

Community-based Natural Resource Management of the Jozani-Pete Mangrove Forest: Do They Have a Voice?

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Abstract — Local participation, especially in natural resource management, has been promoted as a key strategy in the quest for sustainable development. Community-based Natural Resource Management (CBNRM) is an approach that has generally been promoted as an institution that genuinely includes and empowers 'local people' in natural resource use and management. This paper examines how local participation in conservation projects works in practice by drawing on concepts from institutional and actor-oriented theories and applying a case study approach to examine community-based mangrove management at Jozani-Pete, Zanzibar. Here CBNRM became embedded within a conservation agenda that resulted in conflict, resistance, frustration and uncertainty amongst community members. The paper offers insight into how exogenously initiated CBNRM projects have difficulty gaining traction unless they both address existing power relations and deliver on promises of material benefits. If they fail to do so the experience of the Jozani-Pete case study suggests that CBNRM may work to further marginalize already marginalized people.

INTRODUCTION

Community-based Nature Resource Management (CBNRM) is an approach to conservation that emphasises the participation and empowerment of 'local people'. The aspiration of 'genuine' involvement by local people in CBNRM is widely supported. However, the practice of CBNRM has been criticised for being driven by top-down

concerns, with little regard given to community heterogeneity and their related diversity in aspirations (Li, 2002). This article contributes to the polarized debate on CBNRM using a case study approach to examine whether the objectives of the project were realised in practice. We hope to clarify how contingent circumstances in the case study were reflected in broader discussions.

The objective of the study was to elucidate how local participation works in practice in CBNRM. Attention was given to the forces and actions that promoted or constrained local participation in a community-based mangrove management project at Jozani-Pete, Zanzibar. Concepts derived from critical discussion of common pool resource theory, CBNRM experience and actor-oriented theory were drawn on to interrogate the Jozani-Pete CBNRM project to determine what conditions, strategies and actions constrained or facilitated local participation. This paper thus focuses on the dynamics of institutions established to effect the goals of CBNRM projects while taking into consideration views on changing environmental conditions, given that these are central to the social relations in CBNRM initiatives.

BACKGROUND

Various motives for conservation have been presented throughout history, most of them rationalizing the exclusion of indigenous and local people from sensitive, vulnerable or valuable habitats in the name of nature conservation (Adams, 2001). This view was largely overturned in 1992 at the United Nations Earth Summit in Rio de Janeiro (Adams *et al.*, 2004). At this conference, it was generally accepted that environmental degradation and biodiversity loss went hand in hand with poverty and that these issues could and should be jointly tackled. The link between basic human needs and natural resources was emphasised even more during negotiations at the United Nations Millennium Summit on Millennium Development Goals (MDG); particularly concerning the MGD to halve world poverty by 2015 (Adams, 2001). The World Bank, UN and most donors encourage decentralization as a means to achieve these broader development goals to increase efficiency, equity and democracy (Ribot, 2002). The trend is towards formal delegation of power to various decentralized institutions and CBNRM has been given a prominent position in this regard. However, despite the popularity of CBNRM in policy

circles, concerns raised by scholars regarding indifferent outcomes in practice have begun to call CBNRM into question as a model for conservation/sustainable development (Blaike, 2006; Dressler *et al.*, 2010; Shackleton *et al.*, 2010; Saunders, 2014). In spite of these concerns, influential global actors with different motives have continued to focus on decentralized, participatory models for community resource management in poorer rural parts of the world.

It has been argued that local involvement in natural resource management is important in East Africa and elsewhere in the Global South, since inhabitants' daily lives are to a large extent embedded in the use of these natural resources (Mohammed & Johnstone, 2002). Political and economic liberalization in Zanzibar and elsewhere in the 1980s created the space for decentralized governance shifts in natural resource management, alongside a growth in tourism as a development strategy (Gössling & Schulz, 2005). However, it is only more recently that Zanzibar's natural values have been recognized by international conservation interests (Levine, 2007).

The rhetoric of CBNRM is closely aligned with dominant populist narratives on participation, which place emphasis on the 'local' as a starting point for intervention in the environment/development nexus (Vandergeest, 2006; Adams, 2001; Chambers, 1983). CBNRM is based on the premise that communities have the motivation, bonds of association and possess or can develop the skills and knowledge needed to undertake sustainable management of their local natural resources (Ribot, 2002).

An important, but often vague point in CBNRM and policy-making is the target group. Who is supposed to be participating and empowered by the process? What constitutes 'community' has been described in various ways. Kumar (2002) argues that viewing community definitively and idyllically is problematic as it is characterised *a priori* as cooperative because of presumed common understandings and institutions and, therefore, its relationship with resources is considered manageable.

People are expected to develop bonds of commitment with each other through regular interaction in confined spatial domains and through productive practices, which makes the sum of community greater than its individual parts. Under these circumstances, community becomes the link between social good and individual well-being, creating a common positive attitude for long-term care of the society and its environment (De-Shalit, 2000). The strength of community has been given a central position in the discussion on CBNRM (Cleaver, 1999). Champions of community-driven development argue that “communities know their problems and how to solve them better than any outsider can” (NGO Resource Centre, 2006: 4). This view is convenient for 'outsiders' to adopt who wish to promote positive images of cooperative and engaged communities with the motivation of building organisations and social capital in support of projects (Cleaver 1999, 2000). However, we should be more circumspect about adopting these harmonious assumptions, as noted by Levine (2007) when describing how local village organizations and government tend to be dominated by the more affluent and powerful members of society who are channels for revenue and political resources for outside agencies, such as international NGOs.

The Government of Zanzibar (GOZ) has adopted the decentralization paradigm and recognized the connection between local empowerment and long-term environmental protection in its Zanzibar Poverty Reduction Plan (ZPRP), which was ratified in January 2002. This plan was a first step towards eradicating poverty in society as outlined in the Zanzibar Development Vision 2020. Empowerment of the people has become a goal as well as a means for Zanzibar's strategy to reduce poverty. Community-based projects, education and capacity building (as well as improving health services, increasing agriculture productivity and more efficient use of natural resources) are considered top priorities within the GOZ strategy to decentralize governance (ZDRP-PTF, 2002). The Jozani - Chwaka Bay Conservation Area

(JBCBA) is seen as a key project to advance the fight against rural poverty in Zanzibar and has been widely touted as a successful example of decentralized governance of natural resources (McKenzie, 2007; Global Environment Facility, 2006).

As a departure point, this paper takes the view that decision-making is a complex and conflictual process involving various institutions and concerns, usually encompassing a wide variety of stakeholders and views (Burns, 2003). Given the continuing optimism and popularity surrounding CBNRM in policy circles, and the contrasting concerns raised mostly by scholars, it is important that the changing social relations are examined within these projects. We hope to make an incisive contribution to the ongoing discussion on CBNRM by focusing on the case of Jozani-Pete in Zanzibar.

THEORETICAL and ANALYTICAL INSIGHTS

The UN's agreement on poverty reduction shed light on the need for biodiversity conservation strategies and local empowerment (Adams *et al.*, 2004). CBNRM has been seen as an important governance arrangement to meet this challenge (Roe & Nelson 2009). It has been defined as “a process by which groups or communities organize themselves with varying degrees of outside support so as to apply their skills and knowledge to the care of natural resources and environment while satisfying livelihood needs” (Pretty & Guijt, 1992: 22). Ribot (2002) defines effective decentralization as “an inclusive local process under local authorities empowered with discretionary decisions over resources that are relevant to local people” (Ribot, 2002: 4). Rights, representation and recourse in local matters are institutional features required to enfranchise rural people as citizens. CBNRM creates a process whereby responsibilities and decision-making powers are delegated by government to local actors, usually via the establishment of community-based organizations. It is argued that public

participation is the primary reason why CBNRM can achieve long-term results, where other management systems meet resistance (Ribot, 2002).

Common property scholarship, which has been at the forefront of research on commons over the past two decades, continues to provide the bulk of theoretical support for participative forest conservation policy (Agrawal, 2007; Saunders, 2014). Prior to this, people were largely seen as an obstacle to efficient and rational conservation. This view was reinforced by Hardin (1968), where he warned of the 'tragedy of the commons', asserting that common ownership of natural resources leads to a conflict of interest between group interest and that of the individual, and it is the group interest that suffers. Research on common pool resource (CPR) institutions conducted during the 1970s and '80s was key to dethroning the hegemonic discourse of the threat of in situ communities to conservation interests, both at the analytical and the practical level. This showed that local people in many situations have developed enduring and adaptive institutional arrangements that have enabled them to manage their natural resources over time. This work revealed that 'communities' could sustainably manage resources using local knowledge; that their management involved institutionalized self-regulation of extractive use; and that local institutions could be crafted to realise sustainable use. Institutional arrangements for commons management have subsequently received significant attention as the key variable in the efficacy of CBNRM (Barrett *et al.*, 2001; Saunders, 2014). Accordingly, much emphasis has been placed on the identification of institutional principles that support effective CBNRM (Ostrom, 1990). Ostrom (1990) identified common rules in use across a broad range of CPR user-communities with enduring institutions. These rules were synthesised into the following design principles 1) clearly defined boundaries of resource and membership; 2) congruence among appropriation and provision rules and local conditions; 3) user participation in appropriation and provision rules; 4) recognition of rights to organize their own

institutions without being challenged by external authorities; 5) monitoring systems maintained by users' 6) graduated sanction systems; 7) accessible conflict resolution mechanisms; and 8) recognition by and interconnection with management institutions at other decision-making levels. Furthermore, Ostrom (1990) urges that these principles be contextualised to suit local conditions using participatory processes.

However, CPR is criticised for giving too much attention to purpose-built natural resource institutions and too little attention to the contextual factors affecting the countless relationships involved in the analysis of common-pool resources (Sandström, 2008; Agrawal, 2005b; Saunders, 2011b; Saunders, 2014). There are also claims that CBNRM is an extension of government ambitions of social control by dispersing multiple points of political leverage, making them accessible to central decision-makers (Hadiz, 2004; Li, 2007; Agrawal, 2005b; Kothari, 2001). Agrawal (2005a) stresses that the transformation of knowledge/power, politics, institutions and subjectivities is crucial to achieve a successful participatory management process.

Critics also argue that CPR theory does not provide a clear direction for meaningful consideration of local norms, values and interests. Participatory methods, often used to contextualize the design principles in projects, rarely deal with values, preferences and interests of beneficiaries. In practice these techniques are more likely to be used to 'map local knowledge' to achieve pre-conceived, exogenously derived management goals (Saunders, 2011b). Cleaver (1999) challenges the idea of formalising community structure and interactive processes into technocratic systems. Cleaver (1999) also describes how social institutions are often difficult to detect and that they have to be carefully considered since they are often embedded with norms and morals that are not always suitable for local democracy or participation. Failure to address unequal power relations is also a common critique of CBNRM participation in practice (Cook and Kothari, 2001). The discussion is ongoing and

researchers have argued that, for participation to be meaningful, it needs to be part of a broader and more transformative process of development (Hickey & Mohan, 2005; Nelson 2010). How this is achieved in practice, however, still remains unclear, but is surely linked to ensuring that democratising processes are firmly linked to broader political reforms, notions of citizenship and distributive justice.

Whereas CPR theory focuses on the formal aspects of institutional design and functionality, actor-oriented theory is more concerned with examining what happens in institutional practice. This view takes account of the changing recursive relationships between actors and formal institutions with conservation interventions. Long (1992) argues that it is in this way that struggles shape institutional structure. Actor-oriented theory sees actors as social agents who process information and strategize in their dealings with others (Long, 1992). Human agency and social interaction processes are seen as 'context dependent', with a wide range of institutions playing a key role in shaping and enabling possibilities. According to Long (2001), elucidation of the workings of governance arrangements in practice requires that the trajectory of these arrangements be traced from inception to realization through the experiences of variously placed and affected social actors. This approach involves capturing textured details of key events and assessing perceptions of respondents about these events (Mosse & Lewis, 2006). An examination of how CBNRM initiatives realign, supplement or sometimes conflict with existing networks and relations then becomes critical to reveal how CBNRM works in practice. In elaborating this, it is important to reveal how particular groups create space for themselves to pursue their agendas, which may run parallel to or challenge interests and aspirations of other parties, including CBNRM planners. Actor-oriented theory emphasizes the governing social processes and techniques rather than the structural outcomes (unlike CPR theory) and acknowledges that social action always takes place within networks of relations (Saunders, 2011b).

Local participation has been interpreted in many different ways in management processes, but in many cases the vision is too ambitious and far from reality (IIED, 1994). In discussing levels of participation, the literature often uses terminology and value judgements that express high levels of participation as a desirable goal (Bruns, 2003). Participation seems to have an intrinsic value and, in cases where the benefits of participation are considered, local involvement is said to create a more committed and equitable process likely to result in a more sustainable outcome (Ribot, 2002). A low level of participation may be seen as a result of governmental manipulation and restriction of the locals (Burns, 2003) or resistance within the government hierarchy to transfer and decentralise appropriate and sufficient power (Ribot, 2002; Ribot *et al.*, 2006). Without a secure means of transferring decision-rights to local authorities, they may find themselves trapped in situations where they become subjects of higher authority, and easily lose insecure privileges given to them (Ribot, 2002). As will be seen in the empirical presentation, the construction of aforementioned the Jozani - Chwaka Bay Conservation Area (JBCBA) project in Zanzibar has been riddled with conflicting interests and power negotiations, shaping the process and outcome.

The foregoing theoretical discussion has been used to direct the collection of data at Jozani-Pete, as well as a heuristic device for the analysis and discussion. We do not seek to rigidly apply the above theoretical concepts, but rather to use them as a means to analyse and discuss our case study data. Ostrom's (1990) design principles have been used to structure the process and identify key-events that have been of interest in the investigation with an actor-oriented approach.

STUDY SITE and METHODS

The village of Jozani-Pete is located in rural southern Unguja, 24 km south-east of Stone Town, and is the central point of Jozani-Pete Shehia. Shehias are the smallest administrative unit in Zanzibar and the local

administrative leader, the Sheha, is appointed by the government. The Shehia of Jozani-Pete has 1,435 inhabitants according to the local census undertaken in March 2008. The Shehia is approximately 1,250 ha in area and incorporates several habitat types including grassland, terrestrial forest, and 360 ha of mangrove forest. The local dependence on natural resources is high, despite the development of tourism associated with the Jozani-Chawka Bay National Park (Saunders, 2011a). There is a widely held view, supported by a previous study (Othman *et al.*, 2007), that resource use and biodiversity values in these mangrove forests have declined in the early 2000s due to over-exploitation.

Fieldwork for the Jozani-Pete study was carried out with the assistance of a village field guide and translator during February-April 2008 and March-April 2009. Data were collected using a combination of participatory rural appraisal (PRA) methods (such as transect walks, participatory mapping, focus groups, SWOT-analysis and problem ranking) and semi-structured interviews with villagers (N=24).

The participatory techniques employed in this study encompassed key actor groupings in the Jozani-Pete village (including fishermen, farmers, charcoal producers, butterfly farmers, football players and the elderly). Discussions with key informants early on in the fieldwork identified these social clusters and vocational groupings as important in the village. This information was used to develop a sampling strategy that also considered characteristics such as occupation, age, sex, origin and position in various village-based institutional arrangements (e.g. Village Conservation Committee, Village Development Committee and the Sheha Advisory Group). Informants were approached as individuals, but often saw themselves as representatives of social and vocational groups that they identified with, as described above.

All interviews addressed three central themes using open-ended questions in semi-structured interviews. The interviews addressed the informants' relationship to and use of the mangrove forests as a local resource; whether they had opportunities,

and/or were motivated, to participate in the CBNRM project; and how conflict has affected the CBNRM project and relatedly, social relations at Jozani-Pete.

CBNRM PRACTICE AT JOZANI-PETE

The following empirical data, presented in narrative form, reflect the results obtained from interviews and PRA exercises obtained during the fieldwork.

Setting up the CBNRM Project

The establishment of the Jozani-Pete CBNRM initiative was seen by many of the Jozani-Pete villagers as an attempt to solve ongoing nature resource management conflict between the locals and the government. The villagers claimed that the process started with the GOZ's idea of protecting the natural habitat for the endemic and endangered red colobus monkey (*Procolobus kirkii*). The Jozani Forest, (adjacent to the Jozani-Pete village) was formally part of the existing Forest Reserve with some loose restrictions, but the GOZ started a process that would see it become part of the fifty-square kilometre Jozani-Chwaka Bay National Park. A small part of the area also includes mangrove and wetland forest. The Department of Commercial Crops, Fruits and Forestry (DCCFF) initiated Village Conservation Committees (VCC) in an attempt to increase the awareness of conservation goals and improve the relationship with the villages around the proposed National Park. The DCCFF was advised and supported by CARE International in the VCC initiative. We were told that many members of the VCCs were appointed by the Sheha and they were established in several villages located in the proposed park's buffer zone. In accord with the National Forest Policy and Forest Resource Management and Conservation Act No.10 of 1996, the duties of the VCCs were to help develop, maintain and fulfil the established Resource Use Management Agreement (RUMA), enforce the security of

the protected area, encourage tree planting and support the local people in finding viable alternative income-generating activities.

The DCCFF's invitation to establish VCCs was understood by the villagers as a "polite order" given by the government. People were asked to volunteer for positions and a few people with positive attitudes towards 'environmental issues' responded. The villagers claimed to have been hesitant to get involved in the VCC, arguing that they were unwilling to assume responsibility for enforcement and monitoring of the RUMA. To solve the situation, the Sheha eventually nominated villagers to fill the remaining VCC seats. An umbrella organisation called the Jozani Environmental Conservation Association (JECA) was also established to support and coordinate participation of the VCCs from the eight villages bordering the National Park in the national park arrangement. The national park and the surrounding community-regulated buffer zone were to incorporate essential parts of the Jozani-Pete village wood harvesting and farming areas and they would no longer be available for such use. The villagers expressed concern that they were given little opportunity to influence the park establishment process or the RUMA. Timber harvesting, a cross-cutting practice affecting all identified groups, was particularly restricted. Due to protests, the DCCFF softened its position and an agreement was brokered, allowing continued access for collection of dried branches and dead logs for firewood.

Unfortunately the truce between the DCCFF and the villagers did not last long. The villagers started to notice an increased presence of red colobus monkeys and rumours circulated that individuals from other populations were being relocated to the National Park area. The perceived increased presence of "indecent crop thieves" (as the informants called the monkeys) and the lack of compensation for increased crop damage caused by the monkeys, along with resource use restrictions, caused immense frustration among the villagers (supported by Saunders, 2011a).

The villagers claim that they found it difficult to support themselves as their economic opportunities dwindled. Locals had been using the mangrove forest to produce charcoal, collect firewood, fish, harvest seafood and medicinal plants in addition to using the inland coral rag forest – the area was considered to be part of the village's customary land. When sensitising the locals for the proposed National Park and after the imposition of the resource restrictions, the production of charcoal, which was previously undertaken in the dry-land coral rag forest (now off-limits because it became part of the National Park), shifted to the mangrove forest. Mangrove wood produces high quality charcoal. This grade of charcoal is in high demand on Zanzibar and sellers get premium prices. These factors combined caused a rapid expansion in rapidly expanding its production. Jozani-Pete developed a reputation for good quality charcoal and, in consequence, customers came all the way from Stone Town. The business blossomed and the village production expanded to meet demand, resulting in significant cutting of the mangrove forest. An elderly woman, who previously worked as a charcoal producer, made the point during a focus group meeting that: "The forest was called 'the bank', it was our treasure. We were used to make withdrawal whenever we needed it". Another villager stated that: "In 2000, the sound of machetes chopping the red stem of mangrove trees could be heard all day long".

As the Jozani-Pete charcoal business reached its climax, the government formally established the Jozani-Pete VCC. Shortly after regulations were introduced through the RUMA, illicit cutting incidents in conservation and no-take zones were reported. Whether the cutting should be interpreted as a protest, the continuation of business as usual or an act of desperation is unclear, but the DCCFF answered with increased security and with further restrictions on forest product collection times and areas open to harvesting.

Feeling disadvantaged by the JBCA, Jozani-Pete villagers used the national media to air their concerns. As a negotiation point,

and to manage the escalating situation, the VCC suggested that Jozani-Pete be given management responsibility and formalised harvest rights and access to the nearby mangrove forest. In accordance with the aims of the ZPRP, the Government agreed to extend the RUMA arrangements to the mangrove forest. In these governance arrangements the Jozani-Pete VCC, rather than the DCCFF, would be the local management authority.

The DCCFF started to become concerned that massive harvesting would rapidly reduce and severely degrade the structure and quality of the mangrove forest. It is important to note that mangrove forests supply important ecosystem services to the island of Zanzibar, such as a nursery function for fish and marine animals; protection from storms, floods, erosion and seawater intrusion; pollution purification and the provision of fresh water (Ronnback, 2002). The DCCFF thus called for an increased level of protection in the mangrove forest in 2002. However, it did not seek to reclaim responsibility for its management from the Jozani-Pete VCC. The boundaries and level of protection of the mangrove forest were decided in consultation with the VCC and discussed with the Jozani-Pete villagers at an open meeting. The villagers demanded continued access to the mangroves for charcoal production. Several 'strong voices' spoke during the meeting in favour of an unregulated harvesting approach, but the villagers were generally divided and the situation amongst them became quite tense. Our informants claim that the villagers requested more time to discuss the situation and to reach consensus, but the DCCFF rushed the process and made hasty decisions. A respondent recalls the open meeting saying: "It was like they got tired of us."

New restrictions on use of the mangrove forest were imposed by the DCCFF and broadcast over the radio. However, many villagers felt that the formal restrictions hardly mattered, since the lack of mature trees suitable for charcoal production at this time meant that use of these resources at an economically meaningful scale had already ceased. The radio was usually used as the

medium to disseminate GOZ decisions of this kind. It is also used to channel and broadcast local resistance efforts. Decisions of less magnitude are transmitted through meetings organized by the VCC or by spreading the word from house to house. There is no formal structure for information-sharing and, even years later, the locals state that they are unsure how to express opinions and make suggestions in local fora. The VCC claim that they have meetings for this purpose, but few people attend them. Many respondents told us that they only heard of VCC meetings after they were held, or that household duties prevented them from attending. An elderly farmer complained that she has never received a formal invitation to meetings and felt that it would be impolite to intrude.

Despite this turmoil, the CBNRM project was initiated as part of the Jozani-Chawka Bay National Park project. The VCC task of mobilising villagers in support of conservation was made easier by the involvement of CARE International. During the initial process of assuming management responsibility, many Jozani-Pete villagers did attend meetings and were given various types of training (e.g. bookkeeping for micro-finance banks) by the DCCFF and CARE International. The VCC organized tree-planting events and raised the profile of the activity by inviting groups and school children from all over the island to join in the activity. But after a couple of years, CARE International reduced its efforts and, simultaneously, compensation funds ceased. This was a pivotal stage in making many of the villagers' antagonistic towards the conservation intervention.

Many of the Jozani-Pete residents had not realized that protection of the mangroves was a long-term objective. The villagers claimed that they had been told that the mangrove forest would be able to recover quickly, allowing a renewal of commercial charcoal production within no longer than five years. Realising that they would not be able to resume former production levels within such a short time-frame, if at all, new levels of frustration and unease emerged. Concern over their livelihoods also divided the Jozani-Pete village

into conflicting interest groups. The struggle over limited resources was not only apparent in the village, but also between Jozani-Pete and the surrounding villages that were seeking compensation for loss of forest revenues.

The Jozani-Pete Mangrove Boardwalk and villager distrust and resentment

According to informants, there was no coincidence that Jozani-Pete was the stakeholder group most actively demonstrating against the Jozani-Chwaka Bay National Park. They felt that Jozani-Pete was the least developed village in the JCBCA and they risked the most in the project. However, the GOZ argued that the National Park was an opportunity for the village to connect with Zanzibar's dominant development strategy – tourism. A private donation¹ gave Jozani-Pete the opportunity of developing a tourism-related, income-generating alternative, the Jozani-Pete Mangrove Boardwalk. This facility would offer guided tours in the mangrove forest, and be packaged with a red colobus monkey viewing experience and other tourism-related activities associated with the JCBCA. This project was overseen by the DCCFF, with the idea that the revenue generated from the attraction would support the development of village infrastructure. The initial idea was that the 'boardwalk tours' would be managed through the VCC and undertaken by Jozani-Pete villagers. However, the DCCFF became concerned about the VCC's capacity to operate such an eco-tourism activity (this is discussed further below). As a result the DCCFF withdrew the responsibility of management of the Jozani-Pete Mangrove Boardwalk and took it upon themselves to administer and deliver the Boardwalk tours.

The entrance fee to the Jozani-Pete Mangrove Boardwalk was eventually included in the admission price of Jozani-

Chwaka Bay National Park, tourists paying a \$10 entrance fee with \$2 going to the Jozani-Pete Boardwalk project. The income from the Boardwalk was to be shared among Jozani-Pete villagers, the JECA, a newly established local farmer organization called Umojawa Wenye Mashamba Jozani² (Uwemajo) and the Jozani-Chwaka Bay National Park. However, Uwemajo felt the agreement was unfair and acted against JECA by protesting that they should receive a larger share given the economic loss that their members would bear as a result of enclosure of agricultural land within the National Park. Uwemajo managed to harness the support of the media in their struggle and eventually took JECA to court in an attempt to obtain a greater share of the Boardwalk revenue. A new agreement resulted in a reduction in Jozani-Pete's share and an increase in Uwemajo's share. Neither Jozani-Pete nor Uwemajo, however, were satisfied with the agreement and the villagers argued that they were steam-rolled by other more powerful organisations in the process. A Jozani-Pete Village Development Committee (VDC) was appointed to administer the Boardwalk funding and manage community development in Jozani-Pete. The income from the Boardwalk was directed to village infrastructure development, such as reconstructing a school and a mosque, but strife continued as the villagers felt they were not directly or personally (at a household level) benefiting from the project.

Management of the revenue from park activities has also been an issue of internal disagreement among Jozani-Pete villagers. As a fisherman put it: "There is always friction when money is involved. Before the (Jozani-Pete Mangrove) Boardwalk there were, in fact, no major conflicts". According to informants, a lot of doubts have been expressed about the Jozani-Pete Village Development Committee's financial management and rumours have circulated about misuse of funds and power within the VCC, and at times also in the VDC.

¹ A number of informants claim that a wealthy business man from Stone Town heard about the Jozani-Pete situation on the radio and took pity upon the villagers. He consulted with the DCCFF about an eco-tourism concept and donated founding for the Jozani-Pete Mangrove Boardwalk.

² An association of farmers whose land has been fully, or to a large extent, embedded in the National Park.

Some villagers interviewed maintained that VCC Committee members have been accused of embezzling funds, but none of these allegations have been pursued legally. During this time, friction between the villagers and the various committees of Jozani-Pete was seen as the cause of many problems within the village. Many of the respondents thought that potential economic opportunities for villagers from the Jozani-Pete Mangrove Boardwalk had been wasted. Open village meetings with members from the various village institutions were held to resolve the situation, but tensions around expenditure were still present at the time of the fieldwork in 2008 and 2009. This situation, as well as disappointment with the percentage share of revenue from the Boardwalks tours and compensation for loss of land from the government, has, according to many of the villagers' point of view, not yet been resolved. There is still no strategy to deal with conflict between different parties involved in and affected by events related to the DCCFF's intervention at Jozani-Pete. We were told that, in the past, conflict and disagreement on most matters were usually resolved through discussion between the disputing parties. The Shehia traditionally had a central position in conflict management but, in the case of Jozani-Pete conservation project, he had been advised by relatives and the village elite to keep out of the discussion since the situation had become too complex and his intervention could affect his public support.

Coordination, communication and public exclusion

We were told in unequivocal terms that Jozani-Pete villagers were tired of meetings. They did not consider attending meetings as part of a 'proper day's work'. Furthermore, they said that they rarely dared to express opinions at meetings since they did not feel themselves "to be of special importance, so why would anyone listen to me". Many of the villagers felt unable to influence decisions and they did not receive any feedback on

suggestions or statements, making many of the informants draw the conclusion that the VCC did not represent their interests. VCC members claimed, on the other hand, that they "take everything on, even things they hear outside of the meetings" and that the villagers were making unnecessary complains.

The VCC, VCD and Shehia share formal responsibility for forwarding ideas, complaints and opinions from the people to government representatives, but since there is no clear means to do so, it is hard for both committee members and others to establish how much information is transmitted in either direction, let alone any resultant action. A majority of the informants suggested that the VCC should initiate small group discussions or VCC representatives should walk house to house to get a better feel for attitudes amongst the community. A middle-aged farmer was of the view that face-to-face contact is the best way to spread information. She also thought that more residents would attend meetings if they were combined with theatrical or musical performances. Another respondent, a football player/butterfly farmer, argued that compensation for lost work time was the only way to get people to attend the meetings and, furthermore that people felt that they needed to be encouraged to participate. A number of villagers across all social and vocational strata felt that they were not welcome to participate in VCC or DCCFF activities.

A lot of discontent over conservation was expressed in our interviews. Illegal mangrove harvesting and a failure to act collectively to protect local resources from within and without has created a circle of resignation and mistrust. We were told by several respondents that a group of people had loudly voiced their disappointment with the leadership of the VCC and asked them to step down (however, the informants were all very careful not to provide the names of this opposition). Even though this protest group never got its way, they managed to create a negative atmosphere concerning the conservation intervention. It

appeared that the VCC has also experienced internal conflict concerning transparency and power sharing. A majority of the informants maintained that conflict within the VCC had become the last straw for the local management institution. At the time the fieldwork was undertaken, the VCC had been dormant for several months and the regular monthly village meetings had been cancelled.

Most of the village respondents claimed that everyone, or at least “everyone else”, cut mangroves regularly. This even extended to VCC members. Many fear that nothing will prevent people from illegal harvesting of mangroves if the economic situation in Jozani-Pete becomes even more difficult; personal needs will exceed the motivation to pursue the common good. A repeated statement from a number of informants was that “people are crying while they are destroying”. Villagers claim that the illegal cutting was driven by concerns for short-term needs. People with monitoring responsibilities felt threatened by those with economic interests in continued harvesting of wood for charcoal. Many blamed the VCC for leading the village into this miserable situation. Upset villagers told VCC members that they would “come and eat in your house, since you keep me from getting food of my own.” Despite this, several respondents said that they were sympathetic with the VCC.

Differences in opinion regarding the VCC among the villagers were striking. Most villagers were of the view that the VCC was not serious and were “playing like children” and using their positions to their own advantage. However, a minority thought they were doing a difficult job well. That said, the clear majority of informants were in agreement that the VCC is dysfunctional. Both members and non-members of the VCC expressed the need for the VCC to become better respected and legitimate in the eyes of the Jozani-Pete community. A fisherman argued that the Jozani-Pete villagers have difficulty in distinguishing between the VCC members’ role as community members on a day to day basis and their responsibilities and duties as members of the VCC.

One of the main issues with the institutional arrangements according to the villagers was a lack of capacity and, and some argue, even will, to monitor and enforce infringements in the mangrove forest. According to the accounts of the villagers, the VCC has never formally punished anyone, even though we were told there have been blatant infringements of resource use rules. The informants argued that the reason for this is that the perpetrators always have a kinship or social relationship with a VCC member. The sanction for illegal harvesting within the boundaries of the Jozani–Chwaka Bay National Park is 300,000 Tanzanian shillings³, regardless of the type of infringement, with a first violation incurring a 15,000 Tanzanian shilling⁴ fine and confiscation, monitored by the VCC with support of the DCCFF. A second-time violator ought to be arrested by the police for trial. Originally, a number of guards from the village were employed to patrol the mangrove forest boundary but the DCCFF was dissatisfied with their work and dismissed all but two guards and replaced the others with DCCFF employees. One the two original guards has subsequently been found guilty of taking a bribe from illegal woodcutters. He confessed and was penalised but retained his position as a guard. Informants argued that the DCCFF, by this act, proved to be more capable than the VCC at enforcing the harvesting rules. Some thought it would be more efficient if the GOZ took full responsibility for the management of the mangrove forest and communicated directly with the locals, instead of using the VCC and JECA. Others said that the GOZ “has already failed with their management of the mangrove forest” and no longer had the political legitimacy to take the responsibility back. According to many disgruntled villagers, opportunities for more consistent and systematic participation and discussion in various fora would create a better management system with more satisfied and engaged inhabitants.

³ Equivalent to \$300. 1000TZS was worth approximately 1 USD at the time of the fieldwork.

⁴ Approximately \$15.

ANALYSIS and DISCUSSION

Ostrom's design principles

This section will begin by using Ostrom's (1990) principles to examine how the CBNRM institution is functioning at Jozani-Pete. Ostrom's principles are not particularly useful for examining the social relations and conflicts that affect CBNRM institutional functioning, so we have also drawn on actor-oriented theory to give an account of the power relations among the actors involved and affected by the CBNRM project.

Management of the Jozani-Pete mangrove forest runs parallel with the other institutions in the village. The institutional boundaries for different village functions seem unclear and local committees appear to have a tumultuous relationship with each other. Challenging situations have arisen due to kinship and social relationships, with the same people holding positions in several different village committees. Dependency on forest resources for economic survival and identity remains strong in the village, even if legal access to these resources has been constrained (Saunders 2011a). The importance of the Jozani-Pete coral rag and mangrove forests leads to simple assumptions about the willingness among local people to become involved in decision-making processes; instead the opposite has occurred and passiveness fuelled by mistrust seems to have inhibited the potential for collective action for conservation. There are several possible reasons for this, starting with the top-down communication from the government in the announcement stage of the Jozani-Chwaka Bay National Park. Spontaneous protests were caused by the information being 'forced' upon the Jozani-Pete community by the GOZ without wide consultation. Some locals were able to negotiate some compensation for loss of land and use of resources within this narrow space for active participation. The GOZ deviated from the original agreement and further increased uncertainty concerning community entitlements by increasing the protection measures for the red colobus

monkey and changing the restrictions on resource use. Further actions followed that impoverished execution of the project.

During the initial period, a core number of villagers, motivated by the possibility of getting compensation, mobilised to oppose institutions that they thought would reduce their resource use, namely the GOZ represented through the DCCFF. Their demand for fair compensation for expropriation of land and loss of income caused the project proponents (DCCFF and CARE International) to increase structural opportunities for participation. To this end, the JECA was established to represent the locals in the management process of the JCBCA. Even though the JECA enabled a level of collaboration between communities situated elsewhere around the National Park and the DCCFF, the weak bonds between 'community' and those representing its interests complicated the Jozani-Pete situation. Resultant extensive deforestation of the mangrove forest prompted the GOZ to reassert top-down control. The inhabitants of Jozani-Pete felt that they were once again disconnected from their main source of income with no voice to influence resource use.

Since the VCC no longer had practical management issues left to deal with, the responsibility of the VCC shifted towards patrolling the terrestrial forest area around the National Park. Incidents where the VCC failed to fulfil their responsibilities and cases of guard corruption weakened respect for the local legal system amongst the community. Many villagers' pointed out that the members of the VCC were not democratically elected but appointed by the Sheha. Contrastingly, the VCCs' representative role is fully recognized by the higher authority. Their relationship with JECA and the DCCFF is well established and in line with the broader Jozani-Chawka Bay National Park interests.

Even though the strength of the initial resistance to increased restrictions on resource use waned, the issues of compensation and alternative income remained high on the locals' agenda. Many of the villagers did not feel that the GOZ⁵ has taken its full responsibility in

⁵ In this context the informants seemed to identify the DCCFF, JECA as well as the VCC with the GOZ.

the situation, considering that conservation intervention has “taken our source of income, leaving us less well off”. There was a widely view that the so-called community representative groups had been co-opted by broader government and international NGO interests in support of the National Park. This led to the conflict over governance and financial management of the Jozani-Pete Mangrove Boardwalk Project. The formal institutional design of CBNRM projects may appear to support meaningful involvement, by giving the appearance of participation, but this did not reflect the obvious underlying social tension and conflict among the villagers. Disappointment, anger and cynicism regarding participation are common reactions in such situations (see e.g. Cook and Kothari, 2001) and were evident in the case of the Jozani-Pete CBNRM Project.

Our results suggest that a number of Ostrom’s design principles, although formally institutionalized, are not being practiced. While the boundaries of community involvement and resources seem to have been defined and mapped, facilitating participation of a broad representation of the Jozani-Pete community appears to have been more challenging. Origin, vocation and age were parameters that either included or excluded villagers from the process. There was no congruence between appropriation and provision rules and local conditions, as there was no systemic monitoring of the environmental conditions by either the DCCFF or the VCC. It was clear from our interviews that many of the villagers did not think they have had a meaningful opportunity to participate in collective-choice arrangements, either in terms of deciding the rules of resource use or deciding who should make decisions about these rules. Furthermore, the mangrove forest is being managed without any enforcement or sanctioning powers, at least as described by Ostrom (1990). Finally, Ostrom’s last principle is the recognition of a community’s rights to organize their own institution without being challenged by external authorities. Our informants argued strongly that the CBNRM was not designed by the locals, but was initiated and promoted by exogenous actors linked to the undemocratically appointed local elite.

Community attitudes and power struggle

Why has the Jozani-Pete CBNRM project faced so many challenges? A key element in community mobilisation is to create a network of support, sensitization and increased awareness about an issue, as well as to mobilise resources, such as money, time, information and the expertise needed to achieve the desired objectives (NGO Resource Centre, 2006). The aims of a project need to be relevant and beneficial so that community members put their minds and energy into it, and the results need to be sustainable. For a project to gain enduring community support it needs to benefit (at least potentially) most of the community members for a longer period than just the initial phase, particularly if expectations of future benefit were the primary motivating force (NGO Resource Centre, 2006). The Jozani-Pete villagers saw a long-term financial gain in preserving the forest, but had difficulties in engaging in the project when community mobilisation was not aimed in the direction envisaged by the project proponents. Cleaver (1999) found it too simplistic to assume that communities can be structured into an organization, especially for a cause such as conservation that has been exogenously initiated. The CBNRM experience at Jozani-Pete supports the view that projects rarely take into account or acknowledge the complexities at target sites (people and their relationship with each other and their environment) and that these circumstances are contextually dependent.

In the case of Jozani-Pete, the institutional arrangements run parallel with the existing local administration system. The CBNRM institution does not seem to have been embedded into the existing community institutions in any meaningful way, although some village elite were enrolled in its cause and, as a result, it has been confronted with legitimacy issues.

It is also highly questionable whether many Jozani-Pete residents have the desire to be organized as a community around natural resource management. All informants (except

an over 70-year old widower) declared during interviews that they were more or less fully independent and in no need of the community in their day-to-day lives; they minded their own business without interfering with their co-villagers. Inhabitants who have moved to Jozani-Pete from other parts of the island, Pemba or the mainland, found it quite strange how infrequently Jozani-Pete residents interacted with each other. To some extent, this gave the impression that Jozani-Pete was a fragmented village with sub-communities anchored both in and outside of the village. The strong identification with community assumed in participatory approaches to development does not seem to be present at Jozani-Pete.

A farmer and charcoal producer complained that the Jozani-Pete Mangrove Boardwalk has added to fragmentation of the village and its common interests: "Before, I contributed, like everyone else, to the village's prosperity by raising funds or performing physical work, such as when we built the school. We saw the common good. Now, everything shall come from Jozani-Pete Mangrove Boardwalk and I do not contribute any more. I feel less a part of the community". According to de-Shalit (2000), social and economic circumstances, such as the Jozani-Pete Mangrove Boardwalk conflict, can affect people's attitude towards communitarian behaviour and thus can result in socio-environmental alienation, as indicated by some of the informants views. Furthermore, De-Shalit (2000) claims that socio-environmental alienation is exacerbated when communities are affected by human-induced environmental disasters, such as the local deforestation of the Jozani-Pete mangroves.

Social responsibility and an interest in community development are the most significant motivations for participation suggested in the literature. Cleaver (1999) questions the idealistic imagery which De-Shalit (2000), amongst others, argues is the main motivation behind public participation in resource management processes. There are altruistic rationalists amongst the villagers, but the most common and strongest arguments for involvement in the project we

encountered were based on individual economic interests. Many informants emphasised a sense of autonomy and independence from the village society, which raises the question as to whether the villagers could develop a relationship with the community to manage resources collectively, creating the link between common good and their own well-being as argued by, e.g. de-Shalit (2000).

Both the National Park and the protection of the mangrove forest are first and foremost conservation initiatives, which, during the process, have incorporated some democratic aspects and poverty reduction initiatives (to reduce pressure on the local natural resources and build project legitimacy). The creation of local institutions has the potential to create positive synergistic effects between socio-economic and conservation goals (as described by Cleaver, 1999), but this certainly has not occurred at Jozani-Pete. The Jozani-Pete CBNRM, in conjunction with local government, would need help with leadership training, strategic planning, enterprise training and development of a well-functioning local democratic system to meet the high expectations of the ZPRP. Perceived widespread illegal mangrove harvesting needs to be viewed within the greater context of formal restrictions on resource use, widespread feelings of disenfranchisement, expropriation of private and village land, and little or no compensation or benefit from tourism. At a more practical level, there is also an inherent tension between sustainable use/conservation goals, local development aspirations and democratic processes (Saunders, 2011b), which was often glossed over in the CBNRM project design and its implementation, with dire consequences at Jozani-Pete.

CBNRM at Jozani-Pete seems to be facing a number of power-related issues, internally within the village and with the external actors/authorities. In a bottom-up initiated management approach, a crucial point is for the community to be recognized by relevant authorities and become legalized as a stakeholder in the national/regional management structure (Bruns, 2003). In the Jozani-Pete CBNRM, the challenge seems to be rather that of an institution not fully recognized as legitimate by the core

stakeholders. Both the VCC members and the other villagers tend to withhold information from each other due to the lack of trust between them. Informants argued that the VCC has adopted techniques to silence and shame inquisitive and/or critical voices during open meetings – perhaps in an attempt to maintain their fragile power. This behaviour has resulted in even less commitment and participation by the locals. It also highlights a tension between the project's democratic aspirations and further entrenchment of power by the village elite as they harness the new symbolic and material power of conservation. CBNRM's aspirations of deliberative democracy, whether in a stronger or weaker form, should be based on the development of the preferences of local actors through public discussion, and the transformation of their decisions into action (Dryzek, 2000). It is a moot question as to how much scope or potential there is for this sort of decision-making in a situation such as that described above, where the project goals were largely pre-determined by outsiders, and where the local elite are the project mediators.

If a community is to manage its resources, it needs public space and a forum that supports open and transparent discussion amongst its members, with authorities that provide their support. Information-sharing systems need to be developed, as well as open channels for exchange and negotiation. Feedback on suggestions, proposals and ideas is crucial in order to create feelings of being heard and listened to (Glasson *et al.*, 2005). There also needs to be more than just the potential for material benefit from project involvement. Individual and collective costs associated with time spent in setting up and participating in new conservation institutions, coupled with the implications of resource constraints, need to be manifestly off-set by appropriate levels of remuneration from other activities that are promoted as being conservation-friendly, such as tourism.

CONCLUSION

There is much written in the CBNRM literature about opportunities for communities to organize around the management of natural resources. Often this is described as simply designing and implementing Ostrom's (1990) institutional design principles and adapting them to local conditions. This assumes that institutional design corresponds to behavioural change in practice, and this is an overly simplistic view that tends to overlook the struggles over power and influence that comes with CBNRM projects. Whether this is an implementation deficit or related to problems with the assumptions of CPR theory is subject to an ongoing debate (Cleaver, 2012; Saunders, 2014).

Multiple interests are always at play in CBNRM projects. The implementation of CBNRM projects that are able to successfully trade-off conflicting interests and activities, while delivering socio-environmental project goals, is an extremely challenging assignment. At Jozani-Pete, this sort of success has not been achieved. Few of the factors required for public participation have been fulfilled and villagers are generally resentful of the conservation initiatives and are feeling worse off. Arguably, this CBNRM initiative at a minimum would have required the secure transfer of power and an accountable, representative local institution, engaged with the interests of its members, for its success (Ribot 2002).

In this case, the 'agency of poor people' was largely constrained by a pre-determined project agenda and a project focus on building consent through the co-option of village elite. This had the effect of reaffirming and reconstituting stratification rather than challenging existing relations of power and authority, as the project rhetoric would have it. This case study thus clearly illustrates the difficulty of setting-up exogenous CBNRM institutions to restrict resource use without further marginalising already marginalised people.

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