# A History of Surveillance, Commodification and Participation in Nature Conservation. The Case of Park "W", Burkina Faso

Julie Poppe

125

#### Introduction

This article presents a multiple-voiced ethnographical account on nature conservation based on a historical overview of nature conservation in protected reserves in Burkina Faso, specifically in park "W". The history of nature conservation in Burkina Faso reveals remarkable continuity. This contrast with the ways in which the history of nature conservation in developing countries is frequently presented: as having evolved over time along the same lines as development cooperation, from top-down to more participatory approaches. One aspect of continuity is the collaboration of international institutions with the national and local management of nature reserves. A second aspect of continuity is visible in the lifelong interest of the State with regard to the management of nature reserves in: (1) the exploitation of wildlife through hunting tourism; (2) community participation; and (3) fortress conservation through exclusion and surveillance with repressive measures. As such,

Currently, environmental issues are pet subjects in global politics (think about topics such as climate change, desertification control, biodiversity protection, renewable energy, etc.) and "sustainable development" is the goal bridging global environmental and development politics (Aubertin, Vivien 2006). Zimmerer (2006: 1) talks about "environmental globalization", referring to "the increased role of globally organized institutions, knowledge systems and monitoring, and coordinated strategies aimed at resource, energy and conservation issues". This text will detail this process of environmental globalization in relation to nature reserves in Burkina Faso, while showing how international actors have consistently influenced the management of nature reserves since their creation in colonial times. Environmental globalization is thus not a new process materializing in the last few decades, but rather a process which is currently accelerating.

In this era of increasing emphasis on environmental issues and sustainable development, "local communities" or "indigenous people" often seem to have shifted from being the scapegoats of environmental degradation to presenting a panacea for environmental protection and sustainable development. This flip is displayed in the discourses and buzzwords used by conservationists, development workers, State agents, scholars and policymakers worldwide. However, we need to exercise caution before assuming that environmentalism and development cooperation have evolved from top-down towards participatory approaches. Comparable to Swift (1996) and Ribot (1999), I will highlight the concerns of French colonial administrators about desertification and "community participation". Following Leach and Mearns (1996) and Beinart and McGregor (2003), I argue that narratives of nature degradation by local populations continue to live and to inform the ongoing conservation processes in the Sahel alongside the currently popular community participatory narratives. As such, the focus on community participation does not supersede exclusionism in nature conservation. Rather, both trends have been co-existing and inherent to nature conservation since its inception.

Like the roots of people-centred approaches, the roots of green development thinking can also be traced back to the colonial period. In many developing countries this latter pillar of nature conservation defines rational use of natural resources as a means to generate revenues for development. Specifically in the case of Africa, wildlife is attractive for international support and tourism and is thus valued as an important renewable natural resource that can be exploited sustainably through regulated tourism. This interplay of conservationism and capitalism, as described amongst others by West and Carrier (2004), Brockington (2008), Duffy (2008), is thus also reproduced over and over again throughout the history of nature reserves.

This article is empirically based on anthropological fieldwork conducted between January 2007 and December 2008 on the Burkinabe periphery of the transnational park "W", specifically in and around Diapaga. The transnational park is named "W" in reference to the shape of the double meander of the Niger river in that area. It stretches over a total surface of 10.302 km<sup>2</sup> in Eastern Burkina Faso, South-Western Niger and North-Western Benin. Together with its adjacent hunting reserves, the park is considered as one of the most important protected areas in West-Africa, both nationally and internationally. Park W is the only park in West-Africa that transgresses national borders and covers part of the larger ecological complex of merged nature reserves, commonly called the WAPO-complex. International environmental institutions have increasingly recognized the importance of the conservation of park W and its savannah wildlife populations. This has resulted in international designations of the park as a Ramsar Wetland and as a Biosphere Reserve/World Heritage Site by the UNESCO-Man and Biosphere Program (UNEP-WCMC 2008). Additionally, this has attracted a large scale conservation program, titled Ecosystèmes Protégés en Afrique Soudano-Sahélienne (ECOPAS, Protected Ecosystems in Soudano- Sahelian Africa) and funded by the European Union, which was governing Park W between 2001 and 2008 on «regional» basis. In this case «regional» signifies an area which spreads across national borders and is thus used as a synonym for transnational. In its turn, the importance of Park W in international consciousness has led to an increased focus of the Burkinabe Government on the management of this nature reserve.

The Burkinabe part of Park W is situated in the sparsely populated Tapoa Province, which is inhabited by several ethnic groups; Gulmanceba,<sup>2</sup> Fulbe<sup>3</sup> and some Zerma.<sup>4</sup> Each of these groups on the periphery of Park W engage in agro-pastoralism and practice differing degrees of animal husbandry and/or agriculture. Some Zerma are additionally involved in fishing activities. A few Moose,<sup>5</sup> Hausa and Yoruba live scattered throughout the towns of the province where they work as civil agents, traders or shop owners.

The park managers are State foresters and their auxiliaries, currently called rangers (*pisteurs*).<sup>6</sup> Foresters are centrally recruited State agents and may originate from any ethnic group of Burkina Faso, as they rotate every few years from each duty-station as part of public policy. The foresters on the periphery of Park W are either paramilitary foresters, responsible for Park W and its periphery (including the hunting zones), or civil foresters attached to the Departmental and Provincial Forestry Office or to the international environmental program governing the park.<sup>7</sup> Rangers in this region are most often Gulmance or Zerma men with little or no schooling. They are, in fact, agro-pastoralists involved in park surveillance and hunting tourism to gain additional revenue. Only one Fulbe man was part of the group of park rangers, consisting of 25 to 30 men, in the northern part of Park W where I conducted most

To present the conservation policies and practices at Park W, and Burkina Faso in general, I will proceed chronologically and align this article with three distinct time periods: (1) the late colonial period from the 1920s until the 1950s; (2) the revolutionary period during the 1980s; and (3) the recent conservation era from 1997 until now. For every period, the classifications and designations of the park, the foci of the environmental policy and the legislation at that particular time, and the actors involved in natural resource management will all be discussed. One should keep in mind that this division into different periods is artificial and is being employed as an analysis tool, although continuity has marked the conservation ideologies since colonial rule. Special attention is paid to the actors conducting the actual management of the nature reserves, as this provides insight into the entanglement of national, local and international actors present in nature conservation. Throughout history, national environmental politics have been co-shaped and co-informed by global nature conservation politics. At the same time, national conservation policies have trickled down to the local level, influencing inhabitants' everyday lives and involving inhabitants in environmental politics, effectuating unexpected changes or continuities in national and global environmental politics. Therefore, it is important to highlight the entanglement of these three levels in research on nature conservation. Based on this historical overview of nature conservation in Burkina Faso, I will conclude by summarizing the global trends of nature conservation. These trends are not present only in Burkina Faso. Rather, they seem to inform the processes of nature conservation in developing countries across the world.

# The colonial heritage of nature conservation in French West Africa

Classifying "no man's land" as nature reserves

The regulated protection of wildlife in Africa has its foundation in the Convention of London on Nature Conservation and Wildlife Preservation, ratified in 1933. This convention gathered an international committee, co-chaired by the African sovereignties of that time, to define different categories of protected areas and wild animals and to establish regulations for the hunting of wild animals (Rouré 1956: 146). Even before this convention, the French colonial administration had already designated the "W" area as a sanctuary (*parc refuge*) in 1926 in order to draw the attention to the preservation of wildlife and its habitat in this zone. However, no practical measures were taken for the actual protection of the zone in 1926 (Rouré 1956; Benoit 1999). It took until the 1950s, after the International Technical

Conference of Lake Success (1949) on the domain of environmental education (in fields such as ecology or botany), before the actual management of the nature reserves in Africa was worked out on a practical level.

In 1935, after the London Convention, the French Government adopted a decree that attributed all the «uninhabited spaces without owners» in the A.O.F. (*Afrique Occidentale Française* or French West Africa) to the State, specifying that these uninhabited spaces have to be used for the protection of nature. According to this decree, the colonial Government designated the "*Parc du W du Niger*" as an important State-owned nature reserve because the W region was seen as a «no-mansland» (Benoit 1999: 29) and thus an ideal site for nature preservation without the interference of human beings. In the 1950s, when mobility and funding increased, the surface of the W reserve was extended and the classification of the reserve gradually shifted towards more and more restrictive categories of nature reserves. Firstly, the W reserve was classified as a Faunal Reserve and State Forest, a designation in which user rights are restricted. Subsequently, the reserve was re-labelled as a "National Park" in 1954, meaning that any form of exploitation of the natural resources in the reserve is strictly forbidden (UNEP-WCMC 2008).

### The basis of fortress conservation and wildlife commodification

The decree of 1935, which attributed so-called uninhabited spaces to the State as protected areas, has laid the foundation for nature conservation in terms of exclusion of inhabitants in French West Africa. As such, the basic idea behind French nature protection was one of «fortress conservation». I borrow this term from Brockington (2002), who applied it in the context of a Tanzanian game reserve in order to talk about the exclusion of the inhabitants at nature reserves in general. In this context, exclusion is not only a reference to the resettlement of inhabitants to areas outside of the reserves, but also implies protectionism in terms of surveying the reserves to prevent the «destructive use of natural resources by human beings».9 This latter form is a dominant and recurring pillar of nature conservation, as we can read in the following paragraph on nature conservation in the A.O.F: «The human influences work indirectly on the fauna through a profound modification of the physical conditions of the regions, which are subject to exploitations, industrial culture or lease, and directly through the destruction of wildlife due to traditional hunting, commercial hunting, professional (European) hunting, sportive hunting and through systematic destructions for zoological purposes» (Rouré 1956).<sup>10</sup>

The last part of this quote indicates that especially hunting was appointed as destructive to wildlife in the late colonial period. With this in mind, the colonial Government and some scientists defined legal hunting as the best compromise to use natural resources without permanently damaging nature. Hunting tourism was seen as the most cost-effective and sustainable means of exploiting wildlife, as it raised revenues

for the State treasury and enabled the Government to simultaneously motivate nature protection and economical growth. The French colonial forestry service thus concentrated on goals of regulating hunting tourism and combating poaching. «The interventions of a service charged with on the one hand the protection of wildlife, and on the other hand the hunting and hunting tourism, are logically linked to one another in the framework of the politics of protection and of the use of natural resources. Protect to use wisely or even with profit (not necessarily pecuniary) is in line with human behaviour» (Rouré 1956: 150).

In the wide region around Park W, hunter tourists of French origin have been visiting hunting areas since this period. In many cases, the hunter tourists tended to stay in lodges or camps belonging to the forestry service, called *Campement des Eaux et Forêts*. In 1955, Rouré reported that there were more then 800.000 hectares of faunal reserves west of Park W; these were spread across the surface of contemporary Eastern Burkina Faso. The area around Tapoa Jerma was, according to my informants, already used for hunting tourism during the colonial period, although the zone was not yet officially delimited and people had not yet been resettled out of the zone.

### Local, national and international actors of colonial forestry

During the colonial regime, the Superior Council for the Protection of Nature of the French Union for Overseas Territories was responsible for the classification, creation and management of nature reserves. At the local level, State agents of the Service for Waters and Forests in the A.O.F (Service des Eaux et Forêts des Territoires de l'A.O.F.) were implementing nature protection legislation, while one specific section of this service was dedicated to «Hunting and Protection of Wildlife» or to the surveillance of the nature reserves and the fight against poachers in general. In addition to these foresters, judicial police officers and «hunting inspectors and lieutenants» were authorized to survey the nature reserves and the hunting of wildlife (Rouré 1956: 149-154, 160).

The current borders of Park W were delimited by the colonial forestry service in 1952-53. The forester in charge of the park delimitation on the side of Burkina Faso and Niger was a man of Gulmance origin named Godjé Antoine Yonli. Yonli is still living in Diapaga and I had the opportunity to interview him on several occasions at his house in 2008 (April-June). In these interviews, Mr. Yonli explained how foresters recruited residents to help with the construction of tracks and camps for tourism and especially to measure and delimit the park. «It was not difficult to find helpers because they were paid for this labour», states Yonli. 11 Although people were paid for their work, many residents, talk about this work in terms of forced labour and in terms of fear of the foresters as a compelling reason to cooperate, as the following quotes show: «Pandaadi¹² forced people to work very hard. For example,

131

we had to make roads for him. We were paid 1,500 CFA per month for the work in the park.<sup>13</sup> Some people had to make the roads from Diapaga to Kantchari, others from Kantchari to Fada. And to sew the military uniforms, some people had to bring traditional cloths to Fada»;<sup>14</sup> «We needed to give him<sup>15</sup> presents and carry him when he wanted to move around. And, he troubled us with taxes».<sup>16</sup>

Similar to how Hagberg (2001a: 487) describes a forester mentioned by people in the vicinity of the Tiogo forest in West Burkina Faso, the forester from Diapaga in the colonial period had «a bad reputation and required "gifts" in terms of chickens, eggs, or other agricultural produce». Despite the fact that foresters (and their auxiliaries) from regional origin implemented the actual management, the nature reserves and conservation activities in general were - and still are - perceived as "o bonpieno", "something of the white people", 17 thus something to feel suspicious about. The next paragraph explains why.

In Diapaga, the current office of the provincial and departmental forestry service is built next to the house where the head of the Service for Waters and Foresters lived in the late colonial period. This house is currently inhabited by the forester in charge of the provincial forestry service but, according to the inhabitants of the periphery of park W in 2008, it was formerly the house of a French forester called *Monsieur Bois.*<sup>18</sup> Presently, residents around park W frequently use a similar term *mesbua - bua* in Gulmancema is pronounced as "*bois*" in French and *mes* is an abbreviated form of "*monsieur*" - to denote foresters or their auxiliaries and typically refers to the foresters of the colonial regime.

Due to a lack of personnel and material resources, the colonial forestry service worked with auxiliaries - namely forest guards (gardiens forestiers / gardes forêt), informants (indicateurs) and trackers (pisteurs) - in order to implement the environmental legislation and survey the reserves on a regular basis. Informants were people who signalled problems, such as poachers, to the foresters in a secret way in exchange for a reward or a favour, whereas forest guards were recruited as official foresters' auxiliaries on the payroll of the State. The trackers' task was to guide State agents as well as hunter tourists in the bush, and this was mostly done on a voluntary basis (Rouré 1956: 161). In Diapaga, one man, referred to as Guiré Aljima, was known as a foresters' auxiliary during the colonial regime. According to Guirés descendants - many of whom currently occupy key positions in local administration and development projects - Aljima Guiré guided the foresters everywhere and his picture figured on a stamp in France with the subscript «king of hunting». Aljima Guiré seems to have been simultaneously tracker, forest guard and informant, typically helping the foresters with a variety of needs. Other people who helped Mr. Bois remain unknown due to the secrecy of their intervention.

In addition to the State apparatus of foresters, police officers and hunting inspectors - including their formal and informal auxiliaries - private hunting associations,

international environmental organizations (such as IUPN<sup>19</sup> and UNESCO) and individual scientists also played their part on the shared stage of fauna protection and management of natural resources in the A.O.F. For instance, IUPN set the agenda for the International Technical Conference of Lake Success in 1949, thus contributed to the actual management of the reserves in West Africa. Currently, the IUCN claims an interest in Park W from its initial existence, but it was not until the 1990s that actual actions were undertaken by the NGO to steer the management the Park W. Regarding the influence of individuals on nature conservation in the A.O.F., Rouré (1956) mentioned two persons in his book: the French veterinarian Fiasson, and the French botanist Aubréville, who was General Inspector of Waters and Forests in the French colonies during the 1940s-1950s. The former was involved in the process of classification of the W reserve around 1935, while the latter was influencing the whole process of nature conservation in Africa during his career. Inspector Aubréville strongly emphasized the need of a «charter for nature conservation in the whole of Africa» (Rouré 1956: 147) and was seated in an Anglo-French commission uniting conservation efforts across the borders of French and English Africa (Swift 1996: 77). Science - and particular colonial scientists like botanist Aubréville - thus played a major role in shaping the colonial agenda of conservation, as has already been put forward by different contributors in a book edited by Leach and Mearns (1996). These authors show how Aubréville convinced policy makers worldwide of the ongoing desertification processes apparent in West-Africa, which he attributed to the destructive land use of inhabitants. This, in turn, has shaped the dominant conservation paradigm from that time period; one which is based on exclusion and restrictive exploitation rights for the inhabitants of the peripheries of nature reserves.

# Post-independence nature conservation in Upper Volta

After the Independence of Upper Volta<sup>20</sup> in 1960, the newly created Government retained the environmental legislation from the French colonial period without executing a lot of conservation efforts on the ground. Surveillance of Park W, as well as for other reserves or natural resources in general, was put on the backburner because nature protection was not a priority for the Government. Towards the end of the 1970s, however, in the aftermath of the severe drought of 1974 and in the light of international commitments to protect the environment,<sup>21</sup> the Government of Upper Volta placed the fight against environmental degradation and desertification back on top of its national agenda. The first ministry in charge of environment was created in 1976, while the management of the nature reserves re-appeared as a national priority. Since then, the ministry of environment has changed names several times<sup>22</sup> in response to restructurings within the ministries and the shifting emphasis of policies and foci, but the nature reserves have always stayed under the authority of this ministry in charge of environment.

## The 1980s-revolutionary revival of fortress conservation

Under the revolutionary regime of president Thomas Sankara between 1983 and 1987, the Government adopted a Plan National pour la Lutte Contre la Desertification (PNLCD, National Plan to Fight Desertification). This ambitious anti-desertification program was based on the «three struggles» (trois luttes). or the fight against three human-induced activities, namely abusive wood cutting, bush fires and unguarded dissemination of cattle. These three phenomena were perceived at that time as the three main causes of degradation and desertification. The PNLCD consisted of four pillars, one of which was the classification and protection of natural environments in different types of reserves (CBD-CHM 2006). Subsequently, the Conseil National de la Révolution (CNR) sent out foresters and military patrols to discipline the inhabitants on their use of natural resources and to remove them from the reserves. They based their punishment of environmental offenders on a new legislative code adopted in 1984, namely the RAF (Réorganisation agraire et foncière or Land Reform Act).<sup>23</sup> Moreover, the forestry service promoted reforestation and supported tree plantations in every village. The still present eucalyptus plantations on the periphery of Park W are remnants of this reforestation policy, while the signs on the Diapagalese roads warning against the lighting of bush fires can be traced back to the three-struggles policy. Inhabitants of the region around Diapaga experienced the revival of fortress conservation in daily life under the revolutionary regime as military men came to Park W to combat the "destructive local practices" and to ensure that no one entered the park. Residents of the Burkinabe periphery of Park W remember tangible exclusive conservation measures and resettlements during that period and therefore attribute the second wave of exclusionism to Thomas Sankara. In contrast to the colonial period or the current period, my informants did not tell personalized stories of foresters from the 1980s. It seems that although the Burkinabe Government resumed conservation activities, repression occurred on a moderate level; colonial and/or current conflicts are perceived as much fiercer and more abusive than those of the 1980s. «At that time, foresters were still reasonable», argue many agro-pastoralists. Some informants, mainly retired State servants, enthuse over the order and discipline in Sankara's time, and stress the point that he really cared for nature.

# Hunting for national development

Although nature conservation was not a Government priority in the 1960s, the Government did issue one new ordinance on hunting tourism in 1968. This ordinance aimed at consolidating and restricting hunting tourism to the countries' faunal reserves in order to feed the State treasury with taxes generated by the hunting business (Lompo 2005). As such, the long existing idea of rational natural resources' exploitation through wildlife commoditisation, with the explicit benefit of bringing wealth to the State, was reinforced.

### (Inter)national focus on community participation

The national revived interest in nature conservation coincided with emerging global concerns around the environment and "sustainable development" in the 1980s. It is thus no wonder that nature conservation in Burkina Faso has been increasingly supported since by international development and/or environmental institutions, such as the World Bank, FAO, and United Nations. The international attention on conservation initiatives in Africa was especially concentrated in Burkina Faso because Burkina Faso was seen as «a leading international actor in combating desertification» (Hagberg 2001c: 21) and because the Burkinabe efforts were internationally perceived as "participatory" - an approach which became popular in the international environment-development debate at that time. The Burkinabe Government was known in the late 1980s-1990s for its participatory land management through its "gestion des terroirs" approach Programme National de Gestion des Terroirs (PNGT, National Plan for Territory Management), which was based on different territories managed by village committees gathering representatives of the local communities (Hagberg 2001c: 68). In keeping with this approach, "village committees" managing the natural resources were seen as a solution to the problems of nature conservation. On the periphery of Park W, however, no resident remembers the actual existence of such a village committee managing natural resources or wildlife during that time period. They claim that village committees are new for the time of ECOPAS.

When nature conservation efforts mushroomed again in the 1980s, foresters and military men conducted the management of natural resources. However, in contrast to colonial times, the forestry service could no longer recruit forest guards to help the foresters with surveillance due to a lack of financial resources. Therefore, foresters had to rely on the participation of the population concerning surveillance and conservation of the reserves (Hagberg 2001b: 495), which meant that foresters relied on inhabitants who were occasionally rewarded for their help. Moreover, the decrees written in the aftermath of the re-opening of the hunting business gave way

135

to new types of foresters' auxiliaries involved in the daily management of natural resources - namely rangers and hunters' associations (MECV 2005).

The decree<sup>25</sup> on the recruitment of occasional rangers (*pisteurs occassionnels*) declares that «every person of good conduct, possessing hunting skills and knowledge on wildlife protection, can be recruited occasionally to assist in tourism and sportive hunting». During the same period, some rangers were permanently recruited by the State in order to assist and advise the foresters, following the earlier example of the forest guards. In the Burkinabe northern periphery of Park W, one village head was recognized as a State ranger in the late 1980s, while other men were executing the same tasks as State rangers without being officially employed by foresters. Currently, the State rangers of the 1980s have passed away or retired, and no State rangers are officially recruited anymore.

The decree on hunters' associations in Burkina Faso<sup>26</sup> articulates that «all local people who want to hunt, have to be part of a hunters association». These hunters' associations defend the stakes of local hunters while also involving the hunters in the fight against poachers or other nature destroyers (Chardonnet 1995). This latter role refers to the fact that members of the hunters' associations were expected to report to foresters on illegal activities of their neighbours. Article 3 of this decree declares that «every member of the hunters' association is competent and obliged to denunciate every act that disturbs or damages the development of the wildlife and the exercise of hunting». In the Burkinabe periphery of Park W, only one hunters' association was created in the 1990s. This hunters' association was situated in the town of Diapaga and consisted of a dozen men, mainly a mix of different State agents (foresters, teachers, agricultural or animal husbandry extension workers...), who had the means to buy the necessary permits authorizing legal hunting. Village hunters with restricted means were not able to join the association, an issue which clearly demonstrates one of the problems associated with representation in community participation that Ribot (1999) describes. The president of the hunters' association in Diapaga was the then retired forester Yonli Antoine, the same person who was involved in the delimitation of the park in 1954. In several interviews, Yonli stressed that "the hunters' organization of Diapaga was created with the one and only aim to help the foresters with surveillance in the villages, by reporting on poachers or people in the possession of a gun without declaring this. For every denunciation act, the members of the association were rewarded with a fee in the associations' cash desk». 27 Currently, the hunters' association of Diapaga is no longer functioning. Youli points out that «hunting is no longer possible, because there is no wildlife anymore except for the wildlife protected in the national park», where one cannot hunt per definition, even with a permit. Furthermore, «hunters' associations were abandoned because foresters wanted to work with members of the village committees as informers instead of as members of the hunters' association». 28 In the next section, I will support this impression by showing how surveillants became such a widespread phenomenon, as such making the members of a hunters' organization as denunciators superfluous.

### Contemporary nature conservation in Burkina Faso

In 1997, the Burkinabe Government reformed its environmental policy, which led to a new legislative basis named the Forestry Code.<sup>29</sup> The major realization of this reform was the recognition of numerous privatized hunting zones on the peripheries of the country's nature reserves. These zones were set up on the one hand to function as buffer zones for the reserves, and on the other hand to contribute to the local and national economy through the commodification of wildlife in hunting and safari tourism. Once again, the actors of the daily management of the reserves shifted slightly according to this reform.

## Panoptical surveillance, mainly targeting Fulbe herders

Since the 1997-reform, the Burkinabe State management of the nature reserves has been based on the idea of major ecological complexes, called Wildlife Conservation Units (UCF: *Unités de Conservation de la Faune*). Presently, these units are called *Unités de Protection et de Conservation* (UPC), and are attached to the National Direction of the Paramilitary Corps of Waters and Forests. This means that paramilitary foresters are in charge of the daily surveillance of the nature reserves, while also non-paramilitary foresters are present at the provincial and departmental forestry offices to control natural resources outside the reserves. The UPCs, administered by a "management cell", are responsible for «the management of the nature reserves, the surveillance deterring poachers and other nature destroyers, the collection of ecological data for surveys, the control of slaughter quota, the environmental education and formation of actors, the support of actors in their quest for financial support, and the coordination of the management activities of partners».<sup>30</sup>

The UPC of the W region consists of the national park W, the partial faunal reserve Kourtiagou, the hunting concession of Tapoa Jerma and all the village hunting zones in that area.<sup>31</sup> The management cell of this UPC works from three forestry check points, one at each of the three official entrances to Park W in Burkina Faso. These check points and the entrances were renewed and extended in 2001 by the ECOPAS international conservation program. The management cell of UPC W consists of paramilitary foresters of varying ranks and is headed by a forester with the rank of commander, called "the Conservator" ("Conservateur").

Prior to 1997, the hunting zones had in most cases already served for hunting tourism without being designated as reserves. In 1997, however, these zones were officially classified as reserves. This resulted in compulsory resettlements to free the zones from human interference and was re-enforced through legally based, restricted use

of natural resources on vast territories which had been formerly used by inhabitants to supply their daily subsistence. For many agro-pastoralists living in this area, these recently created reserves obtrude nature conservation as an exclusionary action on their lives, much more so than Park W had in the past. Due to the proximity of the hunting zone to their villages and to the recent intensification of surveillance and repression linked to them, inhabitants feel that exclusionism has increasingly and seriously constrained their activities. Currently, rangers and foresters catch and sanction (both physically and pecuniary) a few offenders per week for violating the environmental regulations imposed on the periphery of the Park W. Many foresters, rangers and ECOPAS workers expressed to me that this repression is necessary because the local population destroys the natural resources due to their dependence on the natural resources for daily survival. As such, they connect poverty and linked to that "ignorance", "stubbornness" or "illiterateness" to the destruction of natural resources by inhabitants, just like many contemporary international projects do (for instance: IUCN 2000, World Bank 2002).

According to the inhabitants, this level of surveillance was not present in the 1980s, nor during the colonial regime, although these periods can be seen as the start of the current repressive regime. Many informants referred to the intensified surveillance by saying, for instance, that «the park is now everywhere. The park has even entered the village».<sup>32</sup> In contrast to a national park, where any form of natural resources' use is forbidden, some user rights are granted to the inhabitants next to the hunting reserves; e.g. seasonal cutting of long grasses or entering the reserve for the performance of "traditional" rituals or ceremonies. The granting of rights is an enforceable rule, but one which is always subjected to the forester's approval, and this inevitably requires "gifts" such as chickens.<sup>33</sup>

In the department of Diapaga, 17 villages were resettled in 1997-1998 to clear the way for one hunting zone called the Tapoa Jerma Safari Zone.<sup>34</sup> Since then, the hunting zone of Tapoa Jerma has been attributed to a concession holder, named Benjamin Traoré. Mr. Traoré is Ouagadougou-based business man owning a private security company in the capital. He is interested in keeping his zone free from cattle and poachers. Therefore, he has been organizing surveillance himself since 2003, supplementary to the forestry service's surveillance. The concessionairy's surveillance team, called wildlife guards (*gardes faune*), include some of the rangers from the village of Tapoa Jerma, but the majority are men from Ouagadougou. With these extra guards, the hunting zone of Tapoa Jerma is thus super-supervised, or as a young ranger in Tapoa Jerma expressed: «We are mining the zone. If a Fulbe herder will set foot into the zone, the mines will explode, BOOM! ».<sup>35</sup>

In contrast to earlier times, the surveillance of foresters and their auxiliaries is no longer aimed at simply finding poachers. Rather, surveillance is currently targeting Fulbe herders (as was made clear in the quote above) who, the argument goes, «are

illegally grazing cattle in the reserves or are cutting off branches of protected trees outside the reserves».<sup>36</sup> When foresters or their auxiliaries leave on a surveillance mission, they often say «we are going to catch some Fulbe»,<sup>37</sup> thereby ascribing all environmental offences to one ethnic group.

«When the forest guards<sup>38</sup> see a cow in the bush, they are capable of following it all the way, and when the youngster who is guiding the herd is cutting a branch for the cows, he will be in serious trouble. But when the bush is set on fire, the forest guards will not even move there to see what happened and catch the one who lit the fire».<sup>39</sup>

Fulbe herders are the most profitable target for park managers. In terms of revenues, catching a Fulbe herder is much more profitable than catching a poacher because of the Fulbes' relative wealth in comparison with the poachers' wealth. When Fulbe are caught, they are obliged to pay a "transaction sum", which is in many cases a semi-official fee not necessarily defined by a legal procedure. The logic of park managers is that «a herder who does not have the money to pay his fine can always sell cattle and thus pay. A poacher, on the contrary, is in most cases not able to pay and thus sent to prison». 40 Targeting Fulbe is also justified by the fact that Fulbe tend to be locally perceived as «the scum of society», as «untrustworthy», and as «strangers», in contrast to Gulmancé and Zerma who are labelled as «autochthones» and thus the «rightful» users of the natural resources.

# Hunting for local development

One of the main purposes of the environmental national reform in 1997 was to create benefits for local people while preserving nature. In line with participatory ideals, hunting tourism should not only feed the State treasury but should also support local communities. Therefore, in 1997, the hunting concessions were attributed to private owners of Burkinabe nationality in order to keep the revenues of this valuable resource in the hands of Burkinabe people (read: Burkinabe elite). The former - mainly French - owners of existing hunting zones in many cases became the hunter guides working in the shadow of the official Burkinabe owners. In exchange for a just repartition of the revenues among the concessionary, the State and the local communities, these private owners are granted usufructuary rights to the State owned reserves in terms of wildlife exploitation. According to legislation, the private operator shall invest financially in the management of his habitat through the construction of infrastructures, manage the fauna exploitation in his zone in cooperation with the local forestry administration office<sup>41</sup> and contribute to local development through the payment of taxes and donation of bush meat to the local community. In this case, the local community is represented by the village committee of wildlife management, called Comité Villageois de Gestion de la Faune (CVGF), and constructed after the example of the village committees for land

139

management of the 1980s. Their first task is receiving bush meat and pecuniary revenues of hunting tourism in the concessions in order to manage these revenues for "community purposes". Under "community purposes", foresters and agropastoralists on the periphery of Park W indicate examples like the building of a well, the building of a dam for rice cultivation, or the building of a house for the teachers (as teachers are sent from other regions of the country as part of public policy for State agents). Determining how and for what the revenues may be used must be done by the committee; but once again, this decision is ultimately subjected to the foresters' approval or under foresters' *«tutelle»* as Ribot (1999: 25) calls this common practice of "oversight" in the Sahelian participatory forestry.

A second task of the wildlife committees is to delineate an additional village hunting zone, called *Zone Villegeoise d'Intéret Cynégetique* (ZOVIC), on their village territory to attract tourists who can hunt small game like birds in these designated zone. According to Vermeulen (2004: 314), the participation-based opportunities to create a CVGF and a ZOVIC make Burkina Faso into an exemplary country for the whole of Africa «as wildlife management by the local population is a reality», although practical constraints impede the committees' ability to function independently and autonomously. In general, inhabitants are quite frustrated and disappointed about the CVGFs because 10 years after their creation they do not yet benefit substantially from the revenues of the hunting zones. Moreover, for many residents, creating another reserve on their village territory is just another encroachment on their farming or pasture land.

Practical constraints, however, are not the only problems of the village committees, nor are they the most important. As Ribot (1999) and Painter et al. (1994) have shown, representation is a much bigger problem, certainly because this participatory approach is based on village committees which assume sedentary populations living in stable villages settings (Painter et al. 1994). One of the most obvious structural constraints of the CVGFs is that these committees quite often exclude Fulbe as well as women. ECOPAS has focused on the inclusion of women in the committees over the last few years by forcing residents to add at least two women per committee (although they only have minor tasks in practice). However, little has been done to include Fulbe in the committees, as if they are not part of the local population. When targeting Fulbe, all environmental NGOs merely focus on the creation of transhumance corridors, thus on the channelling of pastoral activities of the Fulbe in areas outside the reserves. Transhumance corridors need to be drawn, therefore, on village territory, which is a very difficult negotiation process between all different actors involved (community, farmers, municipality, foresters, etc). Even though they have not been successfully implemented yet, the corridors are designed by conservationists and State and development workers as separate zones solely dedicated to transhumance, just like the reserves which are solely dedicated to conservation

### Current actors in the era of environmental globalization

Since the 1990s, international institutions have been increasingly supportive of national and local conservation efforts in Burkina Faso, as well as in other countries all over the world. In Eastern Burkina Faso, a project called *Projet d'Appui aux Unités de* Conservations de la Faune (PAUCOF, Support Project for the Wildlife Conservation Units) funded the workings of the conservation units of the forestry service with resources from the United Nations Environmental Program, the European Union, and several European countries. The IUCN provided the means for the resettlement of the villages in the hunting concessions, mainly in terms of scientific research and compensatory goods for the resettled people. The biggest support directly for Park W and its management came from the ECOPAS program of the European Union. This conservation program was constructed to coordinate and align the various State managements of the three nation-States within which Park W is situated. In 2008, a new project of an Italian NGO, Association de Cooperation Rurale en Afrique et Amérique latine (ACRA, Association for Rural Cooperation in Africa and Latin-America), settled in the offices of ECOPAS after the funding had dried up in order to work on «the development of the periphery of Park W» in cooperation with the ministry of environment. Still, many more projects are going on in Diapaga and all try to intervene in the management of natural resources in one way or another.

The assistance of the ECOPAS program for the Burkinabe State management of Park W consisted mainly of building infrastructure to upgrade ecotourism and the management of the park and of investing in surveillance. As such, the international support built on the continued interest of the State's natural resource management in relation to the exploitation of wildlife and protectionism through control of the natural resource use. The Burkinabe section of the ECOPAS programme supported rangers and village wildlife committees to assure consistent surveillance and to involve local people in the wildlife management according to participatory community ideals of contemporary nature conservation (Kaboré 2006). Both rangers and members of the village wildlife committees are people from the villages neighbouring the nature reserves. The task of the village wildlife committees was described above.

The main tasks of rangers are to be trackers in hunting tourism as well as to be spies of the foresters; they are expected to report on other residents offences both when they are on a surveillance mission and in their day-to-day life. ECOPAS provided monthly salaries for 15 park rangers per forestry office at the entrances of the park

(3 in total), supplying military-looking uniforms and bikes. In total, this ECOPAS support meant more than a tripling of the surveillance efforts: a team of 45 park rangers and 10 foresters on record, with enhanced logistical and financial support. This contrasts drastically with the previous situation before the arrival of ECOPAS, that of 3 foresters with a few auxiliaries who were only dependent on rewards. Additionally, many more village men have tried to benefit from the conservation initiative and have started to work as park rangers voluntarily (read: for gifts) in order to make some money. In sum, the current and increasing international support has intensified privatisation and surveillance at the core of the State management of the reserves, conveniently unfolding under the flag of community participation.

#### Conclusion

The historical-ethnographical analysis presented above reveals that exclusion and repression of inhabitants have been ruling practices at the core of policy throughout the history of nature conservation in Burkina Faso. In the case of park W, conservationists and scientists tend to justify these exclusionist conservation paradigm through the fact that the area was originally an uninhabited space and thus now subjected to the pressure of inhabitant-induced nature degradation and desertification. In fact, contemporary park managers use the same discourse as the colonial botanist Aubréville, that of fighting the destructive practices of unschooled or reluctant inhabitants, to explain why they ought to protect the park. As such, the focus on repression and exclusion has been reproduced over and over again throughout the twentieth century up until present day, although the dominant conservation paradigm has been presenting a picture of community participation instead of repression and exclusion in the last decades. Strikingly, after an era focused on community participation practices of repression and exclusion seem even to have been increased these days. Monitoring, denunciating, punishing and silencing the residents occurs with an ever-increasing intensity, and these actions are supported by both national and international actors. Screening off different activities in separate zones is more and more seen as the primary solution, although this unambiguously excludes other actors within the zones and thus impedes interaction, collaborative resolution, and social cohesion.

Formerly, exclusionary measures in the Burkinabe nature conservation was targeting poachers as the main destroyers of the nature reserves. Recently, however, Fulbe herders are increasingly appointed as the main destroyers of nature reserves because of their transhumance practices. As such, the labels attached to Fulbe herders since decades («strangers» and «semi-nomads») are reproduced and reinforced through conservationism. Fulbe herders try to manoeuvre into this strictly regulated space of conservation by establishing new relationships, by making agreements with the park managers, by allying with civil society organisations and by claiming autochthony

in contrast to other Fulbe herders. Whether or not ethnic rivalry is on the rise as a result of conservation policy remains to be answered (in my dissertation). It seems rather obvious though that the ultimate losers of the conservation story are the less politically powerful (Fulbe, women, ...).

Furthermore, the case-study of Park W has also shown that the participatory model in nature conservation was not new in the 1980s, in contrast to what is commonly believed. Rather, emerging global interests for "local communities" in the rising environmental-development debate at that time re-attracted attention towards participatory approaches, already long present since the launch of nature conservation initiatives. Much of the surveillance efforts and work on the ground has been contracted out to so-called local communities, from the late colonial regime up until now. For instance, the delimitation and surveillance of Park W was conducted by forest guards from the region, while the State forester selected for the delimitation of the park was a man originating from the region too. In the 1980s, State rangers and hunters' associations were the representatives of the communities involved in wildlife management. Later on, park rangers and village wildlife committees took over this role. This reversion to local actors is presented by conservationists, State agents and NGO workers as crucial to preventing the inhabitants from exercising destructive practices. In their view, community participation would eradicate the practices of bush fire, excessive wood cutting and poaching. This is, however, not the case, if monetary incentives and decision-making are not made available to the inhabitants, irrespective of the frequent punishments inflicted on the residents. Many decisions such as the granting of user rights to the hunting reserves and determining on what the revenues may be spent - stay in the hands of State agents and international actors, despite the dominant paradigm of community participation in nature conservation. Moreover, repression seems much more prevalent than community participation for many of the inhabitants. However, some of the actors (private operators, rangers, CVGF members, foresters, tourist guides and NGO workers) gain participatory roles through their conservationist occupations. Once again, the actors who are less powerful socially, politically and economically, and less entrepreneurial are excluded and are losing in various ways.

Another issue that appears recurrent in the history of nature conservation in Burkina Faso (and in other developing countries) is the "touristification" of wildlife. Only between 1980 and 1985, the Burkinabe Government publicly closed down the hunting business. Other than that, the Burkinabe forestry service and environmental regulations have always been focusing on wildlife exploitation through hunting, from colonial times until nowadays. As such, the core idea behind conservationism has stayed the same, namely dedicating nature conservation to economical growth, although the contexts of commodification and its purposes have changed throughout time. During colonial times, hunting tourism was dedicated

to French or international development. In the postcolonial period, hunting had to contribute to national development. And since the 1990s, hunting tourism is increasingly brought into action for local development. This latter links with the currently ruling community participation paradigm in which costs and benefits imposed upon the inhabitants in the name of conservation have to be compensated in monetary terms.

Moreover, it became clear how difficult it is to unravel who has influenced who among international, national and local environmental institutions or actors. In every time period, the management of park W has been executed by (1.) "white people" (colonial foresters, NGO-workers, private entrepreneurs in the hunting business), (2.) State servants (mainly foresters) and (3.) all their local auxiliaries from the villages surrounding the reserves. Nevertheless, the weight of these three types of different actors on the nature reserves' management in Burkina Faso has changed slightly throughout time. Currently, more and more international environmental institutions are influencing the management of nature reserves in Burkina Faso. This has led to the privatization of the hunting business and an ever-intensified surveillance through the massive recruitment of village men to assist in the daily management of the park under the flag of community participation. Generally, we could say that natural resource management in 'developing countries' has increasingly become quadripartite or a cooperation between (1.) nation-States, who own the natural resources in many countries, (2.) international development or environmental institutions, who provide the means and conditions for State-based natural resource management, (3.) communities, who need to be incorporated to let the management succeed on the long term and (4.) private operators, who share responsibilities and revenues of natural resource management with the national Government. However, the Burkinabe Government and international community present it as if the contemporary, participatory natural resource management is tripartite, namely a matter of nation-States, private operators and local communities.

Despite the intertwinement of international, national and local perspectives and initiatives in environmental protection throughout history, mainly Burkinabe citizens, and not the foreigners of the global institutions, have been implementing the natural resource management in situ. This has led to changes or specificities in the management of the Burkinabe reserves on the ground, despite the continuities in the reserves' management mentioned before. Moreover, discourses of international, national, local and personal interests were simultaneously formulated at the local level. Contesting and co-existing ideas, such as community participation and repression, have thus been inherent to nature conservation paradigms since the creation of nature reserves.

Finally, I want to remark that all actors alter and appropriate the national and international environmental discourses and ideologies, and as such reshape the

environmental politics at the local level. Therefore, more anthropological research on the ways in which different actors navigate between different registers (local, national and international) in the strictly regulated arena of conservation initiatives will elucidate complementary views on nature conservation. This can open up space to heterogeneity in contrast to the homogeneity proposed (and supposed) by separating activities in strictly delineated territories under the current zoning paradigm.

#### **NOTES:**

- 1 This article is dedicated to my informants and assistants in Burkina Faso who adopted me in their lives and taught me to look through their eyes. I would especially like to thank Mario Zamponi for organizing a panel at the AEGIS-conference in 2009, in which I firstly presented this paper and was highly encouraged to turn this into an article. I have greatly benefited from the exchange with Katherine Homewood and the other contributors of this volume. I also thank both of my supervisors, Ann Cassiman and Sten Hagberg, for their infinite intellectual stimulus. The editing is done by Charlotte Wolff.
- 2 Gulmanceba is a synonym for Gourmantché, which is more commonly used in literature. Gourmantché is the French term, stemming from colonial times, for the people living in a region stretching over Eastern Burkina Faso, Northern Togo, Northern Benin and South-Western Niger. I prefer to use terms that people use themselves when referring to their group, if I need to specify their ethnic affiliation. Gourmantché refer to themselves as *Gul(i)manceba*, people of the *Gulma*.
- 3 Fulbe is the plural for Pullo. It is the term these people use to refer to themselves. In French literature, they are commonly called Peul, while in English literature the term used for the Fulbe is Fulani.
- 4 In literature, Zerma is commonly called Zarma. Djerma is also another way of writing Zerma.
- 5 Moose is the plural for Moaga. It is the term these people use to refer to themselves. In literature (both French and English), the French corruption of Moose is commonly used, namely Mossi.
- 6 The French term "pisteur" can refer to different people, as the term was used in different ways throughout history. In the first place, "pisteurs" are "trackers", guiding the foresters (mostly coming from more urban settings) and tourists in the West-African savannahs. However, currently, the term pisteur also denotes the task of denunciating offences of the environmental regulations to the foresters. Litterally, the French term "pisteur" covers both of these designations, "tracker" and "spy" (E.N.).
- 7 The contemporary Ministry of Environment is subdivided into four directions: the General Direction of Nature Conservation, the National Direction of the Paramilitary Corps of Waters and Forests, the Direction for Ecological Surveys and the General Direction of Improvement of Life Quality. The foresters who conduct the surveillance of natural resources against 'destructive use' are attached to the two first subdivisions.
- 8 The northern part of the Burkinabe periphery of Park W compares roughly to the territory of the departments Diapaga and Botou. I have worked from two main research sites: the town of Diapaga, and the village Tapoa Jerma. The first site is selected as the capital of the Tapoa province, where all administration offices and NGOs involved in environmental politics are present. The second site is a village at the entrance of the park and an adjacent hunting zone, where many men are employed in nature conservation.
- 9 Head of the management unit of park W, Diapaga 2008.
- 10 This is a passage in chapter one of a book by Rouré (1956), a chapter called «the man destroyer» (*l'homme destructeur*). Because the book I consulted was old and dilapidated, I can not cite the exact page of this quote.
- 11 June 2008.
- 12 A local denotation of the white Government officials of colonial times, which means literally "trap" and refers to the "meanness" of these people as this trap is one of the most dangerous and biggest traps (A.N.).
- 13 Opening up of tracks in the park (A.N.).
- 14 Elder of Kogdaangu, 2008.
- 15 The Head of the forestry service in Diapaga (A.N.).
- 16 Elder of Tapoa Jerma, 2008.
- 17 See also Hagberg 2001a: 487; Gomgnimbou 2001: 236 for other regions in Burkina Faso.
- 18 Bois is a family name in France, but also the French word for wood.
- 19 IUPN is the abbreviation of International Union for the Protection of Nature. IUPN was the predecessor of the IUCN, International Union for the Conservation of Nature, now known worldwide as an international

environmental NGO.

- 20 Upper Volta is the old name for present-day Burkina Faso, which was named Burkina Faso in 1984 under the regime of Thomas Sankara.
- 21 Around 1970, the Government of Upper Volta ratified a lot of international conventions concerning nature conservation. In chronological order: the African Convention on the Conservation of Nature and Natural Resource (Alger-Convention), the Ramsar Convention on Wetlands, the Convention of International Trade in Endangered Species (CITES or Washington-Convention), and the UNESCO Man & Biosphere Program (UNESCO/MAB) (Chardonnet 1995).
- 22 In 1989, the ministry of environment became the Ministry of Environment and Tourism (MET - Ministère de l'Environnement et du Tourism). In 1996, the Ministry was called Ministry of Environment and Water (MEE Ministère de l'Environnement et de l'Eau). It is only since 2004 that the Ministry of Environment and Structure of Life was created, as the ministry of Environment is called now (MECV: Ministère de l'Environnement et Cadre de Vie). This "structure of life" in the name of the current ministry of environment points to the growing attention paid to pollution and the improvement of life quality.
- 23 The RAF is a major land reform policy, attributing all rural land to the State. The RAF's third section is specifically tackling the "regime of fauna", which had to replace the wildlife management code of French colonial rule. The RAF defines different categories of protected areas according to their degree of tolerable exploitation and determines the fines for environmental offences in these different categories of protected areas.
- 24 Interview with hunters' guide (Pama 2007); see also Chardonnet (1995: 25).
- 25 Decree n. 244/MF/MET (1985).
- 26 Raabo n. 0020/CNR/PRES/MET/MATS (1985).
- 27 Retired forester Yonli, Diapaga 2008.
- 28 Ibidem.
- 29 Currently, the Forestry Code of 1997 is the legislative reference par excellence used by Burkinabe foresters in interaction with offenders. However, sometimes foresters still refer to the RAF or other legislative documents.
- 30 Article 6 in Arrêté n°2001-041/MEE/CAB.
- 31 See article 3, Arrêté n°2001-041/MEE/CAB.
- 32 Fulbe chief, Diapaga 2008.
- 33 These gifts may be interpreted as petty corruption, although many informants don't describe this as corruption. Corruption is mainly defined by them in terms of money and larger scale transactions, such as the underhanded arrangements with Fulbe herders to let them graze their cattle in the Park.
- 34 In the Burkinabe periphery of Park W, two hunting zones are present, namely the hunting zone of Tapoa Jerma and the hunting zone of Kondio.
- 35 Young ranger, Tapoa Jerma 2008.
- 36 Head of provincial forestry office, Diapaga 2008.
- 37 Rangers of Tapoa Jerma, 2008.
- 38 Local denotation for park managers (N.A.).
- 39 Fulbe herder, Diapaga 2008.
- 40 Forester in Diapaga, 2008.
- 41 Basically, the forestry service is in charge of the hunting concessionary and has to supervise the concessionary's management of his hunting zone. In practice, the hunting concessionary sometimes has more power than the foresters because of his elitist position and his wealth, leading to illegal privileges for the hunting elite.

Aubertin C., F.D. Vivien (2006), *Le développement durable: enjeux politiques, économiques et sociaux*, Etudes de la documentation française, La documentation française, IRD éditions

Beinart W., J. Mc Gregor (2003), Social history & African environments, James Curry Ltd, Oxford

Benoit M. (1999), Peuplement, violence endémique et rémanence de l'espace sauvage en Afrique de l'Ouest: le no man's land du W du Niger, in «Espace, Populations, Sociétés» : 29-52

Brockington D. (2002), Fortress Conservation. The Preservation of the Mkomazi Game Reserve, Tanzania, The International Institute & James Currey, Oxford

Brockington D. (2008), *Powerful Environmentalisms: Conservation, Celebrity and Capitalism*, in «Media, Culture & Society», vol. 30, n. 4

CBD-CHM (2006), Convention on Biodiversity. Clearing-House Mechanism of Burkina Faso. Country Study on the Biodiversity of Burkina Faso, http://bch-cbd.naturalsciences.be/burkina/bf-eng/implementation /doc/monography (19/10/2006)

Chardonnet P. (1995), Faune Sauvage Africaine. La ressource oubliée. Tome II, Commission Européenne

Duffy R. (2008), From Wilderness Vision to Farm Invasions: Conservation and Development in Zimbabwe's South-East Lowveld, in «Journal of Modern African Studies», vol. 46, n. 4

ECOPAS (2003), WAPO. Afrique des quatre fleuves, film, sponsored by European Union

Gomgnimbou M. (2001), "Forêts à identités contestées: perceptions des classements des forêts de Tiogo et de Laba par les populations locales", in CNRST & SLU, Aménagement intégré des forêts naturelles des zones tropicales sèches de l'Afrique de l'Ouest, Uppsala

Hagberg S. (2001a), "Droits à la terre, pratiques d'aménagement. Le cas de la forêt de Tiogo au Burkina Faso", in CNRST & SLU, Aménagement intégré des forêts naturelles des zones tropicales sèches de l'Afrique de l'Ouest, Uppsala

Hagberg S. (2001b), *In search of Nyo : Lyela Farmers' Perceptions of the Forest in Burkina Faso*, in «Africa», vol. 71, n. 3

Hagberg S.(2001c), Poverty in Burkina Faso. Representations and Realities, ULRiCA, Uppsala

IUCN (2000). Les enjeux de l'utilisation durable des resources naturelles: cas de la Réserve de la biosphere de la Mare aux hippopotames au Burkina Faso. Ouagadougou, Deuxième Colloque Pan-Africain Sur l'Utilisation Durable des Resources Naturelles en Afrique.

Kaboré B. (2006), Synthèse des activités du volet peripherie de la composante nationale Burkina Faso du projet Parc W, Ministère de l'Environnement et Cadre de Vie, MECV, Sécretariat Général, Projet 9 ACP ROC/13-PARC W (ECOPAS) « Composante Nationale Burkina Faso »

Leach M. & Mearns R. (1996), The Lie of the Land: Challenging Received Wisdom on the African Environment, James Currey Heinemann for the International African Institute, Oxford & Portsmouth (N.H.)

Lompo O. (2005), Dynamiques et enjeux de la gestion participative à la périphérie du parc regional W. Cas dans la ZOVIC de Kabougou, Burkina Faso, Mémoire de DEA, Université d'Abomey Calavi, Benin

MECV (Ministère de l'Environnement et Cadre de Vie) (2005), *Note d'Information sur le Tourisme Cynégétique* et l'Ecotourisme dans les Aires de Protection Faunique du Burkina Faso, Direction de la Faune et de la Chasse, Ouagadougou

Painter T., J. Sumberg, T. Price (1994), Your Terroir and My "Action Space": limplications of Differentiation, Mobility and Diversification for the Approche Terroir in Sahelian West Africa, in «Africa», vol. 64, n. 4

Ribot J. (1999), Decentralisation and Participation in Sahelian Forestry. Legal Instruments of Politico-Administrative Control, in «Africa», vol. 69, n. 1

Rouré G. (1956), Faune et Chasse en Afrique Occidentale Française: Guide du Tourisme et de la Nature Vivante, Editions Grande Imprimerie Africaine, Dakar

Swift J. (1996), "Desertification. Narratives, Winners & Losers", in M. Leach, R. Mearns (ed), TheLie of the Land: Challenging Received Wisdom on the African Environment, James Currey Heinemann for the International African Institute, Oxford & Portsmouth (N.H.)

UNEP-WCMC (2008), www.unep-wcmc.org/sites/wh/pdf/'W',%20Niger.pdf

Vermeulen C. (2004), La gestion participative de la faune sauvage au Burkina Faso: les expériences du ranch de Nazinga et du parc du W, in «Game & Wildlife Science», vol. 21, n. 3

West P., J.C. Carrier (2004), Ecotourism and Authenticity, in «Current Anthropology», vol. 45, n. 4

World Bank (2002). Burkina Faso, National Natural Ecosystem Managment, PID. In: http://web.worldbank.org/external/projects

Zimmerer K. (2006), Globalization & New Geographies of Conservation, The University of Chicago Press, Chicago & London