

Importance of Social Capital

Marine protected areas should factor in social capital—the relationships, networks, norms and sanctions that connect different people and institutions

The Statement adopted on 22 January 2009 at the workshop in Chennai on “Social Dimensions of Marine Protected Area Implementation in India: Do Fishing Communities Benefit?” (see page 24) called for greater participation of fishing communities in the selection and management of marine protected areas (MPAs), and greater social justice in decisions that determine the distribution of benefits from MPAs.

The importance of the social aspects of MPAs has also been highlighted in a recent study undertaken by the author in Mozambique. The study examined the relationships between artisanal fishers

fishery management and increase local economic benefits. Evidence from the Mozambique study suggests that the relationships or social capital between different users of an MPA (namely, fishers and the tourism industry), and the alliances made with the State can be used to both uphold and undermine an MPA. In the context of the study, Social capital refers to the networks, norms and sanctions that connect different people and institutions, and can have both a positive and negative impact on people’s behaviour. The social capital examined in the Mozambique case is shown to have a negative influence on compliance with the rules governing MPAs, and acts to exclude local fishers from sharing in MPA benefits.

To understand why an MPA fails, it is important to realize that MPAs are, in fact, property rights, and rely on social mechanisms and processes within society, such as laws and regulations, to function properly. The assumption made in rights-based management is that existing users of a marine resource, such as a coastal fishing community, will be willing to co-operate with the State when an MPA is sanctioned and will respect the rules governing the MPA. As a result, this will lead to compliance with the new MPA rules and better fishery management.

Traditions and customs

However, many fishing communities have, over time, generated their own sets of rules and sanctions that govern fishery resources. These rules are embedded within social mechanisms and processes, and manifest in the traditions and customs of a community. When an MPA is allocated, it can lead to conflicts due to the tensions between

and tourism operators using private and State-run MPAs, and compared them with open-access areas. The study indicates that when the relationships between different resource users and the State cannot be maintained, then the MPA fails, leaving the fishery resources vulnerable to overuse. The research reveals that MPAs are dependent on their social dimensions, which can be used by different agencies as exclusionary policy devices to reward and penalize different resource users from experiencing the MPAs’ benefits.

The Mozambique research and the Chennai Statement are useful for any coastal fishing community that may want to use MPAs to improve

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the rules governing the rights of fishers and the new rules governing the MPA. The property rights characteristics of an MPA operate to replace the rights of local fishers, transferring them to new institutions and resource users, such as non-governmental organizations (NGOs) and tourism businesses. The conflict between traditional fishing rights and the MPA manifests as low levels of social capital between resource users, and low compliance with MPA rules.

In the Mozambique study, low levels of social capital were observed in the MPAs due, in part, to the substitution of fishers' rights by the MPAs. This was highlighted by the limited contact arrangements made between the fishery and tourism sectors, and expressed in the low compliance with MPA rules. These tensions were compounded by a second factor: divisive political alliances between some State officials and tourism businesses. This was observed through the influence of the different revenues generated by tourism in the MPAs, driven by the ability

to market conservation and exclusivity to tourists. Overnight fees within the marine national park were, on average, US\$500 per night, compared to US\$100 outside the park. This provided sufficient incentive for government officials to renege on agreements to limit tourism, and instead promote a strategy of tourism expansion. This was in contradiction to a management plan agreed on between the government and conservation groups supporting the MPA, and resulted in an increase in competition for the fishery resources, between tourists and artisanal fishers.

What appears on paper to be an MPA that will conserve marine resources and provide local economic benefits, was, in fact, undermined by an unsustainable interest in tourism development. This has left both artisanal fishers and conservation groups feeling excluded in the management process, as the linkages between international tourism businesses and the government have grown stronger.

Using social capital to analyze MPAs can help build a better understanding

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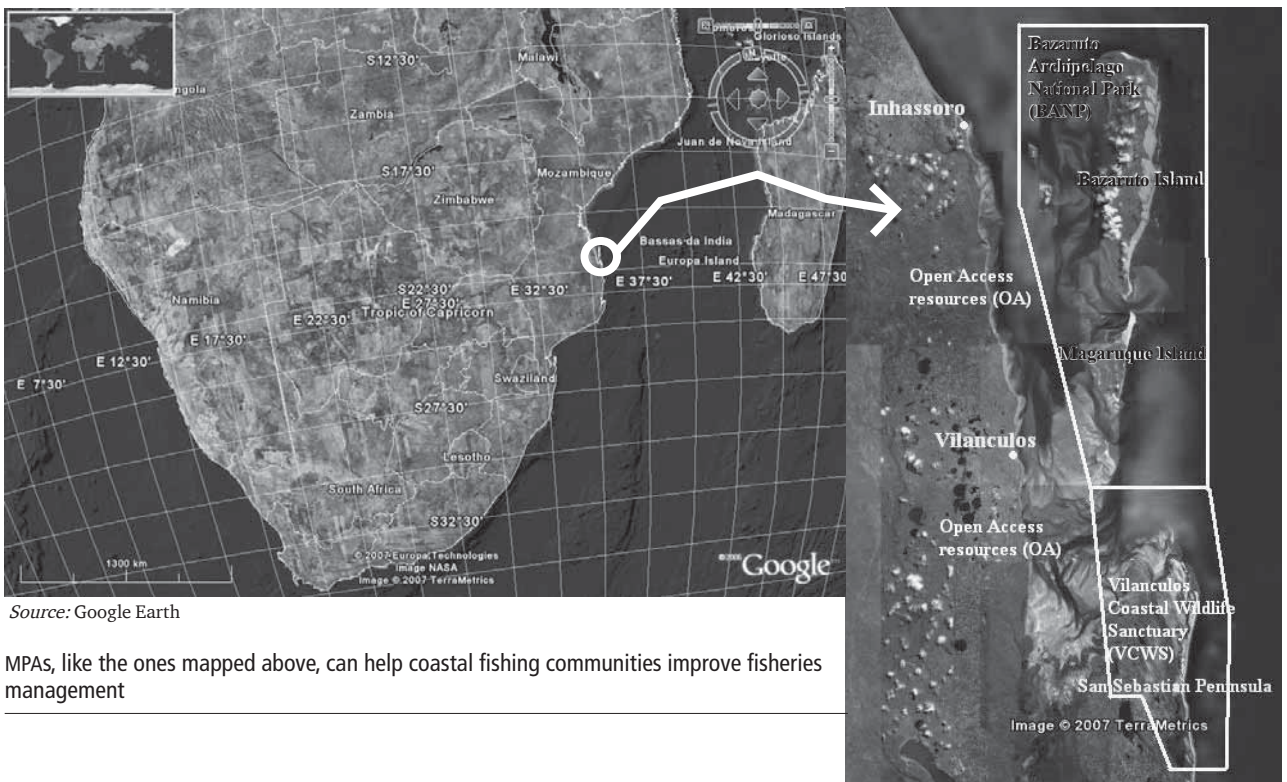
Fishers in Mozambique. In practice, MPA implementation may have few local benefits for fishing communities

of the contextual factors (both temporal and spatial) that work to undermine or maintain an MPA. Like other forms of capital, social capital can be used by people to do things collectively for the benefit of everyone. It is commonly associated with the ties and bonds that help communities to co-operate and manage a natural resource used communally. These include the connections and networks that build traditions and customs that, over many years, can be used by fishing communities to control use and access to a fishery.

These types of social capital are referred to as ‘bonding and bridging’ social capital, and determine how we interact and trust each other in close, similar communities. The type of social capital that helps us understand MPAs, particularly MPAs used by different resource users, is called ‘linking’ social capital. This is found in the connections that reach beyond our normal group of friends and communities, and connect people and institutions from different backgrounds and cultures as well as from different levels of power and resources. The Mozambique study focused on ‘linking’ social capital found in cross-sector linkages between artisanal fishers, tourism operators

and MPA governing institutions, and also the social capital found within ‘political society’, which is expressed in the political alliances forged between different sectors and the State.

So why is linking social capital important to MPAs? The answer lies, again, in the property rights characteristics of MPAs. When an MPA is allocated over traditionally managed fisheries, it is assumed that fishers will behave rationally and enter into an agreement with the new users of the MPA, such as the tourism operators in the Mozambique case. The assumption is that local fishers will be compensated for the loss of their fishing rights within an MPA, and, in return, will comply with MPA rules and respect the rights of the new users. However, this does not readily occur, as there is a cost in getting people together, to bargain and reach an agreement. This is known as a ‘transaction cost’, which can be reduced when there are high levels of social capital between resource users. In many instances, the ability to reach agreement can be hindered by language and different cultural understandings, and is normally left to the government to facilitate. However, governments have limited capacities and resources, and negotiations may



Source: Google Earth

MPAs, like the ones mapped above, can help coastal fishing communities improve fisheries management

Behavioural characteristic	Social Capital Indicators
Co-operation	Formal contact arrangements exist between different resource users of an MPA (artisanal fishers, tourism operators) and the institutions that govern the MPA MPA management groups represent all MPA resource users, including fishers, NGOs, the private sector and the State governing institutions
Compliance	MPA rules for fishing incorporate traditional knowledge/rules MPA rules are adopted by fishers through traditional fishing rules, and are endorsed by community institutions MPA regulatory mechanisms include fishers, NGOs, the private sector and the State governing institutions, including traditional fisher institutions
Bargaining	Fishing rights within an MPA are secured with political support, and maintained through ongoing positive political alliances with the State Fishing communities recognize the rights of new claimants to the fishery (tourism operators) within an MPA New claimants to the fishery (tourism operators) recognize the fishing rights of the MPA's previous users (artisanal fishers)
Benefits Distributions	Competition between different resource users leads to collaborative actions/activities that benefit everyone MPA benefits are agreed on and shared amongst different resource users
Compensation	Negotiations on MPA compensation involves the State and all resource users with rights to the MPA, including those with migratory fishing rights

involve more than one Ministry, making the process susceptible to corruption, with government officials bargaining to benefit themselves rather than local fishers.

The issue of compensation and bargaining becomes more complex as the number of users who have a claim to the natural resource within an MPA, increase. The Mozambique case considered only two types of users: artisanal fishers and tourism operators; but in many coastal regions, more sectors can be involved. The importance of linking social capital is its requirement to consider political alliances, which should be established at all levels of government if an MPA is to work.

In the Mozambique case, the company managing the private MPA with rights to the marine resources for 99 years, has established strong political connections at the highest level of government but has failed to build political support locally. This has meant that many local fishers ignore the rules governing the privately managed MPA, knowing that their actions will not be penalized by local government agencies. This has led to conflicts over enforcement, and

sanctions by the State and the MPA management company, and has resulted in higher costs to patrol the MPA boundaries.

Social capital is not the only factor determining the sustainability of the natural resources within an MPA, as other political, economic and natural factors have an important influence on fishery sustainability. However, MPAs as property rights do represent a series of relationships between the different resources users, and if these relationships cannot be maintained, the MPA fails, and resource depletion ensues. In practice, social capital cannot be measured directly and has to be assessed through proxy indicators.

The table above lists some of the indicators used to identify positive levels of social capital in the Mozambique study. The indicators can act as a guide or checklist for any coastal community that is considering using MPAs to improve fishery management and attract tourism activities.

Compliance

An example identified in the table is the issue of 'compliance' to rules governing MPAs. This can be illustrated from the Mozambique case by the different

management approaches adopted to address traditional fishing rules. The management regimes in the MPAs do not recognize traditional fishing rules, which has resulted in conflicts and low compliance with MPA rules. In the open-access areas outside the MPAs, traditional fishing rules are recognized by State governing institutions

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and are integrated into several co-management initiatives. This is driven by the need to develop low-cost fishery management measures, and includes a closed fishing season for beach-seine fishing, and no fishing on religious holidays. The rules are sanctioned by the fishing community through collective ceremonies, and by the State through legislation. This approach has resulted in good compliance to traditional and State fishing rules, such as boat registration and fishing licensing. It has also encouraged some tourism operators to adopt the same approach to limit fishing in front of tourism lodges. Such arrangements are

independent of the MPAs and have been agreed on by fishers as traditional rules through collective ceremonies attended by representatives from tourism businesses. These arrangements function through mutually beneficial contacts, with tourism businesses providing boat transport to the community in exchange for compliance with the new fishing rules from fishers.

For policymakers and outside agencies, such as NGOs and international conservation groups, MPAs can appear to be a panacea for natural resource conservation. However, it is important that there is greater contextual knowledge and understanding of the setting in which MPAs are to be used. It requires a re-focus away from defining and delineating an MPA boundary, to gain better understanding of the social, ecological and political realities of a place. This would involve a critical examination of the relationships between existing resource users, the State and external interests, before an MPA can be effectively allocated. It is also imperative to consider if the allocation of an MPA is necessary to achieve environmental sustainability, as it may be as effective to invest in developing relationships between different resource users and the State, which are the building blocks for managing coastal fisheries. 3

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A pair-fishing craft off the Barrai Peninsula, Mozambique. Local fishers ought to be compensated for the loss of their fishing rights within an MPA

For more



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Western Indian Ocean Marine Science Association (WIOMSA)

icsf.net/icsf2006/jspFiles/eastAfrica/index.jsp

East Africa: A Small-scale Fisheries Perspective

www.gnungung.com/literature/nrm.html

Social Capital and Natural Resource Management