

Assessment of Fisherfolk Organizations and Beach Management Units (BMU) in the Management of Fishery Resources in Diani-Chale, Southern Kenya

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ABSTRACT

The Diani Chale fishery at the Kenyan coast is facing intense pressure of over-exploitation by communities living along the coastline. Fishing is the main source of livelihood to many families and unregulated exploitation of the resource would impact negatively on thousands of families. The Fisheries Department has the mandate to manage fisheries resources; however the convectional top-down approach in implementing government policies has not succeeded in regulating coral reef fisheries and preventing overexploitation. Consequently, the government has designated Beach Management Units (BMUs) as a mechanism to involve fishers in co-management of fisheries, requiring fishers at a landing site to take on many management roles. The study examines the ability of existing fisher groups and organizations in areas of group membership, election of officials, financial resources and accountability to determine how well prepared fishers are to function as BMUs.

Groups were found to have very low levels of transparency and accountability, and mismatched priorities between officials and members. Though fishers see themselves as poor and look to external agencies to provide funding, 82% of the resources the groups utilize come from internal sources and suggest much greater levels of independence than they recognize. The gaps between the expectations in the BMU regulations and the capacity of fisher folk are highlighted and some of the capacity building needs and recommendations for implementing BMU regulations in Diani-Chale are provided.

INTRODUCTION

The Kenyan coastline is rich in marine resources and biodiversity. Many communities depend on the marine and coastal environment and its associated resources for their livelihood. Marine fishing directly and indirectly employs approximately 20,000 people (Tunje, 2002), and provides monetary incomes to

Obura, D.O., Tamelander, J., & Linden, O. (Eds) (2008) Ten years after bleaching - facing the consequences of climate change in the Indian Ocean. CORDIO Status Report 2008. Coastal Oceans Research and Development in the Indian Ocean/Sida-SAREC. Mombasa. <http://www.cordioea.org>

Table 1: Objectives for group formation.

Ranking	Objectives	No. of times mentioned by		Total
		Members	Officials	
1	Development/Self Reliance	10	10	20
2	Advocacy/Fisher Rights	3	9	12
3	Equipment Purchase	5	6	11
4	Fishers Welfare	5	5	10
5	Conservation/Sanitation	0	3	3
6	Market Fish	0	2	2
7	Revenue Collection	2	0	2
8	Conflict Resolution	1	0	1

about 70% of the coastal communities in Kenya (Malleret & King, 1996). In many tropical regions high population, influx of immigrants, poverty and unemployment have exerted pressure on coastal resources including fisheries. Management of artisanal fisheries under these conditions is challenging as resource users have few alternatives to enable them to ease pressure on resources. Co-management is an important tool in empowering resource users to better manage their resources.

In Kenya the government has drafted legislation to establish Beach Management Units (BMU) as the basis for co-management of fisheries, for marine and inland fisheries to broaden stakeholder participation in fisheries management. Formally, the BMU is envisaged to consist of three main components: an Assembly, an Executive Committee and Sub-Committees. The BMU, through its by-laws, shall provide for the establishment of Sub-Committees depending on the need. The Executive Committee shall elect its ordinary members to head each Sub-Committee while the Assembly shall elect members to serve in the Sub-Committees. The Membership of the Beach Management Unit would be subject to meeting certain regulations.

The main objective of the Beach Management Unit is to strengthen the management of the fish-

landing stations, fisheries resources and the aquatic environment (DFRE/ILM 2003). It is also expected to support the sustainable development of the fisheries sector, ensure the achievement of high quality standards of fish and fishery products and prevent or reduce user conflicts. According to the regulations, each BMU shall have jurisdiction over a beach, the geographical area that constitutes a fish-landing station. An official of the Fisheries Department shall designate a co-management area for each BMU in which the BMU shall undertake fisheries management activities jointly with the Department of Fisheries.

The official of the Fisheries Department shall then draft a Co-Management Plan for that co-management Area in consultation with the Beach Management Unit. The Co-Management Plan shall specify fisheries management measures that the BMU shall undertake to ensure sustainable use of the resource in their area of jurisdiction. In the case of a fishery or areas in which members of more than one BMU utilize the resource, the official of the Fisheries Department shall designate a joint co-management area.

The Beach Management Unit Regulations empower the BMUs to levy fees and other charges against its members and other users of the beach for the services that it provides, to raise income in order to meet its day-to-day expenditures. The levies would

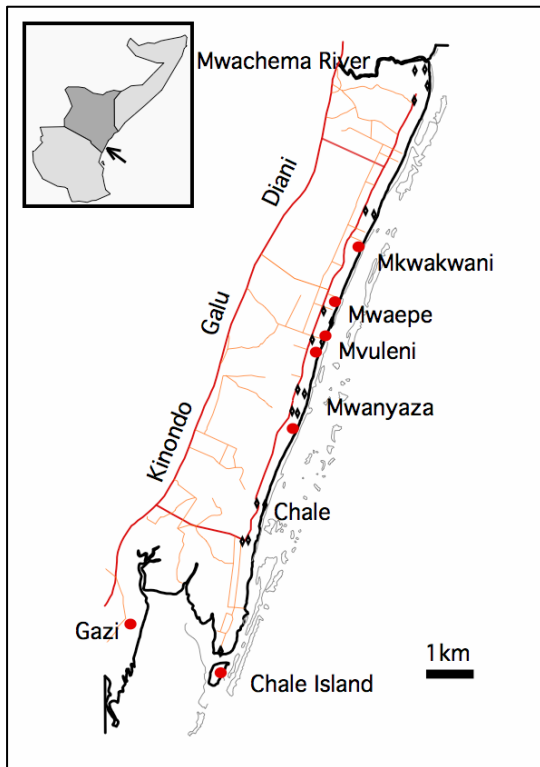


Figure 1: Map of Diani-Chale area showing the location of landing sites included in this study.

come from fishing vessels, fish traders and other facilities provided by the BMU. BMUs may also receive donations from the government, private persons and NGOs. The BMU would be expected to meet its own expenses from the funds generated. This includes the expenses incurred in the daily operations and payment of the employees as stated in its by-laws.

This study attempts to review and understand the status of local fisher groups in Diani Chale in relation to group composition, representation and leadership, to assess their capacity and readiness to adopt and undertake functions detailed in the BMU regulations. The study will identify some of the opportunities and constraints that exist concerning the implementation of BMUs and conclude by with suggestions on capacity necessary to meet the responsibility being delegated to the fishers by the government.

Table 2. Names and acronyms of fisher groups, year of registration, last election and the number of elections held.

Acronym	Group name	Registration	Last Election	Elections held
GFSHG	Gazi Fishermen Self-Help group	2002	2002	1
GBMC	Gazi Beach Management Committee	2004	2005	1
MFSHG	Mwaepe Fishermen Self-Help group	1997	2003	1
MVFSHG	Mvuleni Fishermen Self-Help group	2003	2003	1
MZFSHG	Mwanyaza Fishermen Self-Help group	2004	2004	1
CFSHG	Chale Fishermen Self-Help group	1997	2004	1
SCFSHG	South Coast Fishermen Self Help group	2003	2006	1
MKFSHG	Mkwakwani Fishermen Self-Help group	2006	2006	1

METHODS

The study focuses on 6 landing sites of Diani Chale area of Kwale District that stretches from the Mwachema river to Gazi Bay in the south (Alidina 2004): Mkwakwani (Trade winds), Mwaepe, Mvuleni and Mwanyaza in Diani location, and Chale and Gazi in Kinondo location (Fig. 1). A total of 8 fisher organizations were studied (Table 1), 5 from Diani and 3 from Kinondo. Three officials and five group members from each organization were sampled and interviewed separately in order for the respondents to speak with confidence and for the officials not to dominate responding to the questions.

A structured questionnaire was developed and administered to the groups capturing the following key areas:

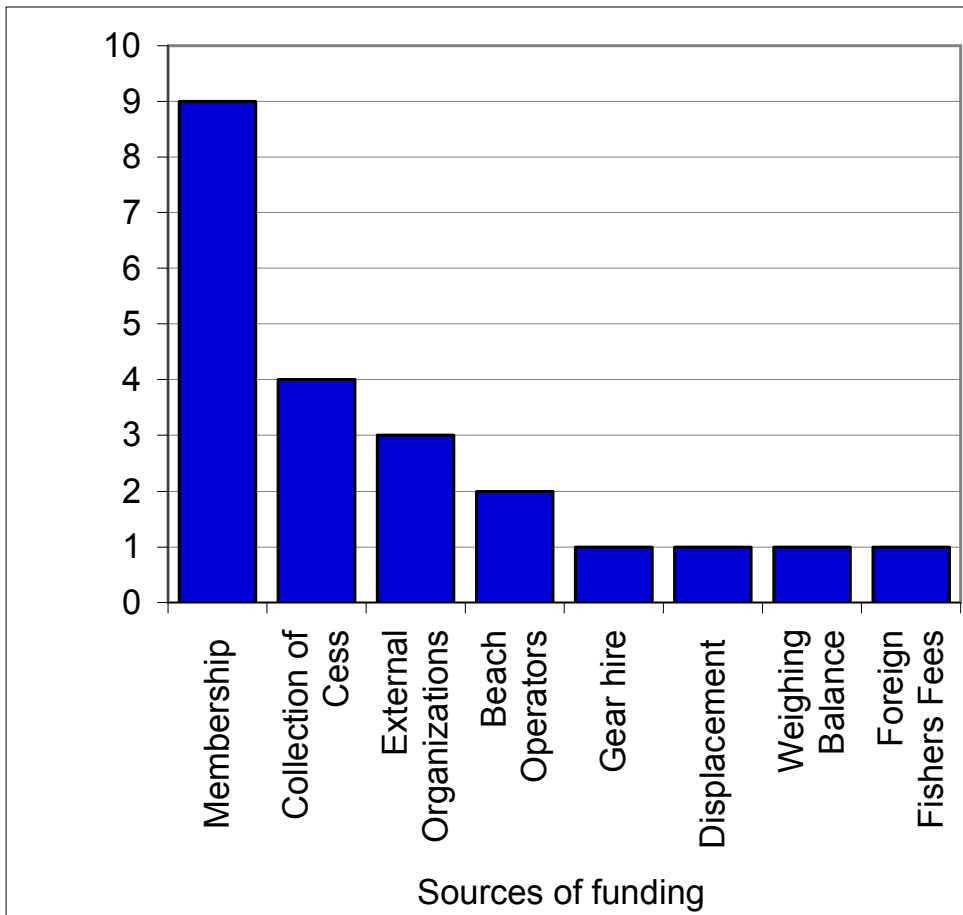


Figure 2. Sources of funding for fisher groups. Notes: Membership - fees/monthly contribution within the group; Displacement – remuneration for moving off previous site; Vessel Hire - paid by researchers and tourists for use of group vessel.

- Objectives for the group formation
- Group administration, election and meeting patterns
- Membership fee structure, Other charges and accountability
- Funding for the fisher groups
- Total annual income
- Expenditures for the fisher groups
- Resource management and Conservation

Secondary data sources largely consisted of literature from CORDIO East Africa (Organizational

Capacity Assessment Report for MFSHG and CFSHG), PACT-Kenya (Capacity Building in the Environment Sector) (OCA) and the Fisheries Department, Mombasa (FD). Data was augmented by personal interaction with the groups, observation on resource use practices during field visits and engaging fishers through informal discussions.

RESULTS

The main objective for the formation of fisher groups

Table 3. Group membership fee structure, landing charges and accountability (amounts in Kenya shillings).

Groups	No of members	Membership fees	Monthly subscriptions	Cess (Ksh/kg)	Financial Reporting	
					Officials	Members
GFSHG	60	500	50	2.00	Yes	No
GBMC	9	100	n/a	n/a	Yes	No
CFSHG	60	3000	n/a	5.00	Yes	No
MZFSHG	30	50	50	n/a	Yes	No
MVFSHG	33	200	30	1/3 part	Yes	No
MFSHG	36	100	50	n/a	Yes	No
S/CFSHG	100	200	n/a	n/a	Yes	Yes
MKFSHG	50	n/a	50	n/a	Yes	Yes

in Diani Chale was initiation of development projects to improve their living standard and achieve self-reliance (Table 2). Advocacy for fisher rights, equipment/gear purchase and fishers welfare were mentioned as additional objectives. Revenue collection and conflict resolution were stated as objectives by members, but not by officials. Conversely, conservation/sanitation and marketing of fish was an important objective for group officials but not to the membership.

Fisher groups in Diani Chale had from 9-100 members (Table 1). Elections were only done once when groups were initially formed but not thereafter. Some officials retained leadership for 3-7 years and there was frequently collusion of family members serving as officials. In addition, group by-laws were not followed by the leadership or members.

The main sources of funding among the fisher groups were membership fees (both a joining fee and monthly subscriptions), collection of cess, donations from external organizations, contributions from beach operators, and charges on use of their weighing

balance (Fig. 2). Hiring out of fishing vessels, levies from foreign fishers and remuneration for moving off the previous site were among the least mentioned sources of income among the groups.

Membership fees varied (Table 3) with Mwanyaza charging as low as KSh 50/- and Chale as high as KSh 3000/- (i.e. from US\$ 0.60 to US\$ 40), but average around KSh 400. Chale Fishermens Self-Help group started with a joining fee of KSh 100 but increased this to KSh 3,000. Those groups that charge cess on fish traded, collected from KSh 2 - 5 per kg (e.g. Gazi and Chale, respectively). The group in Mvuleni owns a motorized boat and divides its catch into three parts: one part is split among the fishers, the second is sold and goes towards boat maintenance and the third is deposited in the group's bank account. Overall, internal sources of funding comprised 82 % of all responses (18 out of 22) with external sources comprising 18%.

The total annual income reported by the fisher groups in Diani Chale (Fig. 3) ranged from KShs 10,000-60,000 per year. MVSHG group reported the

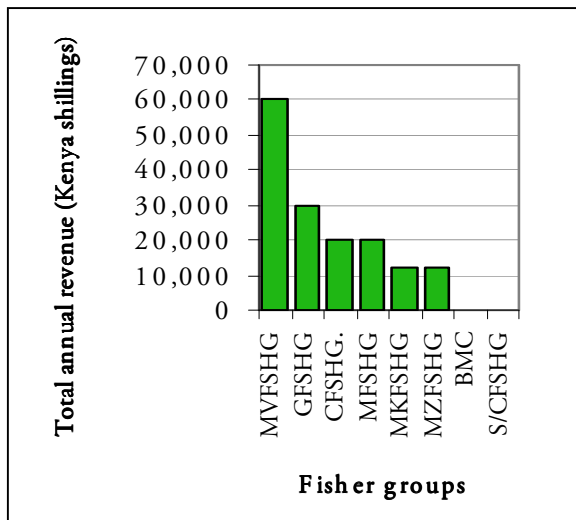


Figure 3 Total annual income for the fisher group in Diani-Chale.

highest level of income followed by GFSHG at KShs 30,000. CFSHG and MFSHG had the same amount of income at Kshs 20,000, while MKSHG (Trade Winds) and MZSHG had slightly above Kshs 10,000 each. GBMC and SCFSHG did not report their earnings.

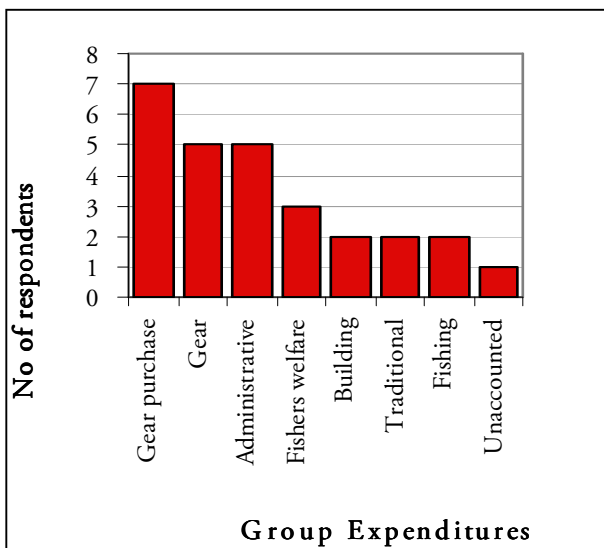


Figure 4. Areas of expenditure among fisher groups.

Fisher groups spent their income primarily on gear purchase and maintenance, administrative functions and fisher's welfare (Fig. 4). Construction and maintenance of buildings at the landing sites, traditional sacrifices and fishing expenses were also mentioned. Some funds were reported by groups members to be spent on 'unexplained circumstances'.

Fisher groups in Diani Chale lacked financial discipline and management. The membership and officials gave conflicting responses about financial reporting. It is only in two groups (SCFSHG and

MFSHG) where both the officials and members agreed that reports were ever tabled. Although the officials from all the groups claimed tabling their financial reports, members from six fisher groups denied ever receiving them. None of the groups have prepared audit reports. The activities of fisher groups were reported very differently from one landing site to another (Fig. 5). General landing site hygiene was mentioned by all groups except Mwaepe, Mwanyaza, and South Coast Fisher Group.

Chale, Mkwakwani, Mvuleni and Mwanyaza are involved in regulating the operations of traders at their landing sites by deciding which traders buy their catch. Fisher groups like Mvuleni, Mwanyaza and GBMC have managed to control the use of illegal fishing gears. Four fisher groups, Mwaepe, Mkwakwani, Mwanyaza and South Coast Fisher Group have not been involved in any role in the management and conservation of resources. Mkwakwani fisher group is the only group in Diani Chale that has managed to control invasion by external fishers using destructive beach seines into their fishing zones.

DISCUSSION AND CONCLUSIONS

In Diani-Chale fishers form groups to improve their standard of living, earnings and fishing capacity. Members focus on revenue collection to support their livelihoods, gear purchase and fishers welfare. However, officials tend to focus on resource

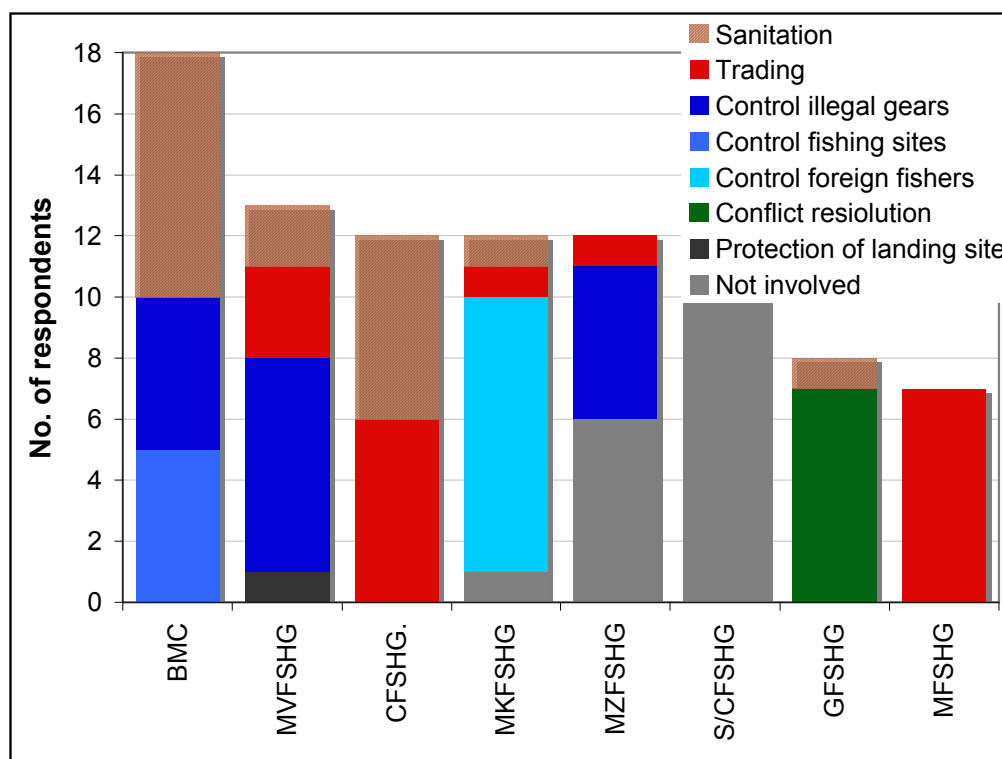


Figure 5 Activities of fisher groups relevant to resource management and conservation.

management, conservation and marketing. However no single group has managed to initiate a development project to raise incomes on its own. Putting development agenda as a priority among some groups could have been influenced by the perception that coming together as a group would attract donor funds; however many such groups disintegrate soon after they realize such funding is not forthcoming (Mulwa 2002) The South Coast Fishermen Self-Help group and Gazi Beach Management Committee existed on paper but during surveys were not found to be functional.

The primary sources of income for the groups are internally generated: membership, cess and other fees accounts for 82% of their income. Thus the fisher groups are primarily self-funded, in contrast to their perceptions that they are not able to undertake any activities unless funded externally. There is high variability in total income reported by the

respondents; it is unclear how accurate the amounts reported are since officials from some groups avoided questions related to finances while in others they are likely to have under-reported their earnings fearing loss of support they already enjoy.

The expenditures of the groups primarily related to direct fishing costs that include gear purchase and maintenance, administrative functions, fisher's welfare, building of the bandas and maintenance, traditional sacrifices and other miscellaneous costs. No groups reported any excess funds available for major savings or investment, or that could be used to support broader co-management activities anticipated for BMUs. Further, the groups do not operate revolving fund schemes through which members have the opportunity to save or access loans through the group structure, an activity common to other community-based groups.

Importantly, the groups lacked honesty,

transparency and accountability; few financial reports are tabled to the members, leading to continuous suspicion and conflict. Elections are held irregularly with some groups retaining the same leaders up to 7 years in office. This situation contributes to, or is a product of some infighting and lack of trust among group members. Further, some landing sites have several fisher groups established, some of which are confrontational and in conflict with each other, showing several levels of conflict among fishers at a landing site that obstruct open and accountable action.

The expectations and requirements of setting up and running an operational Beach Management Unit are quite demanding. From our analysis most landing site institutions are nowhere near the required level in terms of their human capacity, skills and experience to undertake tasks such as conflict resolution and management of resources. It is therefore important that during establishment of BMUs the Fisheries Department should ensure there is adequate preparation, capacity building and technical support provided to fishers. Two of the most important areas are:

1. Lack of trust and open-ness within and between groups is a significant barrier to transparent and accountable activities at the group and landing site (BMU) levels. For example, fisher groups do not conduct revolving fund schemes, as the lack of trust within groups undermines each individual's confidence that their savings will be safe and can be used when needed. Training and assistance in democratic and equitable organization of the groups is critically important to future BMU success.

2. Although the groups have shown the ability to generate funds locally, the high dependence on membership fees and other forms of local funding both discourages the involvement of many fishers in the groups and constrains how much the groups can achieve. BMUs will need additional sources of funding to support their new responsibilities, including a regular financial disbursement from the central government in recognition of the responsibilities devolved from government.

Implementation of BMUs should be conducted on a case by case basis and should consider previous interventions at the landing sites and why they may have failed. Some landing sites have several fisher groups established, some of which are confrontational and in conflict with each other. Many such fisher groups have assumed responsibilities of managing landing site activities and have assumed some Beach Management functions. Other local institutions may also be relevant, such as the Diani-Chale Management Trust (DCMT) in the study area, which was established in 2001. With a coastal area management focus, it has been attempting to establish an overarching fisheries/reef management role for some years, though with limited success. Establishing new BMUs in Diani-Chale must build on these groups and institutions and gain their support rather than isolating them and imposing new structures that may be rejected. Among other problems, these pre-existing groups might compete for revenue with the Beach Management Units. Already in Diani Chale the DCMT considers Beach Management Units in the area as competitors, a conflict that must be resolved to avoid further conflict and competition.

Finally, as with most other issues that relate to fisher landing sites in Kenya, land tenure is a major constraint. The majority of the designated landing sites are on private land, therefore their existence is threatened and future occupancy is not guaranteed. This has been an issue that has preoccupied fisher's minds and has discouraged management or development interventions in Diani-Chale – without security of land tenure no permanent structures can be built at the landing sites.

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