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THE POTENTIAL FOR FISHERIES CO-MANAGEMENT IN THE SOMALI REGION

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This report outlines the basic principles of cooperative management (co-management) and explores how it has been successfully implemented in four African fishing communities with the goal of identifying strategies that may be equally beneficial in the Somali region. It describes case studies in Kenya, Tanzania, Mozambique, and Liberia, examining the benefits and challenges of co-management implementation and useful lessons for the Somali region. The case studies were presented at the Somalia Fisheries Forum 2019 and audience feedback is incorporated here as a starting point for discussions of what co-management might look like in the Somali region. Co-management offers tools to fill in gaps in fisheries management in the Somali region and promote long-term livelihood security.

I. SOMALI FISHERIES

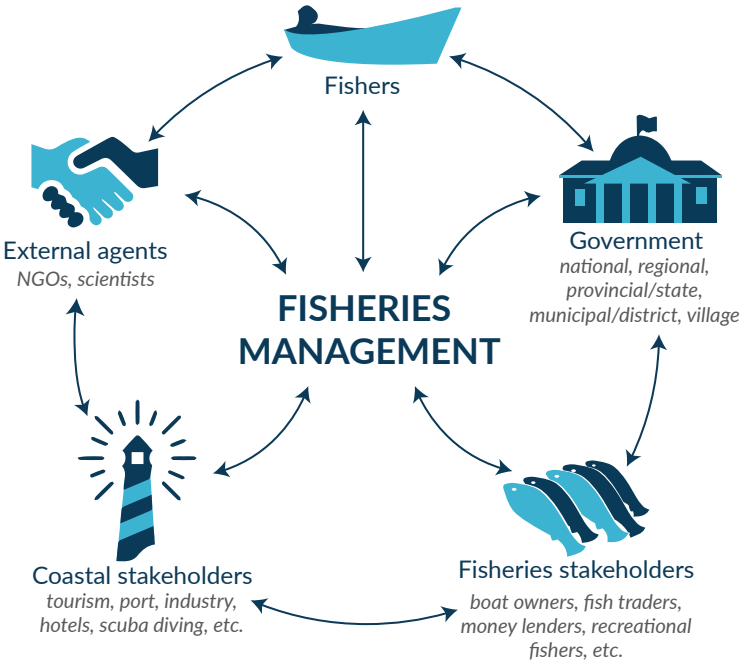
Small-scale fisheries in the Somali region are of growing interest to the government and the international community for their potential to provide local livelihood security. This nascent but important sector uses artisanal methods to fish for tuna, sharks, reef fishes, lobsters, and others that are sold locally or regionally. Though fishing is vital to livelihoods on the Somali coast, it has only recently been recognized as an area that could provide long-term economic benefit to the region. Now, federal and member-state governments are acknowledging the possibilities of the sector and are making strides toward managing marine resources by rewriting their fisheries laws and supporting local-level management.

These local management efforts are in early stages, but they are important steps toward building a long-lasting fishing sector for the region. For one, local management may be able to address some of the challenges that have plagued the Somali region. Second, foreign fishing has been a continuous source of conflict in nearshore waters. Whether this fishing is legal or illegal, communities feel helpless to protect their fishing grounds and the government does not currently have the capacity to assist them. Building fisheries management systems that include a governing body, regulations, and thorough plans to address these issues on a local level is simpler and less costly than developing one system that will work for the entire diverse region.

Additionally, lack of fisheries data makes it impossible to develop a full understanding of the health of fisheries resources, which is needed to determine how to maximize the benefits of the fisheries for local communities in both the short and long term. While a region-wide data collection system is ideal, collecting local data can provide valuable information about the specific fisheries on which communities depend, building an understanding of how, where, and how much to successfully fish. By implementing local management, Somalis can take ownership over their resources. If enough communities become involved, fisheries management for the entire Somali region will improve and fishers everywhere will benefit. This report explores one approach to managing fisheries at a local scale that combines local community and government participation. This participatory approach, termed cooperative management (co-management), is benefitting many fishing communities across the globe and may be a useful approach in the Somali region.

By implementing local management, Somalis can take ownership over their resources. If enough communities become involved, fisheries management for the entire Somali region will improve and fishers everywhere will benefit.

II. WHAT IS FISHERIES CO-MANAGEMENT?



Co-management is a governance structure that establishes a partnership between resource users and government to manage resources. The co-management strategy relies on participation by multi-sector stakeholders to develop a local community plan for fisheries management to ensure long-term livelihood security. Community user groups, all levels of government, the fishing industry, non-governmental organizations (NGOs), international donor organizations, and academic institutions cooperate to create an organization and framework for localized fisheries management that serves all parties impacted by management measures.[1] Co-management is an appealing strategy for addressing fisheries management challenges for governments with low institutional capacity that nevertheless are highly motivated to support fishing communities and economies.

Co-management requires a participatory approach that is tailored to meet the needs of the community and stakeholders. Stakeholders are represented by any person or group that is interested in or affected by fishing. Primary stakeholders are those directly impacted by co-management activities, and thus those who have the highest level of participation in the process.[2] Primary stakeholders usually include fishers, boat owners, boat crew members, traders, processors, and others directly involved in the fishing sector. Local government can also be a primary stakeholder. Secondary stakeholders are more peripheral: people or groups that have an interest in fisheries management but do not necessarily depend on it for their livelihoods.[3] Secondary stakeholders generally include local, regional, and national governments, community members, NGOs, international donor organizations, scientists, and private-sector actors. Consultation with all stakeholders is important, but the primary stakeholders are most directly involved in making decisions.

The overall governance structure, the level of engagement by stakeholders, and the co-management modality can vary depending on the cultural and political context of a location, leading to different types and formats of co-management.[4]

Government involvement can range from maintaining centralized control to relinquishing control to the community. The flow of information from the community to the government and vice versa determines the class of co-management. As quoted from Pomeroy and Rivera-Guieb, co-management can be classified as:

- **INSTRUCTIVE:** There is only minimal exchange of information between government and fishers. This type of co-management regime is only different from centralized management in the sense that the mechanisms exist for dialogue with users, but the process itself tends to be government informing fishers on the decisions they plan to make.
- **CONSULTATIVE:** Mechanisms exist for government to consult with fishers but all decisions are taken by government.
- **COOPERATIVE:** This type of co-management is where government and fishers cooperate together as equal partners in decision-making.
- **ADVISORY:** Fishers advise government of decisions to be taken and government endorses these decisions.
- **INFORMATIVE:** Government has delegated authority to make decisions to fisher groups who are responsible for informing government of these decisions.[5]

To facilitate communication between the community and the government, a co-management organization is created to represent the interests of the community and stakeholders as a unified voice in communication with the government. They often create bylaws that are approved by a high-level government to be the foundational documents for local management functions, outlining the mission and goals of co-management for a specific community. Bylaws may include a monitoring and evaluation framework, financial plans, and resource management plans.

Depending on the needs of the community, the functions of the co-management organization may include:[6]

- Setting fishing areas and boundaries, including creating protected areas.
- Collecting catch data.
- Conflict mitigation.
- Enforcement and compliance monitoring.
- Issuing permits or licenses.
- Creating gear restrictions.
- Collecting fees.

Co-management has been implemented in fishing communities around the world with great success. In many cases, more transparent, participatory systems lead to a greater sense of ownership over resources by the community. This empowerment leads to greater compliance with regulations and use of community enforcement that removes some responsibility from the government.[7] Especially when regulations and conservation areas are included, co-management can improve catch and overall health of the local ecosystem.[8]

While successful co-management systems benefit many communities, they may not be the right management approach for every community. The cultural context at the local and national level is a critical factor to consider prior to and during co-management implementation. The process should be community-driven, with buy-in and leadership established by resource users at the outset. Co-management implementation is a time-consuming process that can interfere with everyday activities of community members. For a co-management unit to be self-sustaining, the process usually requires a three- to five-year commitment with frequent active participation by all involved. In some cases, the cost of time resulting in income loss for participation is higher than the rewards of implementing a management system requiring a high level of community participation. There may also be resistance by stakeholders to shifting power, and secondary stakeholders lacking a complete understanding of primary stakeholders' needs may undermine existing traditional community-management mechanisms.[9] Some of these pitfalls can be avoided through the participatory process, but others may not be remedied, and ultimately, the disadvantages may outweigh the benefits in some communities.

Co-management has not yet been implemented in Somali coastal communities, but it is worth assessing whether it could be a successful approach in the region, especially in areas where there is not yet a management system in place. This document provides examples of successful co-management systems in locations that are similar to Somali coastal communities. By examining strategies that have worked in other places, new co-management implementation efforts can be well-informed and have a greater chance of succeeding.

Co-management has been implemented in fishing communities around the world with great success. In many cases, more transparent, participatory systems lead to a greater sense of ownership over resources by the community.

Community meeting in Tanzania. Photo: H. Holmes/RTB.

III. CASE STUDIES

We selected case studies from Kenya, Tanzania, Mozambique, and Liberia based on their size, their proximity the Somali region, the availability of detailed information about the co-management process, and the challenges and advantages. These case studies describe who is involved, the activities necessary to develop a successful system, the benefits of implementing co-management, and the challenges faced during the process. By examining these case studies, Somali coastal communities may be able to avoid pitfalls and build on others' strategies to effectively manage their fisheries and reduce conflict through local resource governance.

At a national level, each case-study country has a colonial history like the Somali region, with civil strife that impacted coastal livelihoods at some point. Each country has transitioned out of conflict to be led by a central government, but the capacity for national-level enforcement of fisheries regulations remains fairly low, leading to frequent illegal, unreported, and unregulated (IUU) fishing by domestic and foreign fishers. In the cases of Liberia and Mozambique, resource competition is extreme enough to cause conflict between local and foreign fishers, a situation also present in Somali waters. Co-management helps alleviate this conflict through delineation of fishing boundaries and localized enforcement. In addition, prior corruption leading to mistrust of the central government makes current authorities ineffective at the community level. Co-management was introduced in each of these countries to counteract some of that mistrust by involving the community in decision-making rather than imposing strictly top-down mandates.

> *By examining these case studies, Somali coastal communities may be able to avoid pitfalls and build on others' strategies to effectively manage their fisheries and reduce conflict through local resource governance.*

At the community and resource levels, the case-study locations resemble much of the coastal Somali region. In each case study, fishing is central to livelihood security, and the primary fishing activities are small-scale traditional and artisanal. Prior to co-management, fisheries were managed through open access with few, if any, restrictions. As a result, the nearshore marine environments that include sensitive areas like coral reefs were subject to overexploitation, and declining fish stocks led governments to take action by supporting local management rather than national-scale legislation.

Though government support is vital to co-management success, in places with nascent fisheries management systems there are economic barriers to expanding the fisheries sector. Few government resources are devoted to managing small-scale fisheries in the case-study locations. Instead, funding for local management comes from members of the international donor community who are consulted as stakeholders throughout the process. An additional financial obstacle is the lack of cold-chain capacity to produce high-quality fish products, precluding trade in lucrative export markets. Though the scale varies by location, the communities analyzed here are limited by the lack of cold-chain capacity, except in Mozambique, where exporting shrimp is a major economic driver.

While each case study shares many similarities with Somali coastal communities, an exact analog in another country is, of course, impossible to find. The differences among the communities presented here and Somali coastal communities are important to note when evaluating the potential efficacy of co-management in the Somali region. These differences mean that certain strategies that may work in the case-study locations may not be applicable in Somali coastal communities.

Nationally, each case-study country enjoys more peace and security than the Somali region. The persistent violence and insecurity in some areas of the Somali coast make co-management implementation incredibly challenging. Kenya, Mozambique, and, to some extent, Tanzania have better infrastructure than the Somali region, facilitating greater stakeholder access to coastal communities. This infrastructure, combined with a longer history of fishing and the presence of inland fisheries, translates to higher consumption of fish in the case-study countries, especially beyond the coastal communities. Lower levels of fish consumption in the Somali region translated to fisheries management not being a government priority until recently. Now, growing attention is being paid to the potential of fisheries for income, food security, and national profits, with the federal government lending greater attention and resources to fisheries management efforts.

In some ways, the small-scale nature of Somali fisheries is beneficial for the implementation of co-management. Mozambique and Liberia have the added resource-sharing complication of having a domestic industrial fleet that competes with small-scale fishers. Because there is no domestic industrial fleet in the Somali region, there is one less stakeholder to consider in the co-management process. There is also little tourism in the Somali region at present, especially when compared to Kenya, where tourism is vital to coastal employment. While tourism should be considered in planning for the future, its current absence also simplifies Somali co-management efforts.

In the following case studies, a color coding system is used to highlight characteristics that are:

Unique to a particular case study
Featured in all case studies
Featured in a subset of case studies

Co-management in

MKUNGUNI | KENYA

National Context

Though fisheries in Kenya had traditionally been managed locally, the national government took over fisheries management in 1989 after Kenya's independence. This newly centralized system had little input from local fishers and stakeholders and resulted in major fisheries declines and near-collapses because of environmental damage, fishing conflicts, and the use of illegal and destructive gear. As a reaction to the negative results of the national system, the Kenyan government instituted a system of co-management in 2006 called Beach Management Units (BMUs).[10] National legislation established these local management mechanisms on the Indian Ocean coast and empowered them to create their own federally approved bylaws, including boundaries and protections for their fishing areas. The BMUs govern fishing, but often go a step further toward conservation by establishing community-based no-take marine reserves. Though they are not always successful at increasing fish biomass (and therefore, catch), the ability to establish these protections is a useful tool for the local fisheries managers. When they are complied with, the no-take reserves yield positive results for the marine ecology and thus for the fishers.[11] Though the initial reaction of fishers to this co-management approach was skepticism, over time that diminished. Most fishers saw the BMUs as having no negative effect on their livelihood, and some said they were beneficial.[12]

Case Study Profile

Much of the information in this case study is based on the co-management 5-year plan for the Mkunguni BMU developed by Coastal Oceans Research and Development-Indian Ocean (CORDIO) East Africa, the State Department of Fisheries, and the United Nations Development Programme (UNDP).[13] Mkunguni is a fishing village on the coast of Kenya, approximately 88 km south of Mombasa, Kenya's largest coastal city. The BMU represents five villages which together have 11,000 households primarily comprised of members of the Digo tribe, one of the Bantu groups in Kenya. They are historically traders, farmers, and fishers. The ocean near shore supports coral reefs, seagrasses, mangroves, and other important habitats that hold a high diversity of fishes, including the commercially important rabbitfish that breeds near Mkunguni. The Mkunguni BMU manages about 150 fishers who are considered either "dominant locals" or "resident migrants." These fishers use a variety of gear including traps, nets, and lines to catch demersal fishes, pelagic fishes, and invertebrates. The BMU has implemented some management measures regarding restrictions on gear and fishing areas to conserve the important fisheries and livelihoods in the area.

Lessons Learned

Though high levels of community involvement give local people more ownership over the resources, the government must remain involved and supportive of community activities to avoid shifting the full cost and capacity of enforcement onto the community.

Key Differences from Somalia

- Inland fisheries
- Greater peace and stablity
- Higher fish consumption
- Better fishing infrastructure
- Active tourism industry
- No tradition of locals having rights to control fishing access
- Well-established government institutions

Key Similarities to Somalia

- Colonial history
- High levels of government corruption and lack of trust
- Local people depend on fishing for their livelihoods
- Little national-level enforcement capacity
- High levels of illegal fishing
- Open-access fisheries before co-management implementation
- Low centralized national authority capacity
- Little financial support for fishing from the government. Funding is dependent on donors
- Main catch and marine habitats are similar for both countries
- Low cold chain capacity
- Artisanal fishing is the main activity, especially gillnetting
- Traditional fishing vessels that do not go far offshore
- No parity between local and national regulations/laws

Unique to this case study
Featured in all case studies
Featured in a subset of case studies

KENYA CASE STUDY

Co-management Type: **ADVISORY**

GOVERNANCE STRUCTURE

Structure

Elected executive committee
Assembly/committee
Sub-committees

Funding

Registration/permit fees
Tourism fees
Donor funding

Legal Framework & Foundational Documents

Local bylaws/rules
Monitoring and evaluation framework
Financing plans
Co-management plan
National registration
Fisher membership requirement

Management Functions

Set fishing areas/boundaries *(either exclusive or collaborative areas)*
Enforcement/compliance monitoring
Ban gear
Restrict access to certain people
Collect fees for tourism
Establish bylaws
Establish management plan
Monitoring and evaluation
Promote sustainability
Business management
Issue permits/licenses
Protect areas
Education

STAKEHOLDERS

Primary

Fishers
Boat owners
Boat crew
Boat builders & repairers
Net menders
Tour operators
Traders
Processors

Secondary

National government agencies
County/district government
Local/village government
Community members
Local tribes/tribal chiefs
NGOs/IGOs
Private sector
Scientists

CHANGE AGENT ACTIVITIES

Scientific surveys conducted *pre-establishment*

Marine resource survey (reef field survey)
Socioeconomic survey
Traditional management assessment

Community organizing activities *during establishment*

Co-management organization meetings
Involvement of surrounding communities
Full community meetings

Environmental education & capacity building activities *during & post-establishment*

Training on management/creating management plans
Survey results presented to community
Training on conservation
Training on health and safety
Training on data collection

CO-MANAGEMENT IMPLEMENTATION

Benefits

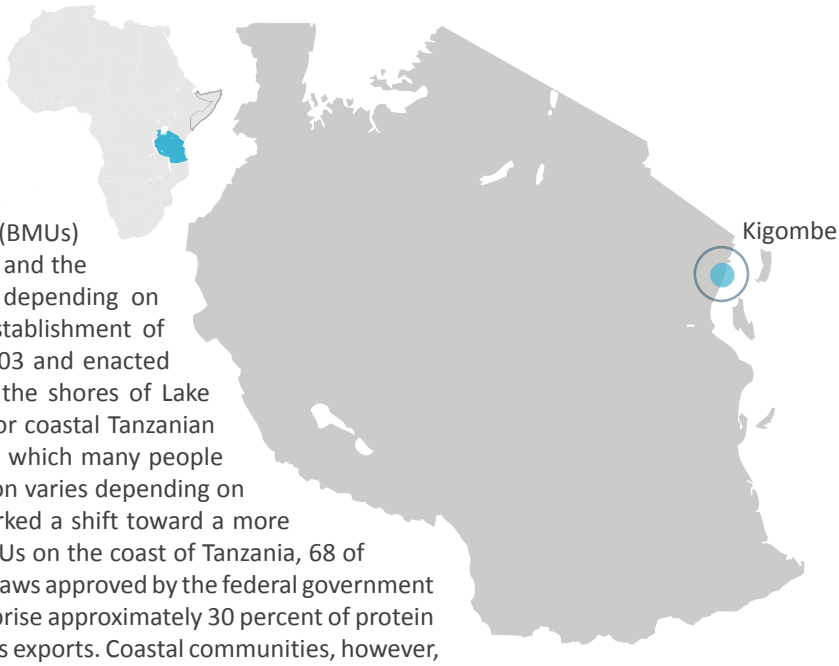
Greater community influence over resource use
Reduced illegal fishing
Improved infrastructure and capacity
Increased fish biomass *(with protected areas)*

Challenges

Poor compliance
Enforcement challenges
Lack of funding
Increased fishing effort *(instead of effective management)*
Lack of institutional memory after training
High turnover of leadership

Co-management in

KIGOMBE | TANZANIA



National Context

Tanzania implemented local beach management units (BMUs) in the early 2000s as a reaction to declining fish stocks and the resulting livelihood security issues for communities depending on fisheries. The central government encouraged the establishment of BMUs after they amended Fisheries Act No. 22 of 2003 and enacted the Fisheries Regulations of 2009.[14] BMUs began on the shores of Lake Victoria, but were quickly promoted as a useful tool for coastal Tanzanian villages to manage the rich coral reef environment on which many people depend. Though the degree of community participation varies depending on location, the implementation of these legislations marked a shift toward a more collaborative system. There are approximately 179 BMUs on the coast of Tanzania, 68 of which have management plans and 39 of which have bylaws approved by the federal government that fit within national fisheries regulations.[15] Fish comprise approximately 30 percent of protein consumption in Tanzania and 10 percent of the country's exports. Coastal communities, however, depend on the marine environment for the majority of their livelihood options.[16]

Case Study Profile

Kigombe is an example of a successful implementation of co-management that was facilitated by external actors, specifically non-governmental organizations working in the Tanga region of northern coastal Tanzania. Kigombe village is home to about 4,000 people. There are around 100 licensed fishers and 80 boats. The waters of this region contain productive ecosystems including coral reefs, seagrass beds, and mangroves that support a wide variety of species. As a result, the main source of income for Kigombe men is fishing for finfish, and for women, gleaning the reef for shellfish, octopus, and sea cucumbers, and more recently, farming seaweed. Though the environment is conducive to productive fisheries, degradation of these habitats from dynamite fishing, clearing of mangrove forests, and bottom trawling over seagrass beds led to declines in catch, alerting the community to the need for more robust fisheries management than was being provided by the central government.[17]

Lessons Learned

Making an effort to include the women in the fishing sector in co-management activities improves community participation which in turn leads to increased adherence to conservation and management regulations. But community members must be careful to communicate well with the government and focus on high-priority issues in order to ensure success.[18]

Key Differences from Somalia

- Inland fisheries
- Greater peace and stablity
- Environmental damage/overfishing driving shift to local management
- Women involved directly in fishing activities like gleaning, and seaweed farming
- Before independence, the government was not involved in local matters
- Dynamite fishing common

Key Similarities to Somalia

- Colonial history
- High levels of government corruption and lack of trust
- Local people depend on fishing for their livelihoods
- Little national-level enforcement capacity
- High levels of illegal fishing
- Low centralized national authority capacity
- Little financial support for fishing from the government. Funding is dependent on donors
- Main catch and marine habitats are similar for both countries
- Low cold chain capacity
- Artisanal fishing is the main activity, especially gillnetting
- Northern coastal communities are primarily Muslim
- Prior socialist system
- Few conservation areas or ongoing efforts
- Little tourism

Unique to this case study
Featured in all case studies
Featured in a subset of case studies

TANZANIA CASE STUDY

GOVERNANCE STRUCTURE

Co-management Type: **CONSULTATIVE**

Structure

Assembly

Funding

Catch Revenue
Fisher fees
Taxes on catch
Vessel fees

Legal Framework & Foundational Documents

Local bylaws
Monitoring and evaluation framework
Financing plans
National registration
Resource management plan
Collaborative management areas with neighbors

Management Functions

Set fishing areas/boundaries *(either exclusive or collaborative areas)*
Catch data collection
Conflict mitigation
Enforcement/compliance monitoring
Collect fees for tourism
Contribute to national legislation/policies
Establish bylaws
Establish management plan
Monitoring and evaluation
Impose penalties

STAKEHOLDERS

Primary

Fishers
Gleaners
Seaweed farmers
District government

Secondary

National government agencies
County/district government
Local/village government
NGOs/IGOs
Other external co-management organizations

CHANGE AGENT ACTIVITIES

Scientific surveys conducted

pre-establishment

Marine resource survey
Socioeconomic survey
Traditional management assessment
Fishing profile/baseline

Community organizing activities

during establishment

Involvement of surrounding communities
Meetings with local government

Environmental education & capacity building activities

during & post-establishment

Training on management/creating management plans
Survey results presented to community

CO-MANAGEMENT IMPLEMENTATION

Benefits

Greater community influence over resource use
Increased compliance
Reduced illegal fishing
Improved infrastructure and capacity
Increased data collection
More inclusive system, especially of women
Increased government accountability

Challenges

Lack of trust between community and government
Officials do not invlove locals enough
Poor communication among involved groups (co-management organizations, government, etc.)
Funding provided, but little community engagement
Unrealisitc expectations of government

Co-management in

KWIRIKWIDGE | MOZAMBIQUE

National Context

Before Mozambique's independence in 1975, its fisheries were governed by traditional community chiefs and were restricted to community members. In some coastal communities, informal and multi-stakeholder co-management of fisheries were already present.[19] After independence, more formal governance structures were introduced by the federal government, including for fisheries management. This led to challenges within the communities and tensions with respected traditions. In 1996 the Institute for the Development of Small-Scale (Artisanal) Fisheries (IDPPE) introduced co-management in Mozambique with the establishment of community committees on resource management and co-management units that were officially incorporated into national law in 2003.[20]

Mozambique established 73 co-management committees between 1997 and 2005, with five committees in the Angoche district comprised of 52 men and one woman.[21] The units are described as mostly top-down or instructive units.[22] From the central government's perspective, the units decreased the burden of enforcement, while local fishers sought involvement in order to mitigate conflict between themselves and immigrant fishers and industrial prawn fishers.[23] Poverty and overfishing were also motivations for local fishers to become more engaged.[24]

Case Study Profile

Kwirikwidge is located in northern Mozambique in the Angoche district of Numpala province. Around 600 fishers and 100 owners of boats or gear live in the village. Most of the fishers living in Kwirikwidge originally came from neighboring villages. The religion is predominantly Muslim (53 percent), and traditional or spiritual beliefs play a strong role in the community and in fisheries management. The main language is Emakhuwa. Local leadership consists of a chief, religious leaders, and direct counselors, with the traditional chief enforcing law and order. Traditional authorities are highly respected and influential—more so than formal authorities.[25] Kwirikwidge is home to coral reefs, and its artisanal fishers catch primarily anchovies, sardines, prawns, and goatfish. Beach seines comprise 70 percent of artisanal fishing methods. Almost all catch is commercially sold, mostly in the city of Angoche; only 5 percent is for subsistence.[26]

Lessons Learned

Fishers are consulted in fisheries management and notable decisions have been made to their benefit, but decision-making is concentrated between boat and gear owners and government. While this process has amplified the voices of fishers, this decision-making structure may be perceived as elitist and may be less effective at influencing the behavior of resource users.[27] [28]

Key Differences from Somalia

- Inland fisheries
- Greater peace and stablity
- Higher fish consumption
- Better fishing infrastructure
- Environmental damage/overfishing driving shift to local management
- Migrant fishing population
- Language differences between government and locals
- Large export market

Key Similarities to Somalia

- Colonial history
- High levels of government corruption and lack of trust
- Local people depend on fishing for their livelihoods
- Little national-level enforcement capacity
- High levels of illegal fishing
- Open-access fisheries before co-management implementation
- Little financial support for fishing from the government. Funding is dependent on donors
- Main catch and marine habitats are similar for both countries
- Coastal communities are primarily Muslim
- Prior socialist system
- Resource management tied to religious/traditional beliefs
- Conflict/tension between artisanal domestic and foreign fishers
- Strong role of traditional authorities
- Recent civil war
- Low literacy and education levels, especially among women

Unique to this case study
Featured in all case studies
Featured in a subset of case studies

MOZAMBIQUE CASE STUDY

GOVERNANCE STRUCTURE

Co-management Type: **CONSULTATIVE**

Structure

Elected executive committee

Assembly

Funding

Donor funding

Registration/ permit/license fees

Fines for illegal activities

Fees for external fishers

Legal Framework & Foundational Documents

Management Functions

Set fishing areas/boundaries *(either exclusive or collaborative areas)*

Catch data collection

Conflict mitigation

Ban gear

Restrict access to certain people

Contribute to national legislatation/policies

Promote sustainability

Issue permits/licenses

Set fishing times of day and/or seasons

STAKEHOLDERS

Primary

Boat owners

Gear owners

Traders

Processors

Traditional community leader

Secondary

National goverment agencies

NGOs/IGOs

Private sector

Scientists

Community members

Immigrants/seasonal/ external fishers

CHANGE AGENT ACTIVITIES

Scientific surveys conducted

pre-establishment

Traditional management assessment

Community organizing activities

during establishment

Co-management organization meetings

Involvement of surrounding communities

Environmental education & capacity building activities

during & post-establishment

Technical assistance

CO-MANAGEMENT IMPLEMENTATION

Benefits

Greater community influence over resource use

Increased compliance

Financial benefits (access to credit, bargaining power)

Challenges

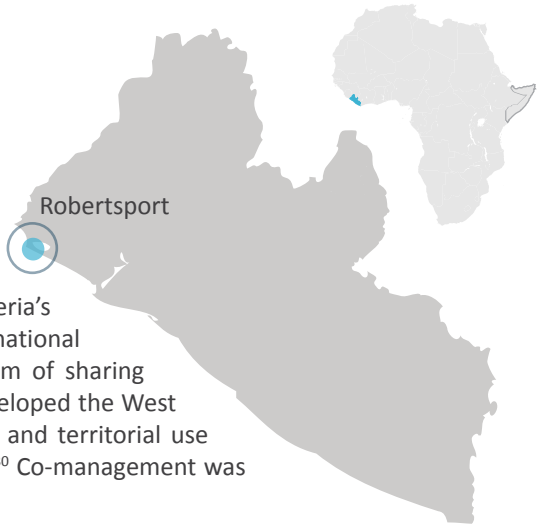
Lack of trust between community and government

Officials do not invlove locals enough

Only benefits active members

Co-management in

ROBERTSPORT | LIBERIA



National Context

In Liberia, rampant depletion of resources and a violent civil war left the government unable to adequately manage the nation's fisheries. Traditionally, Liberia's fisheries have been open-access and unregulated.[29] In the early 2000s, the national government became interested in moving toward a more decentralized system of sharing power with local communities to manage fisheries. In 2009 the World Bank developed the West Africa Regional Fisheries Program (WARFP), which introduced co-management and territorial use rights for fisheries (TURFs) to improve fisheries management and enforcement.[30] Co-management was piloted in Robertsport and subsequently spread to other communities.[31]

Case Study Profile

Robertsport is the capital of Grand Cape Mount County and has a population of about 7,000. The coast is a sandy shoreline with coastal rivers that create estuaries and lagoons that are important spawning habitats for fish. Its fisheries sector is comprised of artisanal and industrial (primarily shrimp) fisheries. Artisanal fishers fish in canoes using hook and line, gillnet, and purse seine methods. Though the gear and fishing methods are similar to those in East Africa, the target species are different as no coral reefs exist off Robertsport. As the capital, Robertsport is considered government property, meaning that the fisheries are open-access for all fishers, but they must register with the Sea Chief. While conflict between fishers exists in Liberia, conflict levels are still relatively low in Robertsport and the surrounding communities.

Lessons Learned

The Robertsport case study displays the utility of community participation in effective co-management and the limitations of community enforcement. While the community was empowered to participate through elections, it was not effective at enforcement for more serious infractions that impinged on the livelihoods of other locals. It is important for community members whose livelihoods are impacted by new regulations to be accommodated and compensated and for enforcement to be supported by national institutions.

Key Differences from Somalia

- Inland fisheries
- Higher fish consumption
- Women involved directly in fishing activities like fishing
- Migrant fishing population
- Industrial fisheries are also present
- Large role of private sector in fisheries

Key Similarities to Somalia

- Colonial history
- High levels of government corruption and lack of trust
- Local people depend on fishing for their livelihoods
- Little national-level enforcement capacity
- High levels of illegal fishing
- Open-access fisheries before co-management implementation
- Low centralized national authority capacity
- Traditional fishing vessels that do not go far offshore
- Resource management tied to religious/traditional beliefs
- Conflict/tension between artisanal, domestic, and foreign fishers
- Strong role of traditional authorities
- Recent civil war
- Majority of secondary activities are done by women (processing, marketing, etc.)
- Tuna fishery dominated by foreign fishers

Unique to this case study
Featured in all case studies
Featured in a subset of case studies

LIBERIA CASE STUDY

GOVERNANCE STRUCTURE

Co-management Type: **COOPERATIVE**

Structure

Elected executive committee
Assembly
Sub-committees

Funding

Donor funding
Co-management unit membership fees

Legal Framework & Foundational Documents

Local bylaws
Financing plans
Monitoring and evaluation framework
Co-management plan

Management Functions

Catch data collection
Conflict mitigation
Enforcement/compliance monitoring
Business management
Advocate for fisherfolk

STAKEHOLDERS

Primary

Fishers
Boat owners
Boat crew

Traders
Processors
Fish transporters

Secondary

National government agencies

NGOs/IGOs
Private sector
Scientists

Immigrants/seasonal/external fishers

CHANGE AGENT ACTIVITIES

Scientific surveys conducted

pre-establishment

Marine resource survey
Socioeconomic survey
Fishing profile/baseline

Community organizing activities

during establishment

Co-management organization meetings
Full community meetings

Environmental education & capacity building activities

during & post-establishment

Training on management/ creating management plans

CO-MANAGEMENT IMPLEMENTATION

Benefits

Greater community influence over resource use
Increased compliance
Financial benefits (access to credit, bargaining power)

Challenges

Lack of trust between community and government
Poor compliance
Poor communication among involved groups (co-management organizations, government, etc.)

IV. POTENTIAL FOR CO-MANAGEMENT SUCCESS IN THE SOMALI REGION

The examples of co-management from Kenya, Tanzania, Mozambique, and Liberia offer insight into the process and lessons for other communities in need of local management. Stakeholder participation is critical for co-management to succeed, but who the stakeholders are and their most effective level of participation may vary among cultures, countries, and even coastal towns in the same country. Using the case studies as references allows communities in the Somali region to understand the process and adapt it to their own needs.

To begin this conversation in the Somali region, co-management was a topic of discussion during the Somalia Fisheries Forum in Garowe in April 2019. Two sessions of the forum brought together local fishers and representatives from fishing businesses, governments, NGOs, and international donor organizations to discuss the potential for co-management in the Somali region. The results of those discussions are presented here. Participants received background information on the co-management process and the case studies above. They were then asked to discuss existing local management systems and the co-management strategies that they believe will work best in the Somali context.

> *Existing fishing cooperatives, traditional systems and clan culture, plus the expressed interest of the Federal Government of Somalia all provide a promising baseline for co-management in the Somali region.*

While Somali federal legislation does not yet include co-management, the Federal Government of Somalia (FGS) recognizes the utility of it and has therefore included it as a goal in their fisheries management plan for 2020–2023. This is the first step in showing support for co-management efforts that are beginning in coastal communities. The FGS is creating an enabling environment for co-management efforts and is actively working to incorporate the principles of co-management into its activities. This top-down approach is similar to that of Kenya and Tanzania, but has the advantage of being preemptive rather than reactionary. Somali officials hope that by commencing the co-management process before local resources have been fully depleted, they will enable sustainable growth of the fishing sector that will support livelihoods into the future.

There is an additional baseline for co-management through traditional systems and existing cooperatives. Somali clan culture may be conducive to co-management because of its local focus and community network. As in Kenya, where local tribes and chiefs are important secondary stakeholders, clans and clan leaders can leverage the respect and trust they have in the community to improve participation in the co-management process. Clans and clan elders also hold valuable traditional knowledge that is vital to developing a co-management system that fits into the community.

Fishermen prepare to go out to sea in the village of Eyl , Puntland,. Photo: Karel Prinsloo/FAO.

Previously organized fishing cooperatives may play a similar role where they are active. Originally put into practice on the Somali coast in the 1980s, fishing cooperatives have persisted through the civil war and have been founded in more places recently because of their efficacy at supporting fishers' interests. Cooperatives are organized bodies that negotiate fish prices with buyers, resolve conflicts, facilitate training, and develop markets for Somali fish. As a group with existing membership, respect, leadership in the community, and goals similar to those of the co-management organizations in the case studies, a cooperative is a useful vehicle for gaining community participation. The cooperative can also function as a conduit for communication between the government and the community. For example, in Puntland and Southwest State, the regional ministries of fisheries empowered cooperatives to restructure and create their own bylaws with assistance from the ministry. This is likely in part because of a demonstrated communication gap between communities and governments. According to Secure Fisheries' conversations in coastal Puntland and Somaliland, cooperative members infrequently spoke with government officials except to report illegal, unreported, and unregulated (IUU) fishing. Because of low enforcement capacity, the government could rarely follow up on reports of IUU fishing. A structured co-management system closes that gap in communication and offers the community its own recourse to deal with IUU fishing on a small scale, removing some of the burden from the government while empowering the community. However, it is important to ensure that cooperatives have full representation from resource users. Cooperatives primarily focus on economic support, so their aims may need to be adjusted to incorporate resource governance. Alternatively, co-management units can be established alongside cooperatives.

Funding of co-management initiatives is a challenge in the Somali region. Engaging with international donor groups is a viable option that has worked in Kenya, Mozambique, and Tanzania. Donors are secondary stakeholders who offer funding and often expertise during the implementation process. In all of the case-study locations, other funding comes from fisher registration fees, which is also an option in Somali communities. Additionally, fines for IUU fishing can help supplement the other more consistent funding sources.

As in Tanzania, Mozambique, and Liberia, lack of trust in the government is a potential challenge to creating a functional co-management system. The Somali political landscape is complex. Each region has its own Ministry of Fisheries, and local mayors have a high level of influence depending on the region in which their town is located. In most places, government officials tasked with being included in the co-management process will need to gain the trust and confidence of the community to have full involvement in co-management. Government officials will need to show a willingness to cede some power to the local leaders to prove they are fully invested in the process.

V. CONCLUSION

With strong local motivation, government support, and tools and funding provided by external organizations, Somali communities are poised to take ownership over their marine resources and implement effective local management measures. The first step is to continue the conversation started at the Somalia Fisheries Forum 2019 and build connections among government officials and local communities. External organizations can help spur this process on by holding community meetings and building a participatory culture that will enable all stakeholders to be heard by officials. At the same time, the Somali regional and federal governments can consider incorporating co-management into their laws as the case-study countries have, institutionalizing a system to delegate power to manage fisheries and control marine resources to those most impacted by management measures. Using the principles of co-management as a guide, the Somali region can be on track to maintain healthy fisheries.

Photo by Karel Prinsloo, FAO.

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