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Politics of Participatory Forest Conservation: Cases from the East Usambara Mountains, Tanzania

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Abstract: *This article explores the gap between formal institutions and actual practices of participatory approaches to forest conservation. Case studies conducted in Tanzania illustrate how the implementation of participatory conservation strategies is shaped by and shapes the power relationships between State and community actors. The present conservation strategies are formally “participatory”, but the actual functioning of forest control is affected by other factors, such as the economic and political interests of the actors involved, and the history of people-state relationships. The involvement of “local people” in forest conservation does not make it a smooth and apolitical process: power relations between various actors intervene in the processes, and make forest control a complex, fragmented and dynamic issue.*

Keywords: Forest conservation, protected area management, participation, power, Tanzania

1. Introduction

Since the 1980's many conservation and development agencies have attempted to reconcile social, ecological and economic goals, by promoting the involvement of local people in conservation initiatives. One of the underlying ideas of so-called participatory conservation approaches has been that because the “local community” is close to the forest or wildlife, it has, or at least should have, the most incentive for and knowledge about managing it in a sustainable way (Brosius et al. 1998). However, the results of these projects and strategies in terms of socio-political and ecological outcomes seem to vary greatly (Newmark and Hough 2000, Hughes and Flintan 2001).

The debates on the role of “community” in conservation and the compatibility of conservation

and development goals have not been settled (e.g. Attwell and Cotterill 2000, Berkes 2004). These contestations are partly linked to the tensions between different conservation ideologies or “paradigms” (cf. Elliott 1996). According to Adams and Mulligan (2003, p. 9-10), the dominant view in Western conservation thinking has remained preservationist, separating “humans” and “nature” even though many conservation organisations have moved towards “sustainable use” ideology. Conservationists fear that community-based approaches dilute the conservation agenda, whereas proponents of community-based approaches suggest that the failures are due to improper implementation of the concept (Berkes 2004).

Forest conservation has also been subject to similar contestations. Proponents of stronger community

involvement in forest control stress that participatory approaches too often see local people just as “beneficiaries” and not as actual decision makers over forest use (e.g. Wily 2002). Alternatively, the communities can be considered as “custodians” of the forests. Wily and Dewees (2001) suggest that the forest-adjacent communities hold enough custodial interests to manage forests well and they could at least be given decision-making powers if not full tenure rights.

This paper explores the implementation of participatory forest conservation in the East Usambara Mountains (EUM), in north-eastern Tanzania. These forests were first protected primarily for their water catchment value, but bio-diversity conservation has become at least as important as a policy goal. I focus on the interactions between the actors involved in forest control in areas where the management responsibility is in principle shared between the State and the people, and discuss these dynamics against the background of relatively recent forest history. The questions addressed include: Have “participatory” strategies to forest conservation and the new institutions, such as management rules, changed the role of and power relations between the local and the State actors in forest control, and if so, how? And secondly, what are the factors in the institutional and wider socio-economic context that may impede their success, in terms of devolving powers to “communities” and sharing the benefits of conservation? I will approach these questions by analysing the relationship between formal and externally-introduced institutions and organisations and the actual functioning of resource control mechanisms in “real-life” situations (Nujten 2004). Selected conservation efforts introduced by different externally-funded projects during the period 1990-2002, and the changes related to reforms in the wider policy frame are used as case studies.

2. “Participation” and Power

In participatory initiatives, the idea is generally to involve “local communities” and possibly other “stakeholders” in managing and protecting forests or wildlife and to assure that their needs are adequately addressed. Yet, the extent to which the responsibilities and access rights are shared varies between different approaches. Participatory approaches to conservation include Integrated Conservation and Development

Projects (ICDP) and various joint- or co-management schemes, such as joint forest management (JFM). ICDPs link conservation of bio-diversity with social and economic development outside the protected areas. Community-based conservation and natural resource management initiatives are other strategies, but they usually devolve more power to local people, at least in principle.

Nevertheless, several studies show that initiatives that use some kind of participatory approach to conservation often fail to achieve their goals in terms of devolving the decision-making powers to and/or benefiting the local people equally as well as promoting conservation (e.g. Wells et al. 1992, Stocking and Perkin 1992, Newmark and Hough 2000, Barrett et al. 2001). Neumann (1997, p. 569) argues that ICDPs often resemble authoritarian “fortress conservation” practices in their socio-economic and political consequences.

Overall, the participatory approach to development has been criticised from various standpoints. Mohan and Stokke (2000) argue that an emphasis on “local participation” can underplay the role of state and trans-national power holders in development processes and represent the “local community” as too a homogenous entity. Moreover, Platteau and Abraham (2002) suggest that the local elites may not be as accountable to the poorer members of community as state agencies, for the resources can be “captured” by local elites in participatory programmes.

In conclusion, the actual practices of development and conservation projects often seem to be far from the ideal models presented in policy documents and intellectual paradigms. Debates over the “right” approach to conservation risk producing blue-print models that fit poorly for diverse local realities. Thus, the implementation of participatory conservation and its power aspects need to be explored in their specific socio-economic and political contexts.

Power, Actors and Institutions

In this study, I approach power and control from a modified “actor-oriented” perspective, which is enriched by more institutionally-oriented considerations of power. In an actor-oriented approach, power is seen as the outcome of “...complex struggles and negotiations over authority, status, reputation and resources, and necessitates the enrolment of net-

works of actors and constituencies” (Long 2004, p. 30). The problem with Long’s approach is that it does not seem to consider the institutional and structural aspects of power satisfactorily.

Both informal and formal institutions, often acting in combination, affect the ways different groups of people access and use environmental resources (Leach et al. 1999). Institutions are defined here as (explicit or implicit) rules, regulations, principles and laws that limit and regulate the actions of actors, their networks and organisations. There may be several institutions that in practice are at the same time affecting the use of natural resources (Wilshusen 2003). For instance, in Africa, the state often is a multi-institutional complex, with much internal competition that may undo formalisation (of institutions) as “...formal rules and regulation are also negotiated and undone by corruption, political networks and powerful alliances...” (Benjaminsen and Lund 2002, p. 3).

In Nujten’s (2004) analysis, power relations can be identified on three interrelated levels: power as strategic games, institutional power and structural power. Individual or strategic power is always a part of wider institutions and structural processes. However, the formal institutional model should not be seen as a standard, but resource control and related struggles need to be studied in real-life situations and as part of the various force fields (ibid.).

Force fields can be defined as more structural forms of power (Nujten 2004). They are related to certain resources, e.g. land. Force fields are not stable as use of force is usually contested by some means, but they can still produce certain “organising practices” which affect the space for action of the actors involved. In this view, the control of certain resources is more an outcome of “the patterning of organising practices” than formal institutional mechanisms (ibid.). I adopt Nujten’s concept of power, but I approach the power aspects of participatory conservation by starting from the formal institutions and related organisations, and seek to explore the way they are put into practice, and possibly challenged by other force fields and related practices.

3. Study Area and Methods

The study area is located in the Tanga region, about 40 km from the coast of the Indian Ocean. The sub-montane and lowland forests of the East Usambaras are known for their high bio-diversity. They are among the global bio-diversity “hotspots” as a part of the Eastern Arc Mountains (Myers et al. 2000). The forests also form a crucial water catchment for the Tanga town. The major ethnic group is the Shambaa, but many other groups exist as well.

Presently, the protected forest area is about 33,000 ha, or 75 % of the total forest area. Most forests fall under the category of Catchment Forest Reserves, which is one type of Central Government reserves. Legally, the most strictly protected forest area is the Amani Nature Reserve, ANR (8,300 ha), established in 1997. This study focuses on the ANR because it is one of the first places where participatory conservation of bio-diversity-rich moist forests has been introduced in Tanzania. Most of the area has been gazetted earlier, but the new management strategies are likely to have altered the conservation practices.

The ANR includes specific zones with different conservation status, including a bio-diversity preservation zone (77 % of the area) and a local use zone (6 % of the area). A buffer zone has been established outside the ANR to “promote sustainable land and natural resource use practises ...and to decrease the dependency of the local communities on the natural resources of the ANR and to contribute to the social and economic development of the communities by involving them in the management of the ANR”(ANR general management plan 1998).

The forests on general lands (previously called public lands) are considered to be under serious threat because of the need for agricultural land and/or forest products (Kessy 1998, Interview of the District Forest Officer, Muheza 28.11.2003). One of the perceived threats facing both reserved and unreserved forests is the burning of land as a part of agricultural practices (Newmark 2002).

The majority of the population depend on farming. Most of the village land is under customary tenure, but the purchasing and borrowing of lands is practised as well (Kessy 1998). Other sources of income include small business, cattle husbandry and wage labour. In addition, conservation projects have intro-

duced additional income and food sources to some families, such as fish ponds and bee-keeping. People still use the forests in many ways, most importantly as a source of fuel wood. Among other benefits traditionally obtained from forests are building poles, timber, vegetables, fruits, ropes, fodder, game and medicine.

Methods

The fieldwork was conducted in six villages in the southern part of the EUM (table 1 and figure 1) during about two months in 2003. In most cases 1-2 sub-villages were selected for the study. The villages were chosen based on their location and participation in conservation interventions. The methods used were mainly semi-structured group and individual interviews with the villagers and thematic interviews with other actors, including representatives of the ANR advisory board, forest authorities at the national, regional, district and ward level, researchers, and development agents, such as former project staff, NGO workers and forestry experts. The interviews of the villagers were conducted in Swahili with the help of an interpreter, who also introduced the researcher to the communi-

ties. Secondary material, such as project documents and academic studies, provided an additional source of information.

The group interviews were conducted separately for men and women and they consisted of 4-12 participants. The principle was to find people from diverse social backgrounds (age, ethnic group) and usually from one sub-village at time. The informants were contacted with the help of the village authorities as they were the official contacts at village level and the stay in each village was relatively short, between two and ten days. However, it is likely that the selection method was affected by their existing social networks.

More than 20 individual interviews of villagers from different socio-economic groups were conducted, mainly in Ubiri to make the study more comprehensive. Out of the people interviewed in Ubiri ten were women and fourteen were men. They were selected through a wealth ranking exercise covering two adjacent sub-villages. The exercise was first carried out by three villagers separately (one village leader, one young woman, and one older man). The

Table 1. Names and locations of villages studied and principal interview methods.

Village & population*	Number of sub-villages in this study	Location	Principal interview methods**
Ubiri (840)	2	Upland, bordering ANR	Individual & 2 groups (f & m)
Mikwinini (673)	2	Upland, enclave of ANR	4 Groups (2 f & 2 m)
I B C M s a s a (2200)	1	Upland, bordering ANR	2 Groups (f & m)
S h e b o m e z a (1873)	1	Lowland, enclave of ANR	2 Groups (f & m)
Gereza (850)	5	Lowland, bordering ANR	2 Groups (f & m)
Kwatango (961)	1	Lowland, Manga JFM	1 group (m) & individual

* Population figures from the village authorities based on the National Census (URT 2003).

** F refers to female and m to male participants.

results were then aggregated to divide the villagers to wealth categories (poor-middle-rich). Interviewees were selected of each category in order to make the results representative of the different socio-economic groups. Members of environmental committees were interviewed as well in most of the villages. I also made observations at the local use and the biodiversity preservation zones of the ANR in order to cross-check the information given by interviewees.

These methods and approach helped me to form a geographically more extensive and diverse picture of the way participatory forest control operates. On the other hand, they did not allow me to form a very detailed analysis of the power relationships at the village level, compared to what would have been possible through an in-depth ethnographic work. Furthermore, reliance on the research assistant and the language barriers made communication with the villagers less spontaneous. Nevertheless, as the assistant was familiar with many of the people, the encounters with the informants usually went smoothly. The fact that I am Finnish by nationality also affected the way people responded, as the interviewees could associate me with the Finnish-funded project. Therefore, it was necessary to try to carefully contextualise the responses when analysing them.

4. Historical Background

This part discusses briefly the colonial and post-colonial history of forest conservation and management in the EUM, in order to contextualise the more recent changes. More detailed histories are provided e.g. in Hamilton and Bensted-Smith (1989), Iversen (1991) and Conte (2004).

The reservation of forests for protective and commercial purposes was started under the German colonial administration, although the main interest of the Germans in the Usambaras was on commercial agricultural estates (Hamilton and Bensted-Smith 1989). Most land in the EUM outside the small 'native reserves' was allocated to plantation agriculture, although not all of that was actually cleared for cultivation. Scientific ideas and the colonial imperative of "progress" started to play an important role in shaping the natural environments. (Conte 2004)

The German activities are said to have heavily reduced the original natural forests area in Usambaras (Schabel 1990) but there are no exact figures on the extent of the forest loss (Hamilton and Bensted-Smith 1989, 40). Yet, also ecological values were recognised by German colonial foresters, and there were thus competing interests towards the forests in the colonial administration (Koponen 1994). According to Grant (1924 ref. in Hamilton and Bensted-Smith 1989) forest conservation was at least occasionally coercive. In general, the restrictions on forest use during the German rule resulted in "bad blood" among the locals and, occasionally, in behaviour described as "deplorable indolence" or "passive resistance" by foresters (Schabel 1990, p. 131).

After World War I, during the British rule, commercial tea cultivation expanded in the EUM resulting in more forest clearance. Some new forest reserves were established because of catchment values (Hamilton and Bensted-Smith 1989). Often reserve boundaries were challenged by farmers through encroachment to reserves, as Conte (2004) describes in the context of the West Usambaras.

After independence (1961), the regulations over natural resources were relaxed, partly as a result of government policy and partly due to the government's decreased capacity to enforce regulations (Hamilton and Bensted-Smith 1989). Farm expansion and commercial logging further reduced the forest cover. The cultivation of cardamom – a valuable cash crop – had started to spread from the 1950's (Iversen 1991) and its deteriorating effects to the forests was one of the issues the conservation projects were later on targeted to address.

In 1976 most of the forest reserves in the EUM were categorised as Catchment Forest Reserves, under the central government. The major goal was to protect water catchments, with conservation of genetic resources and production of timber as secondary objectives (Hamilton and Bensted-Smith 1989, p. 3). Hamilton and Bensted-Smith (1989) also point out that previous decentralisation of forest management had resulted in a serious loss of forests in Tanzania, as district officials had sought quick money by selling tree felling licences, which led to this "re-centralisation" effort.

The involvement of donors and other international actors in forest control in the EUM during the post-colonial period has an eventful history. The focus of Finnish development co-operation in the area was first on technical assistance and on support to commercial forestry. At the end of the 1970's, Finland supported two forest inventories (on commercial species only) and the activities of Sikh Saw Mills Ltd, which acquired wood from the area. Later on, international concerns about forest destruction put pressure on the activities and the focus gradually shifted to conservation (Mwalubandu et al. 1991).

A new, more inclusive, forest inventory was conducted and the IUCN (International Union for Conservation of Nature) organised various biophysical studies in the EUM in the mid-1980's. Subsequently, two donor-funded conservation projects were launched. While the EUCADEP (East Usambara Conservation and Agricultural Development Project) worked with communities and focused on the public land, the East Usambara Catchment Forest Project (EUCFP) initially focused on reserved forests.

According to Stocking and Perkin (1992) the IUCN wanted to use EUCADEP to test the new approach introduced in World Conservation Strategy, named "conservation-based rural development". Conservation was to be achieved by reducing the pressures towards forests by improvement of agricultural systems in the public lands. EUCADEP was implemented (1987-1997) with the technical assistance of IUCN under the Ministry of Agriculture, and Livestock Development and funded by the European Economic Community/European Community.

Formally, industrial logging was stopped in 1987 (Roe et al. 2002). However, illegal pit-sawing continued (ibid.) and the industrial logging did not cease immediately either (Interview of an ex-project advisor of EUCADEP 3.6.2004). A temporary moratorium on pit-sawing was set in 1989 in Amani Division² (Stocking and Perkin 1992, Roe et al. 2002). Nevertheless, illegal pit-sawing was said to flourish throughout the area in the following years (Stocking and Perkin 1992, Roe et al. 2002). Furthermore, forest guards and officers at different administrative levels, village authorities of several villages, as well as the former head of a research institute based in Amani were involved in organising

these activities (Interview of an ex-project advisor of EUCADEP 3.6.2004). This historical case also illustrates how formal institutions, such as logging ban, can be challenged and made ineffective by complex networks of actors, including state actors, organised basically for sharing rents (cf. Wardell and Lund forthcoming).

The EUCFP was run from 1990 until 2002. In the last phase, the former EUCADEP and the EUCFP were combined and the project name was changed to EUCAMP (1998-2002). During that phase it was co-funded by the Government of Finland, the EU and the Government of Tanzania. Its long-term objective was to "contribute to global and Tanzanian efforts to conserve bio-diversity in harmony with the accounting needs of local people" (EUCAMP 2002).

The EUCFP/EUCAMP increased the area of reserved forest from about 17,000 ha of protected forests to more than 30,000 ha. The approach to conservation of the EUCFP was at first rather top-down (Mikkola and Tengnäs 1993), although acceptance from the villagers was asked for before the establishment of new and the enlargement of old reserves (Pirinen 1993). The working relations between the FBD staff and the villagers were not very good in the beginning (ibid.). Indeed, during the first phase of the EUCFP, it was discovered that some of the project's own staff had been engaged in illegal pit-sawing activities (Mikkola and Tengnäs 1993).

At later stages community participation was promoted by various means, e.g. establishing Village Forest Reserves (VFR), managed and "owned" by villages and two JFM areas in the central government reserves where co-management between the FBD and the villages was the goal. Participatory approach was adopted also in the process of establishing the ANR (one of the major achievements of the EUCFP to promote bio-diversity conservation): e.g. Participatory Rural Appraisal (PRA) was used to draw up access arrangements with the buffer zone villages. Introduction of different income generating activities, environmental education as well as farm-forestry were other strategies used to support conservation.

In Woodcock's (2002) view, a "participatory paradigm" has been dominant in the management of natural forests of the EUM since the end of 1980s. She argues, however, that in practice participatory projects have suffered from an "economic bias", as local people have been "beneficiaries" instead of being actors of resource management with real decision-making power. In her view, forest tenure has moved from closed to open access in real terms and led to deforestation and forest degradation (ibid. pp. 155-156). This is contrary to the statement made in the final report of EUCAMP (2002, p. 30) that the illegal activities in the reserves have been reduced after community involvement in patrolling was introduced.

5. Forest Control "On Paper" and in Practice

Formal Institutional and Organisational Context

One of the objectives of the new Forest Act of Tanzania (The Forest Act 2002, 1169-70) is to promote and facilitate active participation of people in sustainable planning, management, use and conservation of forests through the development of individual and community rights as well as "...to delegate responsibility for management of forest resources to the lowest possible level consistent with the furtherance of national policies". The new land legislation enables JFM and even the distribution of state-owned lands, including forests, to communities, groups and individuals (Ylhäisi 2003).

The Ministry of Natural Resources and Tourism (MNRT), and its Forestry and Bee-keeping Division (FBD), are involved in the management, protection and conservation of the Tanzanian forest resources. Participatory Forest Management is now the official strategy of the FBD, introduced and implemented to great extent with donors' support. It consists of two management approaches, the choice of which depends on the legal status of the forest. In JFM solutions the government and communities co-manage state-owned forests, whereas Community-Based Forest Management refers to management "under the control and eventual ownership" of the communities (MNRT 2003).

The governance of forest reserves has been decentralised, and thus district authorities are primarily responsible for most forest reserves, except the Central Government Forest Reserves that are under the direct management of FBD, as is the case with most of the forests in the EUM. Local government officials at the district level are mainly involved in management of forests on general and village lands in the EUM. Among the most important regional organisations in the EUM is Tanga Catchment Forest Office (TCFO), which has the mandate to control the Catchment Forest Reserves.

Within the national and local level, the ANR has a specific organisation responsible for managing the reserve. The general responsibility for the management of the ANR is with the Conservator, who reports to the head of the FBD. The Conservator is expected to discuss important issues with the advisory board, which in principle meets twice a year or upon need (ANR general management plan 1998). Its tasks include approving the budget and the work plan for the ANR (EUCAMP 1998, p. 62). The board consists of representatives of different stakeholders, including two representatives of local communities, and regional and district authorities, as well as representatives of other organisations, such as tea companies and the Tanzanian Forest Research Institute.

In practice, however, the role of the board seemed to be less central in the management of the reserve, although the leadership of the ANR communicated with some of the board members frequently. At the time of my visit, the board had not been called together since the election of its new members. The conservation agency complained about the lack of funds since the end of the project funding. It also appeared that the leadership of the conservation agency had lobbied successfully for the election of certain candidates to be new representatives of the local communities. After being selected, at least one of the new representatives had not been informed about his responsibilities (Interview of a community representative, Shambakapori 25.10. 2003). Formal institutions, such as the rules of the ANR, are thus not put into practice in a "neutral" way, but are affected by the interests of the actors involved, and the existing social networks.

The ANR has made agreements with the buffer zone villages in which the rights and responsibilities of both parties concerning the reserve and the local use zone are defined. For instance, the agreements allow people to collect fire wood on local use zone twice per week, and to collect medicinal plants with a special permission for eight years from signing. As a compensation for reduced access and involvement in protection, villages are supposed to receive 20 % from the entrance fees and research fees paid to the ANR. In some villages that money had been used for community development, whereas in others, the village authorities stated that the money had not yet been used for any purpose.

In many villages of the EUM environmental committees (EC) and/or forest committees (especially in JFM and VFRs) have been established under the village governments by the initiative of the conservation projects to enhance the forest control. These bodies are supposed to co-operate with the village government and to supervise the use of natural resources in the village land. In the villages around the ANR, the ECs' duty is to ensure that the villages fulfil their role in protecting the reserve and the buffer zone (ANR general management plan 1998), whereas the forest committees are supposed to participate in the management of JFM areas. In one of the study villages, where there were both the village EC and the village forest committee, there was confusion about the responsibilities of each committee even among village government members, which indicates that the formal organisational model of forest control introduced by the project was not (yet) very well established.

Development Activities and the Challenges of Participation

Several ways of promoting participation and income generating activities have been used around the ANR. The EUCAMP had promoted different income generating activities in the buffer zone, e.g. bee-keeping (EUCAMP 2002). In Gereza, the members of the bee-keeping group expressed that the group was doing well in economic terms. However, there was tension related to village politics. Some villagers who were not in the groups were discontent with such development initiatives, because they saw that the group members were connected to the former leadership of the village, and that the benefits were distributed unevenly.

Another case where economic benefits from conservation strained social relations within a village concerned boundary clearing work that is part of the strategy of involving communities. A group of men claimed that they were not paid properly for the boundary clearing work and suspected that the village leadership was corrupt and taking advantage of the situation. Potentially, this type of malpractice can decrease the trust in formal village institutions and their will to participate in conservation efforts that are organised through the official village organisations. However, in other occasions, respondents mentioned income from the boundary clearing work as one of the benefits of conservation.

Studies of the village forest management in the EUM have also discovered problems regarding representation of various social groups in forest management activities. Bildsten (2002) found that the different groups within the village were not identified properly in the planning process of a VFR. In another VFR, there was distrust among other villagers towards the forest committee leaders who were accused of being involved in illegal logging. The power relations within the village, in this case, contributed to the unwillingness of most villagers to participate in forest management or to follow the restrictions on forest use (Zulu 2004).

Intra-community social and political divisions are evident also in the buffer zone villages of the ANR, where villagers in higher social positions, such as village government members, usually knew more about the changes in forest control rules. Often they had participated in meetings, seminars or study-tours that dealt with conservation topics. Women and poor people normally knew the least about the forest management issues. When asked "who controls the use of forests" one young woman from Ubiri replied: *"Here in our place it is the chairman, because he catches all those who are destroying the forests. [...] He is as well telling people to plant trees since the forests will be closed for good so that we will never be allowed even to collect fuel wood."*

In Ubiri, only one of the women interviewed individually about the EC who were not EC members had heard about the money to the village from the ANR. In addition, women's involvement in development groups was generally lower compared to men: 4% of all the beekeepers (N=100) and 1% of fish

farmers (N= 134) in the villages of the EUM were women at the end of the EUCAMP (EUCAMP 2002). Women's lesser knowledge about and involvement in conservation activities can be partly explained by their large work load and time constraints. They are also typically less active in village meetings. Existing organising practices, such as the division of work³, thus affect the implementation and outcomes of participatory projects.

Most farmers stated that they benefited from forest protection, because the forests were a source of rain and water. Yet, forest protection has caused tension among some of the farmers in terms of negative side effects. Many of those who had their *shambas* (fields) adjacent to forest said that they had a problem with wild animals destroying their crops. In some of the interviews, the problem was strategically used to criticise the conservation agency or conservation efforts. For instance, in one village, a healer and farmer, who was also in the village government stated (October 2003):

"... The forest needs to have somebody to take care of the (destructive) animals so that they won't get into our farms. [...] So they agreed that they would fulfil that condition since we had refused to sign the eight years memorandum. So they said they would assign somebody to take care of the animals in the farms. So that is what we had agreed but they never fulfilled it and it is like they had played it a trick that way... So we are affected and that is why we continue to be poor."

Not all the buffer zone villages had welcomed the agreements, which will in principle deny all use of forests in the reserve after the eight years have passed. Three of the 18 villages surrounding the reserve had refused to sign the contract with the ANR initially (Sjöholm et al. 2001). Later on, all the villages signed the agreements (Interview of an ANR officer, Amani 5.11.2003). However, the role of such agreements depends on how the formal rules are interpreted by the actors involved, and how widely they are recognised or known. One of the practical challenges with such formal institution is the availability of copies of official management documents, as the misunderstanding of the contents of the agreement in Gereza shows. In this village, the former village head stated (contrary to the ANR management plan) that when the eight years' agreement expires, the responsibility of protecting the reserve will rest entirely on the villagers.

Despite some complaints, many interviewees considered that the control of forests had improved and considered this as a positive change. The first phase of the EUCFP/EUCAMP (1990-1993) had concentrated much on rule enforcement, which certainly contributed to the growing sense of control. However, this can be partly caused by the way the respondents reacted to the interview situation. Furthermore, the extent to which the expressed attitude affects the actual compliance with the rules and regulations of forest use is not self-evident. In fact, forest conservation is likely to be a very contradictory issue for many locals as the statements on problems with animals and access to timber (see next section) indicate. For instance, in certain villages the informants were suspicious about the plans of the government, as they had not forgotten the past problems related to compensations. When the ANR was established, part of the promised compensation was not paid to the affected farmers (cf. Jambiya and Sosovele 2001). The interpretations of the history of resource use and control can be used as strategies to claim access to land and specific resources as Walkers and Peters (2001) demonstrate.

In general, there were conflicting views on the role of villagers, the EC and forest authorities in protecting the forest reserve. Even though many people suggested that they were responsible for sustaining the forests themselves or in co-operation with forest authorities, many also expressed that the forest does not really belong to them. The EC members often claimed that they lack financial support or equipment required to fulfil their responsibilities.

Most of those people who knew about the 20 % share saw it as a clear benefit of conservation and as an incentive to participate in forest control. As one EC member put it *"We have to prevent the people (from breaking the regulations) because of the 20%"*. Yet, the same man felt that he had to carry all the responsibility of forest protection just by himself: *"Actually they (the villagers) are afraid of me like they afraid the policemen. When ever they find me in the forest they run away."* This comment also indicates a low degree of trust between the EC member and other villagers which is likely to weaken the participation to forest protection. In this village, the social position of village authorities and their capacities to involve people in forest control could be somewhat weaker than in general due to recent changes in village leadership.

Interpretations on Logging Regulations and Controversies in Organising Practices

One of the areas where the tightened control over forests was said to have had much effects on forest use was timber harvesting. In principle, the logging of timber is allowed by permit only on general land (Burgess et al. 2000). The historical ban on logging in Amani, including general lands, was still effective in the end of 1990's (ibid.) and people mentioned that also during my fieldwork. In other areas, licences and permits can in principle be obtained from forest authorities for logging on general or village land, but the license fees for reserved species⁴ are very high for many farmers (Roe et al. 2002).

In two villages of the Amani Division, men told that the conservation had changed the livelihood strategies, because logging and pit-sawing had also been banned outside the reserves. The men of Shebomeza, a village located near the headquarters of the ANR, stated that they had serious problems in gaining access to timber for house construction. Yet, as forests grow valuable timber, some people are still ready to take risks and harvest timber illicitly (in reserves and outside) and poach, although control is often said to have improved⁵.

The regulations on tree harvesting are blurred in practice as different actors seem to have their own conceptions on how the process of issuing permits works, e.g. who is responsible for issuing permits for timber harvesting, and whether they need permits for cutting poles. The organising practices of the control of tree harvesting seemed to vary between villages as well. In one case, the village authorities said that they need a permit from ANR officials for cutting trees on public lands for construction purposes, whereas the Conservator told that they do not issue any permits or licenses related to tree harvesting, and that responsibility is vested in TCFO. This ambiguity is probably partly related to the lack of information on the status of regulations on harvesting, but it is also likely that some actors can benefit from unclear rules. In practice, it is also difficult to monitor harvesting efficiently, as the authorities with the mandate to issue permits are located far from the villages.

The ban on pit-sawing in Amani and the unclearness on the role of different State agencies strained the relationship between the ANR management and

some villages. Officially, the general and village lands are not under the ANR management responsibility, but as a village chairman for one village explained the problem when applying for timber: "*They (the ANR staff) will send you to Mubeza and on reaching there you will be going round and round [...] So you will make that rotation and they will not answer you. They are saying they do not let people to saw timber out of this mountain. However, that is creating people to illegally steal the timber they need.*"

One of the problems of formal government organisations in Tanzania has been the high level of corruption among state agencies, including the forest administration, as the history of logging in the EUM also illustrates. Thus, the formal institutions of forest control are often challenged also from "within" the State organisation. Against this background, the willingness of many people to participate in control of forests and their trust towards formal organisations become questionable.

The Case of Gold Mining

Political and economic changes on national and global level can alter, to some degree, the actors' motivation for participating in conservation activities and how the organising practices of control function. The rising trend in the global price of gold (*Economist* 2004) gave people incentives to look for gold in the EUM. Gold mining started to spread quickly among local farmers at the end of 2003. Many "outsiders" also moved to the EUM to prospect for gold in village and general lands, especially in valley bottoms and along the streams (Newmark et al. 2003, Doggart et al. 2004).

Over the course of time, miners also invaded the ANR and other forest reserves to look for gold, which led to disturbances in forest ecosystems (ibid.). Thus the institutional control by laws, the ANR rules, the patrolling by the ANR staff and the villagers was not enough to protect the forest from severe disturbances. According to a former ANR official, it was a hard task to get people to participate in combating the problem. Eventually, local militia men (*sungusungu*) were paid to participate in "fighting against the miners" in the reserves.

The government's response to the problem was rather slow although it knew at a quite early stage about the

gold rush and the related environmental risks⁶. This was partly because of conflicting interests within the central government. Reforms in Tanzanian mining codes in the 1990's introduced more liberal policies regarding mining and led to a dramatic increase in the number of small-scale miners (Kulindwa et al. 2003). These changes were probably reflected in the scale of mining in the EUM. Allowing small-scale mining outside the reserves was apparently in the interests of many politicians, which illustrates the effect of diverse force fields in forest control. Eventually, a combination of interventions by international actors, including the President, Regional and District Commissioners, and the forestry and water authorities, made it more difficult for the miners to operate illegally within reserves or openly outside them (Burgess et al. 2004).

Joint Forest Management

Participatory approaches to forest control have been clearly promoted by the official State policies in recent years. Nevertheless, the new forest law was not implemented at the time of the field work. This was said to slow down the actualisation of the policies. For instance, the process of establishing the JFM and village forest reserves has been very slow in the EUM, but this is also due to the differences in interpretations of policy by the different actors and dependency on external support as indicated below.

The first initiatives to establish the Joint Forest Reserve (JFR) in the Manga forest were taken in the 2000/2001 work plan of the EUCAMP. The project supported the establishment of the JFR by organising planning workshops and facilitating the process (Veltheim and Kijazi 2002). The Manga JFR (1635 ha), consisting of mature lowland forest with a high species diversity, is to be managed jointly by three villages and the FBD.

During the planning phase, the planning team first intended to allow the use of certain types of timber, such as trees felled by the wind, for villagers as a compensation for their participating in the management. Yet, the visit of the World Bank project planning mission in Tanzania signalled to the project that they should use an approach where the people would be paid for participating in some conservation activities instead of giving them new use rights (In-

terview of an ex-project advisor of EUCAMP 19.8. 2003). This illustrates how policy implementation is a process of continuing negotiation between the parties involved.

In the planning phase, the villages' representatives agreed that they would get 40 % of the benefits from the forest, including money from confiscated timber. However, the JFM process was interrupted after the cease of the EUCAMP. There had been some cases of illegal use on both forest reserve and public land in the near past, thus implying that the forest control was not very strict in practice. One of the village government members in Kwatango described the situation as follows (11.11.2003):

"...the delay to approve and return the management plan to the village level has left many villagers suspicious of central government motives. [...] As long as the plans are not returned to the villages for implementation the (central) government continues to take 100% of all the wealth accrued from the forests. In this way committees' members look at the delay as deliberate move by unscrupulous forces to plunder forest resources while demanding the communities to continue guarding and conserving the forest without any economic returns. However, I would say that the weaknesses of these (forest) committees result from lack of confidence in the government..."

Some of the regional forest authorities claimed that the problem is at the central government's level. However, according to a high level FBD official (Interview 9.12.2003, Dar es Salaam), the reason was not that the new legislation had not been put into practice, but the lack of regional forest authorities to work for the approval of the JFM plans. It is clear that regional administration will lose some returns from forests and power after the plans have been approved. This is probably one reason for the slow proceedings. In addition to political-economic reasons, some of the FBD staff seem to think that participatory concept in the context of bio-diversity conservation is "an imposed Western idea". This illustrates the on-going power struggles between the national and regional level actors. There are thus diverse force fields within the State organisations as well, where the principles and practices of forest conservation are contested and resisted by using both discursive and more practical means.

6. Conclusions

As the cases above indicate, participatory approaches to forest conservation influence the power relations between the actors and groups involved, but often not as straight-forwardly as intended. In the implementation of various strategies and projects, the existing (multiple) force fields and related organising practices, such as division of labour at household level and hierarchies within the state organisations, affect the outcomes of these efforts and how the control over resources is exercised. In addition, the contents of formal institutions of forest control are being negotiated and interpreted by the actors within the State, communities as well as by donors.

Thus, the dynamic relations of power between the actors intervene in and affect the functioning of the new “participatory” control mechanism and institutions established. For instance, diverse development initiatives are put into practice in existing village power configurations. The challenges for participation arise both from “local realities”, including political and social relations within villages and lack of social and material resources, as well as weaknesses of state organisations and institutions. In some cases, the initiatives made in the name of “participation” may help shift or maintain the powers over resources to the hands of local elite or benefit mainly some of the staff in the government agency, which may cause tensions and even overt resistance. Furthermore, the history of control, such as past injustices related to conservation and unfulfilled promises may undermine participation of certain groups.

Although many local people attach multiple values to the forests, the present institutions and organisations of forest control that have been established by outside actors, are facing multiple challenges. In general, local people’s interests in forests are quite different from those of conservationists, and their abilities to affect the official control mechanisms are often limited. In addition, the strict regulations on timber harvesting, combined with multiple organising practices of control have led to it being very difficult for the people to actually follow the formal rules. The economic incentives to circumvent the rules and illegally harvest trees are real for many as well. As the case of gold mining shows, the organising practices of control are also affected by political and economic changes outside the local level.

Notes

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- 2 However, some foresters I met during the second visit to the area in 2005 claimed that it was never official, and the paper could not be found either in the district or the regional forest offices.
- 3 Women generally take care of the subsistence farming and much of the household work, whereas men are mainly responsible for cash cropping.
- 4 The reserved species are valuable timber species reserved by the government.
- 5 During the field work I observed one truck carrying timber that was chased after by the ANR officials. There were also suspicions that the illegal collection of wildlife for trade was taking place. See also Roe et al. (2002).
- 6 According to *The Guardian* (17.11.2003) the government had formed a special committee to control illegal mining in Muheza. A visit to the main mining site in the beginning of December and the reports (Newmark et al. 2003, Doggart et al. 2004) revealed that the control was not very efficient in practice.

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