being implemented for 11 years, but its results remain largely negative as lechwe antelope population is declining. In the Lochinvar area, research done between 2002 and 2004 indicates that neither local chiefs nor local people interviewed were aware of these programmes. It was repeatedly stated that this is due to the ineffectiveness of government enforcement and mistrust in the wildlife government authorities (for statements see Chabwela 1992; Haller and Merten 2006).

In an attempt to resolve conflicts between communities and conservation, the government passed legislation through the Wildlife Act of 1998. This act had two aspects: first, it tried to solve the organisational problem of the Wildlife Department, which lacked sufficient money to manage and enforce state institutions such as the wildlife laws and amendments. The Zambia Wildlife Authority (ZAWA) – the newly established wildlife management organisation – was provided with more liberal, market-friendly operating conditions in order to attract tourist operators to the protected areas and gain access to foreign donors. The image that ZAWA showed the outside reflected on the one hand more security and monitoring of conservation areas, with staff being allowed to carry automatic firearms, presenting a military image and police-like attitude. Secondly, the Wildlife Act on which ZAWA was founded also allowed for collective action by local people in the form of so-called Community Resource Boards. Essentially, any community could establish a Resource Board with the purpose of participating in natural resources management with a share of the income from the Lochinvar National Park going to the accounts of local chiefs. However, since 1998, Resource Boards activities

have been rather slow, and they lack commitment from their members as the case of some chiefdoms in Monze and Namwala Districts indicates (Haller 2007a). Several aspects explain their failure.

First although there was a Resource Board, it did not really allow local stakeholders to participate in devising rules for wildlife use or legally being able to hunt themselves. Therefore, no sense of ownership of the resource and its management developed. The basic idea of Community Resource Boards was participation in the monitoring activities from which revenues would be accrued to the local level (Haller and Merten 2006).

Secondly, this leads to the questions dealing with the issue of material incentives for different local people to engage in community projects as have been widely discussed elsewhere (Borrini-Feyerabend 1997; McNeely et al. 1997; Gibson 1999; Haller and Galvin 2008). In a situation like the Kafue Flats, wide community participation and involvement in projects of this nature did not happen because revenues would go to the chiefs to be used for community projects. Direct individual household incentives to participate did not exist. Similar to what Gibson has analysed for community conservation projects in other parts of Zambia, community projects such as schools and health stations did not provide an incentive, because a person could still use wildlife and send his children to school or to the health station (see Gibson 1999). One could argue that in this case revenues should be distributed at the individual level, but this would also not work. A cost-benefit analysis showed that, for example, in October 2002, if the gains had been distributed at the household level, there would not have been a significant incentive for anyone to act collectively. According to the analysis, in the three chiefdoms involved, the total income was US\$120.00 (ZMK 750,000), which meant that ZMK 250,000 was given to each chiefdom. The population of each chiefdom ranged between 2000 and 3000 households, which would mean that each household received only about 100 kwacha (US\$0.02). The losses to local people due to crop damage by wild animals, loss of time and labour, loss of access to fisheries, wildlife and pastures in the Game Management Areas and in the national park were far higher than these benefits. The opportunity costs of attending meetings and the time spent for local level monitoring outweighed the benefits (Haller 2007a).

Thirdly, different local people interviewed between 2002 and 2004 were of the opinion that the money that was going to the chiefs was not used for the right purpose and did not in fact even reach the collective community level or only minimally (Haller and Merten 2006). From a New Institutional perspective, these problems have to be analysed in the context of external changes and high prices for wildlife and the fact that property in wildlife is no longer at the local level. Chiefs, however, receive revenues, but are not (in the view of parts of the local community) delivering the money to the public. In addition, as prices for wildlife products are high and as the link between poorly respected government agencies and chiefs erodes trust that local interest groups have in the chiefs, all actors opt for de facto open access constellations and are no longer interested in

co-management, community management or common property arrangements. In addition, the financial incentives are much too low and as the bargaining power of wildlife staff is low due to lack of funding, these entities are said to be open to payments from outside poachers.

4.2. Case study of Partners of the Wetland: Mwanachinwala Conservation Area project (MCA)

The deficiencies of the wetlands project and the Community Resource Boards initiative stimulated the development of a new project to conserve wildlife in the Kafue Flats. WWF Netherlands and WWF International in Lusaka established the Partners of the Wetland project, which was to be based on a partnership between the private sector (commercial farmers; Nakambala Sugar Company, CERES Farms and Nanga Farms) in Mazabuka, the Zambia Wildlife Authority and the local community in the person of chief Mwanachinwala. The project concept was for the partnership arrangement to benefit the local communities and in the process to bring in and conserve wildlife in a fenced area. Essentially, the project would attract more funding from the WWF, and it was hoped that its success would provide an example of an alternative approach to conservation in other areas. Work on the project module started in July 1998 and the project was implemented as a commercial venture on land offered by Chief Mwanachinwala and his community and by local commercial farmers (Chabwela, own research).

After nine years of project implementation, the project faced serious limitations. The first was the conflict between the leaders of the Mwanachinwala community. Although the local chief and headmen pledged their support to the project at the start of the work, some of the headmen used the project to settle old disputes with the chief. Second, the chief was not only the traditional leader of the community, but also was made the chairman of the Mwanachinwala Conservation Area Management Board, and placed himself in a very prominent position in the project. This made him vulnerable and an easy target for his opponents, questioning his role as chief. Board meetings were said to be difficult. Therefore, much of the community involvement and of the contributions from local businesses (large commercial farms and the Nakambala Sugar Company), local government and Zambian Wildlife Authority were seriously blocked because all the followers from the opponent group did not participate and therefore the project could not be managed on a participatory basis. The opposition followed the traditional *mwami* opponent structure, because these were not headmen, but influential people with links to townsmen and certain government administrators. These opposition leaders were found in many of the chiefdoms involved during Haller's research (2002–2004). Such opposition stems partly from local heterogeneity in interests (Ostrom 1990; Ensminger 1992), which are fuelled by economic interests and legal changes, like the introduction of 99-year leasehold titles; that has to be seen as external change from a New Institutionalist perspective (Ensminger 1992; Haller 2010). Furthermore, local communities considered as participants were

not sufficiently informed and ownership of the project remained with the chief. Communities were thus left in ignorance and excluded from the process resulting in serious disputes among members of the community and a negative attitude towards the project and WWF. One headman, supported by over 700 members, even started a court case against WWF and the ZAWA, accusing them of taking over land ownership from the community. The court case took three years to deal with at the high court where it was decided to stop the case because the accuser did not have sufficient time for, or interest and confidence in the case. The project was nevertheless subsequently terminated in 2007 because of lack of support by the other partners (private sector, NGOs, and local people). The fence enclosing the project area had been torn down by 2006 in many places and the wildlife bought by WWF from private game ranches and other parks and brought into the Mwanangingwala protected area, had been poached or moved out of the area. (Own observations and discussions in Mazabuka with different local informants, business representatives and honorary game rangers; Chabwela and Haller field trips 2007, 2008.)

Although this project intended to incorporate powerful actors in the co-management framework, an institutional analysis can explain its failure. Funds were easily available for such a project initially because local participation through a chief representing the local people seemed appealing, as was the incorporation of all sectors in business (the Nakambala sugar plantation, and different large commercial farms etc.). However, this led to the chief's increase of bargaining power, which suited him well because his position was contested and his initiatives were followed with suspicion. He then tried to install an institutional design of the project without the incorporation of all local interest groups, leading to a court case and to the destruction of the installed fence as well as the poaching of animals that were in the area, a reaction to the threat of losing pasture.

4.3. Case study of co-management of the fisheries in the Kafue Flats

The third example illustrates how an interesting attempt at collective action can emerge from a crisis situation. When one of the authors (Haller) started his research in the Kafue Flats in 2002, the fisheries sector showed many structural and institutional problems. The Department of Fisheries was poorly funded, considerably understaffed and largely ill-equipped. Moreover, while the Department lacked the means for effective monitoring, the fisheries laws were antiquated and based on the 1974 law and its amendments. In fact they could not be enforced, as there was no control of licences or approved mesh sizes and the closed fishing period was never observed. Similarly, there were severe conflicts between commercial fishermen in the fishing villages and those in seasonal camps and the local communities. At the same time, the situation worsened as immigrant fishers became more numerous in fishing camps due to rising market prices for fish.

As a result, the Fisheries Department in Mazabuka took the initiative to form fishery associations in fishing villages. These were based on locally drafted and

adapted by-laws which were to be ratified at the district level and then to be implemented by the fishermen and local communities based on the belief that they were not in complete contradiction to the National Fishery Law. Having by-laws issued at the district level was part of the government's empowerment strategy to make governance easier and still involve the administration on the district level. The assumption was that these by-laws and regulations represented the locally perceived situation of the fishery. Therefore, this would on the one hand, empower local people to manage the fisheries and on the other hand, could provide a process for revision of the fishery laws later on. The process started with fishing villages and communities around Mazabuka, accessible by bicycle or by public transport, where by-laws had been discussed on the local level and with the DoF staff. Later, some of the by-laws crafted by other communities in the area were shown as illustrations to the villages (the chiefdoms of Choongo, Hamusonde and Nalubamba) not easily reachable by public transport because they were located further out in the flats. This was done in collaboration with the WorldFish Centre, local DoF-staff, one of the authors (Haller) and an epidemiologist (Dr. S. Merten, University of Basel, Switzerland), local research assistants and colleagues of T. Haller. However, the examples were not given to be used as blue prints, because they were intended to be the product of local internal debates. Discussions included support from different local stakeholders and other interest groups. They included subsistence fishermen and fisherwomen, commercial fishermen, fish traders (men and women), local chief's groups, and local groups being in opposition to the chief's groups (followers of an opposition leader, some rich cattle owners). These stakeholders – included the chief, but not dominated by him – debated in separate groups about what kind of by-laws they would like to be part of the official fishery laws. So they were able to define by themselves the content of the newly to be created by-laws. Of particular interest was that the by-laws should incorporate some of the old pre-colonial institutions, such as collective fishing events and control by ritual masters as well as regulated reciprocal access and use of gender specific technologies.

There were several positive aspects of the process: one positive result was that all groups participated actively in discussing the by-laws. Secondly, for the first time all these stakeholders were part of a constitutional process in which they received a sense of ownership of the process. Thirdly, the by-laws became their law. This was of major importance, because interest groups that had not been considered in similar previous so-called participatory meetings were able to express themselves in this process. These groups included women, those in opposition to the chiefs, female fish traders, and marginal local communities such as the Batwa. For the first time Batwa, Ila, Balundwe and sedentary Lozi felt they were being taken seriously. Fourthly, as the debate on the project became more established, the by-laws were written down and debated. As a consequence, commercial fishermen from different chiefdoms who were contravening the new rules (including closing time, controlled mesh size and accepting local regulation of fisheries as well as law and order) were avoiding the chiefdoms where such

by-laws had been discussed and agreed on by the different local groups in the Monze and Namwala Districts. Nevertheless, there were challenges: a lack of money from the donor to finish the process, lack by some parts of the DoF to follow the process and delays of ratification on the district level. These created a lot of frustration at the local level, which unfortunately undermined the positive experience. More financial commitment from the state as well as from donors will be needed here as a result of this case study.

The institutional analysis indicates that external changes (fisheries as state property badly enforced) and high prices for fish have led to the weakening of local institutions due to the rise in bargaining power of outside users and overuse of the Kafue Flats fisheries. However, the initiative from the local DoF in Mazabuka and the discussion platform made possible by researchers have led to the possibility of raising the bargaining power of local actors. For the first time since development projects have been implemented in this area local stakeholders could discuss in different interest groups how local institutions regulating fisheries should be organised. This supports the notion of empowerment, although the basic problem of slow ratification on the District level remains a problem. Nevertheless, discussion and writing down of the by-laws has increased the respect external fishermen and traders have for local stakeholders. They either no longer go to these areas or try to adapt to the new informal regulations. This is partial success based on a discussion process where all the interest groups were able to participate and air their problems and interests. Consequently, not just one group or leader was profiting.

5. Discussion and conclusions

This paper has tried to bring out the overall issues and historical perspectives in the governance of the common-pool resources of the Kafue Flats. It has shown that this area is large and consists of heterogeneous communities with complex concerns. We have argued elsewhere (Haller and Chabwela 2009) that the situation in the Kafue Flats does not only originate from population growth, environmental or climate change, or dams and hydropower, but also from institutional changes triggered by external factors such as changes in the national economy, colonial and post-colonial administration. In the framework of the New Institutionalism (Ensminger 1992; Haller 2007a) there was movement in relative prices, making local common-pool resources attractive, reducing the functioning of local and of state institutions. The former was due to recognition, the latter was due to a reduction of financing by the government and therefore a lack of monitoring and sanctioning, increasing the bargaining power of immigrant resource users so they could use the resource as a *de facto* open access situation. This was justified by the ideology of being citizens of the state in a present-absence of the state situation. This shift means that the institutional situation becomes a tragedy of the commons not being allowed to enforce rules and regulations because of a state that is paradoxically present and absent at the same time. The state is present as it

assumes ownership and allows outside users of the resources to claim access by virtue of their *Zambian* citizenship. However, it is absent when it does not enforce its rules, and this absence undermines local rules and regulations (Haller 2007b; Haller and Merten 2008). The dwindling of common-pool resources is a clear indication of failure by the Department of Fisheries and the *Zambian Wildlife Authority* to effectively manage these resources. However, while legal instruments and good policies are available, particularly for the management of wildlife resources, there are no community based natural resource management structures in the *Kafue Flats*, which is a serious deficiency for the better management of both common-pool resources and the communities. Literature on community-based natural resource management has pointed out that among the main deficiencies are the lack of capacity, participation and poor accountability (Hulme and Murphree 2001; Blaikie 2006; Galvin and Haller 2008 for wildlife; see Sen and Nielson 1996; Bene et al. 2003 on African inland fisheries).

From a New Institutional perspective, the failure to devolve power to invest local actors in an appropriate way by addressing the issue of property rights and how to manage resources within such rights has become an important factor in the *Kafue Flats*. The devolution of power has so far increased the bargaining power of local elites such as chiefs and of immigrant resource users both wanting to maintain the open access situation. We agree that chiefs have to be incorporated, but attention has to be paid to the fact that within communities, some of the local actors are in conflict with the local chief, as we have shown in the two wildlife cases. If these different interest groups are not incorporated, a large set of actors will be left out in such projects (Haller 2009). Therefore, from a New Institutional perspective, a sense of ownership of the process of devolution of authority has to be given to all stakeholders so that they are empowered to define the institutions to be used. This then will influence local ideology in the sense of the development of a notion of ownership of a constitutional process (see Haller and Merten 2008). Later on, this has to be embedded into larger institutional settings (Ostrom 1990), in the case of the fisheries, for example, at the district level. The strengths that chiefs, district assemblies or district-level agencies could bring to reverse the situation in a decentralised or devolved institutional setting may be exactly the capacity to a) let different local stakeholders discuss among themselves how resources shall be managed and b) then discuss how these propositions can be incorporated and enforced on different scales (chiefdom, between chiefdoms, wards, districts and provinces). The reason why this type of governance might be more successful than other approaches lies in the fact that a sense of ownership of resource governance on the local level is re-established, allowing local commitment to monitoring, which is otherwise costly. Finally, more centralised government bodies would only become involved when the local level is no longer able to address problems stemming from a regional and national context. Otherwise, the depletion of the resources is inevitable, despite the positive experiences in the example of the third case.

A major lesson to be learned from this analysis for the future governance of the commons is that there is potential for collective action if certain aspects

highlighted in the New Institutional approach are taken into consideration. First, understanding local politics as well as local incentives and power structures is of great importance in creating good governance. To work exclusively with chiefs and the belief that they represent a politically heterogeneous group of local people in such arrangements can lead to poor results, as it is highly likely that a large part of their people will be left out as community activities and benefits remain under the control of the elite. This has been the case with the Game Management Areas Initiative and the Wetlands Project in the Lochinvar area (Case 1) and the Partners for Wetlands project close to the small town Mazabuka (Case 2). We have argued that this is based partly on the traditional political structure, partly on the colonial legacy of introducing chiefs to the area, which leads to an increase in conflicts and contestation [see Cutshall (1980) for an older study on Chiefdom Mungaila; Haller 2007 includes a political analysis of different chiefdoms such as Nalubamba, Hamusonde and Mwanagingwala]. It is therefore important to create a platform on which all the stakeholders can organise and present their demands, and where they can be recognised as owners of the governance process.

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