THE IMPACT OF STAKEHOLDER RELATIONS ON THE MNEMBA ISLAND MARINE CONSERVATION AREA, ZANZIBAR, TANZANIA

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Tourism has the potential to be used as a positive tool for growth in developing nations. In order to gain the most benefit from tourism, planning and management is vital for successful tourism destination development and the attainment of conservation goals. This process should involve all stakeholders who might be affected by tourism and associated developments. In order for collaboration to be effective, there are certain social aspects that need to exist in stakeholder relationships such as open communication, transparency, and trust. Research has shown that these social variables are vital for the successful collaborative management of natural resources, and as such are important to the health of social and ecological systems upon which the future of tourism depends. This article investigates stakeholder relations and how these have influenced the Mnemba Island Marine Conservation Area in Zanzibar, Tanzania. Findings suggest a lack of structure in the working relationships of key stakeholders. As a result, these relationships are strained. Despite the importance of formal agreements and structured relations, these have been difficult to implement due to stakeholder conflict over resource control. Social variables (e.g., trust, transparency) shaping stakeholder relations had a largely negative impact on the health of social and ecological systems. Suggestions for a more detailed investigation into the complexities, challenges, and possibilities for stakeholder working relationships in the Mnemba Island Marine Conservation Area are provided.

Key words: Stakeholders; Collaboration; Coastal tourism; Marine conservation; Marine protected areas

Introduction

The tourism industry has become a globally competitive market in which destinations compete with each other to attract tourists (Telfer & Sharpley, 2008). In many different tourism settings, the business that tourism brings can have a positive impact on quality of life for local people at a destination (Woo, Kim, & Uysal, 2015). Similarly, it can be an important contributor to broader

Address correspondence to Christopher Burgoyne, Department of Geography, Environmental Management and Energy Studies, University of Johannesburg, Kingsway Road, Rossmore, Johannesburg, 2001, South Africa. Tel: +27720618195; E-mail: chris@burgoyne.co.za social, economic, and infrastructural development at a destination (Mowforth & Munt, 2015). The converse is also true: tourism can negatively impact the natural environment and quality of life for local people (Murphy, 2013). Despite some of the problems associated with tourism, it has been used as a positive tool for growth in developing nations (Mowforth & Munt, 2015). As such, some developing nations have begun to focus on using tourism as a development and conservation tool due to its economic value (Eagles, McCool, & Haynes, 2002; Telfer & Sharpley, 2008). This is especially the case in developing regions like Zanzibar, Tanzania that have scenic natural resources but little in the way of industry or industry-related natural resources like oil, metals, or minerals.

Not all the impacts of tourism are positive (Murphy, 2013). In order to avoid some of the potentially negative impacts that tourism can have on natural resources, planning and management are vital to successful tourism destination development and protected area management (Mason, 2015). Planning can provide the framework for how tourism can utilize natural resources and protected areas most effectively (Hall, 2008). The planning process typically begins with government as the protector of public resources, but should involve all stakeholders who might be affected by tourism, conservation, and associated developments (Mill & Morrison, 2009; Telfer & Sharpley, 2008).

Stakeholders in this process are defined by Van den Bergh (2013) as "groups or organisations with an interest or stake in tourism development and/or are influenced by tourism development" (p. 182). Stakeholders often have different interests in natural resources associated with tourism. Sometimes these interests are competing with one another. In cases where there are competing interests it is often more difficult for stakeholders to collaborate sustainably (Van den Bergh, 2013). Despite any such difficulties, it remains essential that stakeholders collaborate in order to capitalize most effectively on tourism business while also avoiding any negative impacts from tourism (Hall, 2008; Mason, 2015). Social variables such as open communication, transparency, and trust between stakeholders are vital for the successful collaborative management of natural resources and associated tourism, and as such they are important to the health of ecological

systems (Jones, Clark, Panteli, & Proikaki, 2012; Niedzialkowski, Paalova, & Jedrzejewska, 2012; Young et al., 2013). In addition, representation and accountability are vital if stakeholders are to trust their leadership and other stakeholders (Blaikie, 2006).

This article reports on stakeholder relationships that have shaped the design and implementation of the Mnemba Island Marine Conservation Area (MIMCA) in Zanzibar, Tanzania. A first section describes the scope of the study area for this article and provides context. Thereafter, the methodology used for data gathering is presented. A third section focuses on defining and characterizing the stakeholders that have interacted in the formation and management of the MIMCA. A fourth section discusses the influences and interactions of the stakeholders listed before. A fifth section deals with the impact that these stakeholder relations can have on the state of natural resources. A final section provides recommendations for improving working relations between key stakeholders.

Study Area

Zanzibar Archipelago

The Zanzibar archipelago is a semiautonomous region of Tanzania about 32 km off the coast of East Africa (see Fig. 1). The two main islands are Unguja in the south and Pemba in the north. Historically the archipelago was ruled by Arabians from Oman and was an important hub in the 19th century slave trade (Longair, 2016). During this time, Zanzibar also became famous for the locally abundant crops of cloves, cinnamon, and other spices (Longair, 2016). In the last two decades the economy has been restructured away from spice exports to the service industry as it has become an increasingly popular holiday destination (Sharpley & Ussi, 2014). The Revolutionary Government of Zanzibar has estimated that by the year 2020, 50% of the population will be involved in the tourism industry (www.zanzibar.go.tz). With colorful coral reefs in warm blue water and a seemingly endless coast of white sand beaches fringed by coconut palms, tourism to Zanzibar is largely dependent on the existence of the ethereal aspects of these natural resources (Miller, Auyong, Smeenge, &



Figure 1. Map of the Tanzanian coastline and the Zanzibar archipelago (inset: Map of Africa showing position of Tanzania in east Africa).

Luck, 2013). In this paradisiacal setting, livelihoods and tourism are competing for natural resources. On the one hand tourism relies largely on "pristine" beaches and reefs; on the other hand livelihoods rely on fishing along those reefs. The future of both depends on the long-term persistence of these marine resources.

Mnemba Island

About 2.1 km off the north-east coast of Unguja, Zanzibar is a small island called Mnemba (see Figs. 2 and 3). Mnemba Island is a small landmass with a vegetated coastline of 1.46 km and an area of 0.12 km². It is surrounded by a fringing, shallow water coral reef. Portions of this reef are considered to be among the healthiest coral reefs in the region (Bergman & Öhman, 2001; EcoAfrica, 2005; Muhando & Francis, 2000; Wagner, 2007; Zvuloni, Van Woesik, Loya, & Somers, 2010). The Mnemba atoll is an important source of tourism revenue for Zanzibar while also being a vital and historical fishing ground for rural communities living on the north-eastern coast of Unguja, Zanzibar (EcoAfrica, 2005; Gustavsson, Lindstrom, Jiddawi & de la Torre-Castro, 2014).

Today there is a luxury ecotourism lodge on Mnemba Island that is leased from the Revolutionary Government of Zanzibar by &Beyond, an ecotourism operator running numerous lodges across Tanzania. The only residents on Mnemba Island are staff of the lodge who are largely Zanzibarians chosen from nearby fishing communities along with a small number of ex-patriots from various countries. These staff live on Mnemba Island in shifts of several weeks. They do not live with their families on the island and while living there they do not engage in any private livelihoods other than their employment at the lodge. Between their shifts they return home to their families whether on Unguja or abroad.

Mnemba Island was historically uninhabited. Fishermen from the villages of Matemwe, Kigomani, Mbuutunde, Pwani Mchangani, and Kiwengwa used

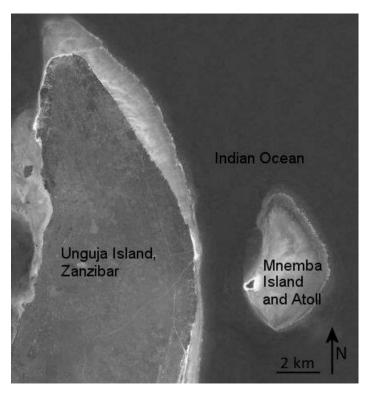


Figure 2. Satellite image of Unguja coastline and Mnemba atoll, Zanzibar (Image courtesy of US Geological Survey).

Mnemba as a camp (see Figs. 2 and 3) from which to stage fishing operations that were on the Mnemba atoll or further offshore from the Zanzibarian coastline (EcoAfrica, 2005). In 1989, Mnemba Island was leased by the government to an Italian company called Tanzanian Cattle Products who used the island as a resort and built basic infrastructure for holidaying corporate staff (Personal communications with director of &Beyond, August 18, 2014). After the lease was secured, local fishermen were prevented from camping on Mnemba and fishing on certain parts of the surrounding reef. They have felt bitter about this prohibition ever since (Personal communications with residents of villages in MIMCA, March–May, 2015).

Mnemba Island Marine Conservation Area

Mnemba Island, along with the surrounding reef, is protected from fishing by provision of its establishment as a Marine Conservation Area in 2002 under the Tanzanian Fisheries Act (No. 8 of 1988). This conservation area was originally created for two reasons: to protect the marine resources of Mnemba atoll and to provide an end to the contention between local communities and tourism operators using the atoll (Revolutionary Government of Zanzibar, 2010). The idea was that a marine conservation area would allow government to collect a fee from all tourists visiting the atoll, and this money could be used to provide fishermen with equipment that would allow them to fish further offshore as well as being channeled into the development of additional livelihood opportunities for the communities affected by the restrictions.

A year after the conservation area was formed the MIMCA Authority was created to manage it (the MIMCA Authority is discussed in more detail later on). The MIMCA Authority is a division of the Department of Fisheries and Marine Resources in the Revolutionary Government of Zanzibar. According to the draft general management plan of 2010 the goal of the MIMCA Authority is to "manage the use and harvesting of marine and

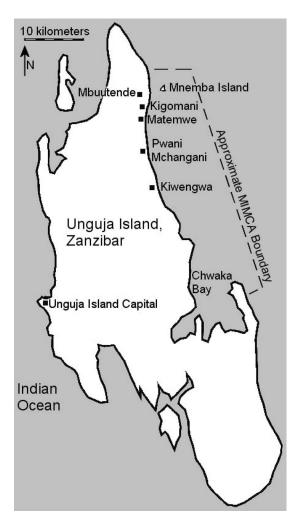


Figure 3. Map of Unguja Island, Zanzibar showing Mnemba Island, relevant towns, and approximate boundaries of the MIMCA. The extent of the boundaries north of Mnemba Island remain unclear (Gustavsson et al., 2014).

fisheries resources at ecological [sic] sustainable levels, and to manage the development of marine tourism in order to maximize economic benefits to the community" (Revolutionary Government of Zanzibar, 2010, p. 34). Decision making by management officials is supported by the ICZM (Integrated Coastal Zone Management) steering committee, delegated professionals, and support staff working in the conservation area. They are informed of concerns in local communities by fisheries officers, of which one is chosen in each village by the local leaders (Revolutionary Government of Zanzibar, 2010, p. 50).

Methods

In order to investigate the impact of stakeholder relationships on the marine protected area and the effectiveness of the MIMCA, in-depth interviews and focus groups (Creswell, 2017; Richie, Lewis, Nicholls, & Ormston, 2013) were conducted in the study area in August 2014 and March 2015. A total of 62 people from local government, NGOs, local tourism operations, and communities living in the Mnemba Island Marine Conservation Area were interviewed. Of these participants, 6 were government employees, 12 worked in the tourism industry and NGOs, and 44 were community residents. Of these 44 residents, fishing or food gathering on the intertidal flats were main livelihoods for 43 of them. Five of these residents were in community leadership, and 8 were members of local environmental organizations. Participants were found by attending a government meeting, speaking with well-connected members of local communities, talking to community leadership, using chain sampling to find new participants, and flow population sampling in busy areas of the communities included in this study (Richie et al., 2013).

The sample size was determined by data saturation and the willingness of individuals in stakeholder groups to participate (Charmaz, 2006; Kerr, Nixon, & Wild, 2010). In considering the demographic profile of each stakeholder group, a variety of participants from each stakeholder group were included to achieve wider representation. Discussions were recorded when permitted; otherwise notes were taken during and immediately after the discussion. The qualitative analysis of interview transcripts utilized an inductive analytical process similar to that which is outlined by Richie et al. (2013) in which basic coding, summarizing, and classifying of the data is performed for retrieval during analysis. These analytical tasks were completed using Atlas.TI software (v7.5.7) and Microsoft Office.

The questions posed to participants were developed based on open discussions held with various stakeholders on a pilot visit to the study area. The question agenda was developed as a guide and not an instrument to be precisely followed: participants were free to speak about those topics that were must important to them (Creswell, 2009; Richie et al., 2013). This study is subject to certain limitations. It was not possible for any of the researchers to speak with an employee of the MIMCA authority at the time of primary data gathering, and government representation in the study is limited in comparison to other stakeholder groups. The result is that this article is representative of only those views that could be ascertained and the assessment is thus biased toward the opinions of stakeholders in local communities and the tourism industry. In addition, the research process was subject to the personal views and bias of the researchers due to the subjective nature of qualitative research (Richie et al., 2013). Precautions were taken to avoid the impact of these biases on this work including the use of an investigative approach with active participant feedback, open discussion that was led by participants, and peer review of analysis.

Key Stakeholders and the Development of the MIMCA

There are a variety of stakeholders interacting in the management and conservation of resources in the MIMCA. A summary of these stakeholders is provided in Table 1 below, along with their interests and roles in the marine conservation area. More detail about their influence and interactions with one another is discussed below.

&Beyond

&Beyond is a luxury tourism company formerly known as Conservation Corporation Africa, or CC Africa. It is a globally recognized leader in ecotourism. Their stated ethos is "care of the land, care of the wildlife and care of the people" (http://www. andbeyond.com). As far as possible, &Beyond have employed local Zanzibarian staff. When the research was conducted 87% of their lodge staff were Zanzibarians (Personal communications with Mnemba Island lodge management, March 18, 2015). In recognition of the importance of other stakeholders' contributions, &Beyond also hosts researchers on Mnemba and buys fish almost daily from local fishermen.

The 33-year renewable lease for Mnemba Island was taken over by &Beyond when they secured a series of leases and properties from Tanzanian Cattle Products in the late 1990s (Personal communications with director of &Beyond, August 11, 2014). The management of &Beyond acknowledged that the reef and associated marine resources were in decline due to overfishing. &Beyond then sought for the atoll to be proclaimed a marine conservation area. The conservation status would allow the government to charge a fee of all tourists diving and snorkeling on the reefs and some of this funding was intended to be diverted for the support of alternative livelihoods and purchase of offshore

Table 1

Key Stakeholders, Their Interests, and Their Roles in the MIMCA

Stakeholder	Interests	Role
&Beyond	Healthy reef system for diving	Stimulating local economies through tourism
Rural communities	Natural-resource based livelihoods	Legal and sustainable utilization
Government	Maintaining the law and gaining income from tourism	Permitting and maintaining the law
MIMCA authority	Managing tourism and gathering relevant fees	Management of tourism and conservation on the atoll, and associated income
ICZM	Ensuring that the best interests of the envi- ronment and stakeholders are served	Steering decision making of government and MIMCA management
Hotels and tourism-related business	Clean beaches and healthy reef system for diving	Stimulating local economies through tourism
Charitable NGOs	Quality of life in communities	Improving quality of life in communities
Africa foundation	Improving relations between &Beyond and other stakeholders through community development	Improving rural quality of life through charitable donations from &Beyond guests

fishing equipment in local communities (Personal communications with ex-manager of Mnemba Island lodge, March 24, 2015). This plan was set in motion when the MIMCA was gazetted in 2002.

In the first year of operations the Mnemba Island lodge management helped by participating in the collection and utilization of tourism fees gathered from divers and snorkelers visiting the atoll (Personal communications with ex-manager of Mnemba Island lodge, March 24, 2015). Since then a system has been developed where employees of the MIMCA Authority use a small motorboat to police fishing on the atoll and collect fees from each tourist that dives or snorkels in the MIMCA. &Beyond has provided accommodation for these rangers on Mnemba Island. The fee was originally US\$1 per person per day, but in recent years this fee has increased to US\$3.

Rural Communities

There were originally five rural communities that were considered part of the MIMCA. These five communities included Matemwe, Mbuutende, Kigomani, Pwani Mchangane, and Kiwengwa, are all on or near the coastline of Zanzibar, are the ones closest to Mnemba Island (see Figs. 2 and 3), and fished on the Mnemba atoll the most frequently (personal communications with local NGO volunteer, March 10, 2015).

Most people living in these communities are subsistence-based fishermen or farmers. Much of the fishing occurs on near-shore reefs using small dugout canoes called Ngalawa that can be paddled and sailed (EcoAfrica, 2005). The fishermen use any form of equipment they can get, including sharpened sticks as spears, spear guns, hand-made fish traps woven from reeds, nets, hand lines, and reportedly dynamite on occasion. Other people work as school teachers, run small shops in the community, or work in the tourism industry. Some women farm seaweed, while others go out onto the intertidal flats at low tide to search for octopus, fish, shellfish, and other forms of edible sea life that they can sell at the local market (Msuya, 2012). Most households try their hand at farming in order to feed themselves, though the soil in the north-east of Unguja is poor and there is little potential for agriculture there. Many households raise chickens and some families have a cow (personal communications with Matemwe resident, March 16, 2015).

In rural Zanzibarian communities there are a variety of committees that deal with different aspects of daily life. Among these are the village fishermen committee; seaweed farming committee; environmental conservation committee; forest committee; and development committee to name a few (Gustavsson et al., 2014). Local residents chosen by village members participate in these committees and the village leader, or *Sheha*, is typically present in each of them. The village fishermen's committee was developed by the government as a way to establish community-based management of natural marine resources. The fishermen's committee chooses a representative to participate in management of the MIMCA.

The Revolutionary Government of Zanzibar

The most influential government body relating to the study area is the MIMCA Authority. There are representatives from various government departments who interact within the MIMCA management body and the ICZM committee. These government stakeholders are discussed below.

The government has played a significant part in the development of marine conservation in Zanzibar. In 2005, a government initiative known as the Marine and Coastal Environmental Management Project (MACEMP) received US\$60 million from the World Bank. This initiative was intended to 1) extend the MIMCA boundaries to join other marine conservation areas and form a network around Zanzibar and 2) fund sustainable livelihoods in underresourced communities. Although some projects did receive funding and there were measurable benefits to natural resource-based livelihoods during project implementation, the overall outcome of this project remains unclear (Msuya, 2012; Yussuf, 2013).

The MIMCA Authority. The MIMCA Authority is a semiautonomous management body organized by the Department of Fisheries and Marine Resources (Gustavsson et al., 2014). The executive committee, comprised of the representatives from the respective village fishermen committees, is chaired by the MIMCA manager. The manager reports to the Marine Conservation Unit (MCU), a government body that oversees the implementation of marine conservation and performs marine research. This unit receives funding from the Department of Fisheries Development, a suborganization of the Ministry of Livestock and Fisheries in the Revolutionary Government of Zanzibar (Gustavsson et al., 2014). The tourism fees collected by MIMCA rangers at the Mnemba atoll are taken into government coffers from which money is variously assigned (Personal communications with Department of Fisheries Development staff, March 12, 2015).

The ICZM Committee. The national steering committee for ICZM was formed in 2002. The aim of this committee is to guide district management of all human activity in the coastal zone. In 2009, the Regional Coastal Management Program of Indian Ocean countries, funded by the European Union, helped the ICZM steering committee to begin regular operational meetings and to establish district level committees (http://www.commission oceanindien.org). These meetings were sporadic and &Beyond has sought to help the ICZM committee to hold these meetings twice a year by offering the Mnemba Island lodge as a venue for the meetings. These meetings have resulted in positive discussion but local community residents claim that little action has occurred, supposedly due to slow bureaucratic operations in the Zanzibarian government (Personal communications with Matemwe residents, March 22, 2015). This committee has an interest in the MIMCA and discusses the declining marine resources in its meetings. Committee discussions are guided in large part by research conducted by the Institute of Marine Science (IMS) at the University of Dar es Salaam in Stonetown, Zanzibar. The IMS is an important contributor of knowledge to management and decision making in the MIMCA.

Hotels and Tourism-Related Businesses

There are many hotels and other tourism-related business that operate along the north-eastern coastline of Zanzibar. Businesses from other areas of Zanzibar also make extensive use of the MIMCA, and in particular the Mnemba atoll (Personal communications with boat captain from Matemwe, March 16, 2015). Many hotels are owned and run by foreigners who settle permanently or semipermanently in Zanzibar (Personal observations, March 2015). Many, if not all of these hotels and lodges, employ local people in catering for tourists. Some of these hotels give financial and other benefits to local communities (Personal communications with Kigomani residents, March 13, 2015). A significant number of fishermen participate in tourism during the high season to improve their quality of life. This can include working as a formal tour guide, a driver, hotel staff, or an informal, nonregistered tour guide. Hotels and lodges work with independent tour guides and drivers to stimulate local income (Gustavsson et al., 2014).

The Africa Foundation and Other NGOs

&Beyond makes contributions to the development of communities living near Mnemba Island through the humanitarian branch of their business, the Africa Foundation. The Foundation works on the assumption that benefit sharing assures the future of wildlife and wilderness through conservation (&Beyond, n.d.). With the support of donors, some of whom have been guests at Mnemba Island, the Foundation has built classrooms at a school in Matemwe, provided schooling resources, and funded the establishment of Fish Aggregation Devices (FADs). These FADs were not maintained and have since been washed away by ocean currents, but the school buildings still stand and are used daily.

There are a number of other NGOs working in Zanzibar among which are the Zanzibar Action Project, Eco and Culture Tours, the Makunduchi Project, the Zanzibar Outreach Program, the Africa Foundation, Jamabeco, the Paje Seawee Centre, and MarineCultures, to name only a few (http:// www.redmonkeylodge.com/projects). Some of these NGOs are run exclusively by foreigners while others are run by or in conjunction with locals (Personal communications with NGO employees, March 10, 2015). These organizations run projects that have the aim of diversifying livelihoods and improving quality of life in rural communities in Zanzibar. Some of these NGOs take an interest in the affairs of the MIMCA because conservation action has had a direct impact on people's quality of life in the area.

The Social Impact of Stakeholder Relations

Social variables influence relationships between stakeholders. Social aspects of working relations between stakeholders were investigated for this study, including how these impact stakeholders' perceptions of one another.

Open Communication

The MIMCA has been plagued by communication issues since the managing authority was first organized. One of the most frequently mentioned problems that community members raised in our discussions with them was a lack of communication from government about benefits arising from tourism to the MIMCA. Nobody was able to tell us what was being done with the fees collected from tourists diving or snorkeling around Mnemba Island. A lack of communication is not just a problematic part of relations between government and communities: there was little or no communication between any stakeholder groups and little communication within stakeholder groups. For example, people from communities within the MIMCA told us that they felt isolated from their leaders, and employees in the tourism industry told us that the tourism industry is "very fragmented and disenchanted" (Personal communications with tourism operator, March 21, 2015). The manager of a tourism operation in the conservation area told us that "right now there is just no dialogue at all . . . there is no unified voice or communication between stakeholders."

The lack of open communication has contributed to a state of passive conflict between stakeholders. A tourism operator said that "conflict comes from lack of knowledge" and that "without crystal clear communication . . . people will always be asking questions about how and where the money gets spent" (Personal communications with tourism operator, March 21, 2015). Some employees of tourist operations told us that when the government was questioned about fees collected by MIMCA Authorities from dive and snorkel tourists, certain influential people told them to stop. This lack of open communication has contributed to a general feeling of enmity between stakeholders.

Transparency and Accountability

Some stakeholders have made the claim that the conservation area is ineffective. Ex-patriots working in the tourism industry said the general feeling is that this is due to a lack of transparency about the money collected by the MIMCA rangers (Personal communications with various tourism operators, March 10-28, 2015). In addition, some community members claim there is little transparency or accountability in community leaders' financial dealings with hotels and NGOs (Personal communications with residents of villages in MIMCA, March 11, 2015). One community member in Kijini village told us about a sum of five million Tanzanian Shillings that a certain local lodge had given to the village as a gift at the end of 2014. This person told us that these leaders had not been held accountable about the way in which this money was spent and the local people had not seen any benefit.

Similarly, the MACEMP project and the associated US\$60 million was something that many local people had not heard about and none of the participants in this research reported knowing any people who benefited from this initiative. Almost all community members stated that they did not benefit from the MIMCA. Only those in community leadership spoke of benefit from the conservation area, and their statements on benefit lacked specificity. It was reported by Gustavsson et al. (2014) that one boat, one engine, and 12 nets have been given out since the inception of the conservation area but since this time no benefits are known to have been distributed.

According to a well-known boat captain from one of the participating villages, these boats were taken over by local elites who did not care to share the boats with other villagers. Not long after the boats were purchased, the MIMCA fee collection scheme was taken over by the independent MIMCA Authority. In addition to this the rotation scheme never happened, and the motors never materialized due to the changing circumstances of financial management (Personal communications with boat captains from MIMCA villages, March 10–22, 2015). Due to the perceived lack of benefit sharing many of the local people showed mistrust for foreign business operators, their local leaders, and government.

Trust

The topic of trust has been a common thread through all of the previously discussed variables involved in stakeholder relations. Community leaders and government authorities are not holding themselves accountable for the management of natural and financial resources. As a result, other stakeholders ask questions but these questions have gone unanswered. Not only is there a lack of communication, but in some cases, open communication and transparency about financial resources have been discouraged leading to a general lack of trust between stakeholders. One fisherman said to us that "if you want to help the community, it is a bad idea to go through the community leaders" (Personal communications with Matemwe resident, May 2, 2015). This sentiment of mistrust was expressed by numerous other community members. One participant spoke with an analogy:

If you give me the ground to build a big house, the land is mine to build the house, and every year I can give you money: But then I don't give you money. What will you think? It is rubbish.

Due to the poor working relations that exist between stakeholders, and the lack of trust that is the result of these relations, community members living in the MIMCA largely think that the conservation area "is rubbish." When attending an open meeting at the Mbuutende community, a gathering of 49 community members of various ages was asked if it would be a good idea to scrap the conservation area: all 49 agreed it was a good idea. A lack of trust in other stakeholders has led these people to believe that they are better off without conservation. Trust can be developed through positive actions in working relations, but these positive actions between stakeholders have largely been lacking (Personal communications with Mnemba Island lodge management, March 18, 2015).

The Environmental Impact of Stakeholder Relations

Similarly to Nangle and Sheng (2010), we found that parts of the atoll are being damaged by poor utilization practices. These include, but are not limited to, anchors damaging the coral, tourists and fishermen walking on the coral at low tide, and overfishing. Through these damaging practices, the tourism industry and local fishermen have been putting pressure on the atoll ecology. Ferrol-Schulte, Ferse, and Glaser (2014) and Rotarou (2013) argued that tourism is a cause of some environmental decline in Zanzibar. Stakeholders who frequently use the Mnemba reefs have witnessed that tourism-related activities have damaged coral on the atoll. The researchers also observed anchor-related coral damage at a popular snorkeling reef. These results align with those of others who found that tourism-related activities can damage the environment (Nangle & Sheng, 2010; Rotarou, 2013).

Moreover, it is not only tourism that is impacting the ecology of this atoll. Indiscriminate fishing is also playing a part. It has been reported by divers who frequent the area that the reef system on the atoll is missing a significant population of reef sharks that fulfil a specific predatory function in the ecosystem (Communications with professional divers working on Mnemba Atoll, March 10-23, 2015). These divers noted that sightings of reef sharks are fairly infrequent, estimated at 1 in 20 dives. Said divers have also stated that the removal of sea urchins and preferential fishing of herbivorous fish has led to the increased growth of algae on the reef choking hard coral growth (Personal communications with dive masters at Mnemba Island lodge, March 12, 2015). These claims of marine ecosystem decline have been corroborated by independent benthic studies of some of the reefs around Mnemba Island (Johansen & Kennedy, 2014; LaPlante, 2014).

Knowledge about overutilization of resources was low in rural communities living within the MIMCA. It was reported by community members that the government has done little to educate people living in these communities about natural resources and their management. Many community members acknowledged that there were less fish today than 20 years ago, but they did not attribute this to overfishing. Some spoke of there being too many fishermen in the area, but many of those saying this would also make the claim that the ocean can never run out of fish. They spoke of the Mnemba atoll as a resource that could not be exhausted. This attitude has remarkable correlations with attitudes of Western fishermen and government officials during the early 20th century and before (Hetherington, 2012; Quinnett, 2012; Uekotter & Lubken, 2014). Increased government attention to the education of community members about sustainable natural resource use could improve resource management.

Due to the decline in health and distribution of natural marine resources, governance has become a vital topic of discussion in an area that supports both a thriving tourism industry and underresourced rural communities (Sharpley & Ussi, 2014). Since 2000, the majority of published works that have mentioned MIMCA and Mnemba Island focused on governance. Despite the importance of effective governance, it has been difficult to implement due to stakeholder conflict over resource control. Although the ultimate authority rests in the government and the MIMCA Authorities, local fishing communities feel that they do not benefit and have been sidelined as they are not made a part of the decision-making process. At this stage it is not known how much of the money collected from marine tourism to the MIMCA is being used for conservation in the MIMCA or greater Zanzibar. This has been a major source of contention.

Residents also told us that they do not receive benefits from tourism to MIMCA (Personal communications with residents of villages in MIMCA, March 11, 2015). A member of the Conservation Club, a committee of local staff members working at the &Beyond lodge on Mnemba Island, said "Villagers are complaining because they get nothing from MIMCA, so they don't care about protecting the reef at Mnemba. . . . They are only looking for money and are not taking care of the reef." One of the many environmental impacts reported was that in the last 4 years divers have estimated a 10% to 15% decrease in the number of schooling fish seen in the waters around Mnemba Island (Personal communications with dive masters at Mnemba Island lodge, March 12, 2015). In the case of the Mnemba Island Marine Conservation Area, it can be said that poor

working relationships between stakeholders is a likely contributor to damaging methods of resource utilization and management in local communities.

Overall, the findings suggest that social variables shape stakeholder relations and have an impact on ecosystem health in the MIMCA. At the establishment of the conservation area, funds collected from tourism to the reefs were used to buy fishing equipment for local communities. There was communication about finances, benefits were shared between stakeholders, and trust developed. Not long after its establishment, the MIMCA was expanded to include many more communities and a longer stretch of coastline, and the bureaucracy of the conservation area became unwieldy due to its size. As a result of this and other circumstances. open communication about finances ceased, benefits no longer accrued to local communities, and trust began to decay as communities felt they were sidelined by government, conservation, and tourism. As a result, fishermen from communities in the conservation area have begun to fish indiscriminately on the Mnemba Island reefs. Working relations need to be improved in order to stop the degradation of these resources. If the status quo continues unchanged, local quality of life and tourism may decrease as natural resource health declines. This will have negative consequences for local livelihoods and the local economy, where more than half the people living in nearby communities are reliant on fishing.

Recommendations

There is a lack of structure in the working relationships between key stakeholders of the MIMCA. As a result, these relationships are strained. Stakeholders are typically not transparent with, or accountable to, one another. The result is that there is little or no trust among them. In the absence of long-term agreements about resource use and the sharing of benefits accruing from tourism to the MIMCA, stakeholders have become entrenched in a trend of getting the most out of short-term exploitation. Resource exploitation has been harmful to the natural environment. If this trend of environmental degradation is to be transformed into a trend of positive environmental management, then working relations need to improve between key stakeholders. This would entail:

- Transparency on the collection and utilization of funds accruing from tourism to the MIMCA, with further open discussion in affected communities on the use of these funds;
- Open communication between stakeholder groups about their interests;
- Downward accountability from community leadership on benefits received from charitable NGOs and tourism operations;
- Improved representation of community members in management operations by using a communitywide vote for the selection of representatives;
- Partnerships between tourism operators and charitable NGOs that could stimulate local infrastructural and social development;
- Perhaps most importantly, local government and NGOs helping local community members with access to alternative livelihoods that are not dependent on the diminishing marine resources in the MIMCA.

It is recommended that the MIMCA management authority meets with stakeholders to 1) better implement zoning in the conservation area; 2) improve trust through transparent administration of funds; and 3) discuss how natural and financial resources should be managed. Without such changes, the future of the conservation area is uncertain. However, despite the lack of positive working relations, perceptions of conservation can be improved if tourism operators can partner with charitable NGOs in order to capture potential financial contributions of foreign tourists to local development. Such an approach could bypass some of the pitfalls associated with the current set of working relationships that exist between stakeholders in the MIMCA.

In the near future additional research on stakeholder relations would be a useful means for improving our understanding of how they impact social and environmental systems in and around the MIMCA. Such research might investigate:

• The impact that neoliberalization and market integration have on the control of natural resource management

- The impact of resource dependence on the development of resource management strategies
- The role that private investors in the tourism industry have played in other contexts similar to that of the MIMCA.

Conclusion

The Mnemba atoll is an important resource for both the livelihoods of local communities and the Zanzibarian economy. As such, it is an important area to protect and manage in a way that enables multiple stakeholder groups to benefit. In the more recent past communities have not experienced the benefits of having a marine conservation area and tourism in their local waters, resulting in some stakeholders feeling disenfranchised due to the behavior of governing authorities. Being an important conservation area, the onus is on government to preserve this key resource area by engaging with communities consistently, effectively, and sharing tourism benefits with them. Despite a lack of transparency and accountability, partnerships between tourism operators and local charitable NGOs can play a pivotal role in changing negative perceptions of conservation by increasing the flow of charitable benefits from the tourism sector. As to how negative working relationships and perceptions can be changed should be the subject of a more detailed investigation into the complexities, challenges, and possibilities for stakeholder working relationships in the Mnemba Island Marine Conservation Area.

Learning From the Past, Looking to the Future

The actual workings of stakeholder collaboration in tourism destination management are not often described. In particular the development of trust, and the impact that it has on positive working relations, has received little attention in the literature. Being such a vital part of the sustainable management of natural resources upon which tourism destinations depend, we feel that these sorts of social topics need to be investigated more thoroughly because they are so often implicitly assumed in most research.

Researchers elsewhere could contribute to this discussion on trust and other social variables, while

governments, tourism operators, and communities could benefit by focusing on these most fundamental and foundational parts of effective working relations. We know from the past that social variables have a significant impact on the management of natural resources, and that these variables are tricky to tackle in research. What needs to be studied in the future is how communication, transparency, trust, representation, and accountability can be used individually or in part where some of the other variables cannot exist due to unavoidable stakeholder behavior. We look to the future with the hope that research will help stakeholders work around difficult problems which seemingly cannot be worked through.

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