Summary report of the workshop to validate a strategy document for establishing fisheries co-management associations and a national framework for fisheries collaborative management in Liberia

Report prepared for WARFP-Liberia

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This report represents a summary of the activities and discussions in the national workshop based on notes taken by Robert Arthur and prepared by Robert Arthur and Prof Robert Pomeroy.

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Introduction

The national fisheries co-management framework meeting was designed as an activity to consolidate the learning to date arising from the co-management work being supported by the consultancy of Professor Robert Pomeroy and Mr John Parks. It was agreed that a workshop would be held on 13 and 14 December for senior-level national agency representatives, local co-management association (CMA) representatives from four fishing communities, national-level NGOs (e.g., the Liberian Artisanal Fishers Association - LAFA), interested regional West African Regional Fisheries Programme (WARFP) representatives, and other interested national-level stakeholders[1]. The four objectives of this national meeting would be to:

(a) discuss the rationale and aims of fisheries co-management in Liberia, and raise fishers and Ministry awareness;

(b) to present lessons learned and observations from CMA representatives regarding their experience in the process of initiating co-management in their communities;

(c) to summarize the findings and recommendations arising out of R. Pomeroy's and J. Parks' consultancy; and

(d) to create a national co-management coordination body of CMA and government agency members, supported through the national co-management framework underway (previously referred to as the "National By-Laws").

This national meeting would be divided into two days. First, a series of sessions held over the course of a day that focused on the learning exchange of CMA representatives and formation of the national co-management coordination body. Second, a half day workshop would be held focused on outreach with Ministry officials, presentation of the Pomeroy/Parks end-of-consultancy findings and recommendations, and presentation of the national co-management framework. The workshop agenda is provided in Annex A.

The workshop was held at the P.A. Rib Shack in Monrovia and was attended by participants from the Robertsport CMA, community representatives of Buchanan, Rivercess and Tailor Kru Town, the Liberian Artisanal Fishers Association on Day 1 (see Annex B). These participants were joined on the second day by representatives from central and local government and other agencies including United Nations Mission in Liberia (UNMIL) and World Bank (see Annex B). Over the course of the two days the workshop was supported by the staff of the WARFP and Mr Trokon Tarr had responsibilities as the Master of Ceremonies, ensuring the workshop ran smoothly.

Day 1: Development of a National Network of Fisheries CMAs

Introduction to the workshop was by Trokon Tarr thanking the participants and outlining the purpose of the workshop. This was followed by a welcome statement by Yarnga Topka who welcomed the participants and reiterated the purpose of the workshop and the contribution of the workshop to the wider goals for the fisheries sector. Dr Braimah provided the opening remarks

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[1] Parks, J. Site Visit Report for the Period of August 25th through September 11th, 2011. WARFP-Liberia Contract WARFP/CS/6/10

emphasising how fisheries management the world over is increasingly taking up co-management and giving authority to fishers to play a greater role in ensuring resource sustainability and deriving developmental benefits such as street lighting, clinics and credit structures. Having piloted the approach in Liberia in Robertsport the aim is to extend co-management to the other counties. To begin with there will be centres established in four communities and landing sites in two places – Robertsport and Buchanan. To support co-management a number of capacity building programmes, for example in business management, conflict management have been initiated and study tours will also help to identify successes that can be built upon.

Following the opening statements participants gave brief introductions of themselves to the whole group. Participants included community representatives (sea chiefs, Robertsport CMA, community science and others), representatives of the Bureau of National Fisheries (BNF), LAFA, WARFP (including consultants) and World Bank. The introductions were followed by a review of the workshop purpose and agenda by Prof. Pomeroy. Purpose is to cover two things: guidelines for establishing CMAs and national fisheries co-management by-laws (re-named the national framework). These documents are in the document packs (see Annex C and D) and the main aim is to validate these two documents. By-laws are intended to strengthen the national fisheries laws to allow co-management to work. Second thing is to look at possibilities for a network of CMAs – currently there is only one. Thirdly we will review what we did in Robertsport and how this can be extended to other counties. Finally we want to look at how national level is able to support co-management. The session concluded with an explanation of what will happen in each of the sessions and what they are intended to generate, emphasising the importance of speaking up and participating in the sessions, sharing ideas with one another.

Session 1

Session 1 focused on the progress to date in the WARFP in Liberia and the co-management component within in. This was achieved through two presentations. James Davis (deputy coordinator of the WARFP-Liberia) reviewed the status of fisheries resources of West Africa, highlighting the low levels of benefits and the overexploitation of resources (including illegal). This is lost opportunity for Liberia and West Africa. Reasons for this were described, emphasising the role of the project in increasing the wealth generated and the portion captured in the region. The three components of the projects were introduced:

- Good governance and sustainable fisheries management
- Reduction of illegal fishing
- Increase fish resources in the local economy

The achievements to date over the first year were described including the 2010 fisheries regulations, registration of artisanal canoes, raising awareness about fisheries in the media (Component 1); fisheries monitoring centre established, five illegal fishing vessels have been arrested and prosecuted (Component 2); Acquired land in Robertsport for the landing site cluster; established co-management association (CMA) in Robertsport; developed co-management strategy (Component 3).

The overview was followed by a presentation by Yerma Peters on the co-management activities in Robertsport. The presentation focused on describing the timeline of the activities through pictures with activities divided into three key phases: courtesy calls, community meetings in Kru town and

Fanti town and research and participatory research. In the presentation the opportunities and benefits that co-management could provide were reiterated and the roles of individuals (superintendent, governors, core committee members, community science volunteers, consultants) in the process highlighted. The presentation also described how the process of establishing a CMA was able to bring together different elements in the community to jointly select representatives and begin to work together. An overview of the social and economic conditions and community facilities in Robertsport was provided based on the results of the community profile. The presentation brought events up to date with a description of the CMA executive committee elections and the extension of activities to Tailor Kru Town and concluded with the key achievements including the establishment of the CMA and the bringing together of different elements of the community to work together.

Questions were invited. Question was asked by representative from Buchanan about illegal fishing and request was made to BNF to ensure that foreign licensed vessels should be aware of the obligations to avoid conflict with local fishers. A request was also made to WARFP to ask for support to community science. James Davis responded to highlight the 100% observer coverage on licensed vessels and the establishment of the inshore exclusion zone. These measures are intended to reduce such interactions. On community science Dr Braimah explained that the community science can play a very important role in co-management. As the community science is already active the volunteers can participate in the process but the CMA and co-management does not belong to the community science but could have a very valuable role as a science sub-committee. It is important to get it right in Robertsport to show that science can be contributing to the community as a whole.

Session 2

The session was started by Prof Pomeroy who wanted to focus on three aspects: what co-management is; the process of co-management; and a description of what TURFs are. In the description of co-management the role of fishers in making rules and working with government as partners, learning together how to manage was central. Through discussions and consultations the roles and responsibilities in the partnership can be defined, providing fishers with an opportunity to be involved. This demonstrates that co-management can be different in different places depending on what is agreed. Furthermore the nature of the arrangement may change over time as management authority may be delegated. Question from a representative from Buchanan – if we spot something illegal and report to government what can we do next? Prof Pomeroy explained that in a partnership there is an agreement and there are responsibilities so under co-management it should be more clear who will act. What kind of decisions is the CMA able to make? That is up to the fishers and government to agree. That is the next step in Robertsport.

The second part of the presentation focused on the co-management process (provided as a handout). In this part Prof Pomeroy explained the steps that the community organisers went through in Robertsport and the meetings, education, organising and community assessment activities that were undertaken. Co-management is not yet in place as there is still a need to develop a co-management plan, identify conflict resolution mechanisms and begin to implement the plan. The people from Robertsport will talk about their experiences with these stages. The presentation concluded with a discussion of Territorial Use Right in Fisheries (TURFs) and how the fisheries can be bound and managed by communities, providing the CMA with responsibility and ownership over

part of the sea to manage. A key challenge in doing this is in the enforcing of decisions on these areas.

Building on the introduction to co-management Robert Arthur presented the participatory resource assessment process and some of the findings. The presentation highlighted a number of the more practical issues that emerged from the assessment that should be considered in the process of developing co-management in Liberia. This included issues such as the distribution of artisanal fishing within and beyond the IEZ. This was used to highlight issues in the form of a series of questions such as how artisanal fishing and interactions can be managed under co-management.

The presentation raised a number of questions: If the CMA could not enforce the rules what could they do? Dr Arthur explained that this was one of the benefits of co-management and that this was something that should be discussed with the government as part of a process of developing roles and responsibilities. Massa Kiazolu from the Robertsport CMA added to this and explained that they have an agreement that they can raise issues with the BNF and that these would be acted upon. Further questions highlighted the fishing beyond the IEZ, firstly questioning whether such fishing might be illegal and how this fishing could be regulated. This was picked up by Dr Braimah who pointed out that this was something that the participants need to think about in developing the rules and, in particular, the TURF. As the questions had taken up some time it was decided not to present the recommendations from the process in Robertsport. It was also felt that this might take away from what the CMA representatives themselves would present. Without a break the workshop moved into the nest session.

Session 3

Dr Braimah described experiences from a World Bank project in Ghana. Initiatives began in 1997 under the World Bank. Dr Braimah described how work started in Mumford which was an example of a successful fishing community. When researchers looked at the community they saw that the community had rules that they had made and enforced themselves under the chief and seven people. From this a series of lessons and best practices were identified and could be extended. When the DFID funded Sustainable Fisheries Livelihoods Project started in 2005 they found the co-management associations were not working (only 25% functional four years after the end of the World Bank project) so the strategy was revised. In the revised approach it was found that those groups with constitutions tended to work better and unless tenure was clear, democratically elected representatives tended to stay, creating future conflict. A work plan was an important aspect. Without this, activities could be unfocused. By-laws were important in mandating action. Finally the relationship with the chief fisherman was critical. Dr Braimah highlighted the importance of this individual and in the CMA process the groups in Liberia should think through how the fishing chiefs can be involved.

Human resource development was important but it was critical that expectations are managed so people know what they are getting into. Lack of incentives can cause two problems – firstly people become unwilling to make sacrifices and secondly those remaining involved are those with the resources that allow them to remain involved, concentrating power. In addition to human resources, the experience in Ghana suggested also that financial management was important – identifying both sources of income and also how the benefits from co-management could be used and distributed. Examples of income sources and by-laws and sharing mechanisms from enduring institutions in

Ghana were described as well as the types of expenditure the CMA might face. Dr Braimah suggested that Robertsport CMA should start to consider these aspects. Accountability in finances could be an issue and proved to be a source of conflict with few committees in Ghana using back accounts or formal financial management systems.

Although the management bodies had not been working, the concerns in Ghana over the state of resources endured. Following from Dr Braimahs presentation the Robertsport CMA representatives shared their own experiences from the process of establishing a CMA in Robertsport.

John Adams, general Secretary of the Robertsport CMA highlighted four key issues that they faced:

- Misunderstandings between Kru and Fanti communities. Fanti putting nets around Kru fishers and other issues led to problems. Sometimes the Kru fishers would cut the Fanti gillnets. These were problems that the core committee designed to overcome by bringing these groups together.
- Regulation on gears were challenging e.g. monofilament gillnets, mesh sizes. Especially the small mesh sizes. The CMA explained that allowing the fish to grow would provide greater benefit.
- People not familiar with co-management
- Bringing people together beyond the fisher groups was also challenging.

Questions were posed by participants about how the communities were brought together and the problems with new gear regulations.

Massa Kiazolu presented the achievements and successes to date by the Robertsport CMA. Bringing Kru and Fanti together to work for the common good was a key achievement. The CMA represents a partnership between the fishers and government and the fishers and CMA committee have been supported through training and capacity-building supported by the consultants John Parks, Robert Arthur, Robert Pomeroy and Blessing Mapfumo. Getting the government to sit together with resource users is a major achievement. The CMA is raising awareness of the issues with illegal gears fishers are reporting the use of these. Finally Edwin Kalen provided a report on the lessons learned from the experiences of CMA formation in Robertsport and recommendations for other communities. Firstly he highlighted the need to create an MPA along Lake Piso and part of the Atlantic Ocean to protect stocks. Next he suggested that there was a need for local MCS capacity in the form of a boat that could be used to monitor fishing activities. Thirdly they need to provide alternative livelihoods for those affected by the project – e.g. those living around Lake Piso. Finally continued capacity building for the CMA could help realise future benefits.

A question arose as to what would happen in other places – where else will CMAs be established? James Davis explained that Robertsport is a pilot and once success can be established in Robertsport co-management can be replicated in other areas starting with Buchanan and River Cess.

Following from the Robertsport CMA, Prof Pomeroy explained what he and John Parks had learned over the year and what they suggest as future steps. They found that in a divided community it was a positive experience that the community would come together on co-management. It is also encouraging that there is interest also in the BNF. In a short time the community have managed to come together and start working. Capacity building has been an important part of that. There is

optimism about the future given what has been achieved. In the future there are things that need to be addressed:

At the moment there is no legal space for co-management and fishing rights. There is a need for the by-laws to be moved forward to ensure a legal basis for co-management. Also, as Robertsport move forward they need to share their experiences and talk with people from other communities, helping them learn what works and what doesn't. There is also a need for a team at BNF who are supporting co-management – who the communities can go to.

Co-management will not work without good monitoring, control and surveillance (MCS) and enforcement. This needs to tie to the other parts of the WARFP. Coordination is a key element together with capacity building. A network of CMAs provides additional voice could be an opportunity. Links with community science and other natural resources projects, e.g. Lake Piso Multi-Purpose Reserve, should be pursued to leverage additional benefits and resources.

The final part of the session was a discussion moderated by Prof Pomeroy. The discussions were wide ranging but touched on a number of important points relating both to co-management and the regulation of fishing activity. Questioning opened with a question about how the by-laws were drafted and who was involved in this process. Dr Braimah responded that the by-laws would be the focus of discussions on the second day of the workshop. Prof Pomeroy suggested that the participants should read the draft by-laws as homework in preparation for the discussions. Coming back to the experiences of the CMAs the question was asked how the Fanti and Kru were able to come together and work constructively given that they had been in a situation of conflict. Dr Braimah suggested that their experiences are an opportunity for the representatives of River Cess, Buchanan and Tailor Kru Town to learn from their experiences. Key points made during this part of the discussion and recorded on Powerpoint included:

- Fanti and Kru in Robertsport had no common understanding to begin with.
- Discuss with all households, patiently explaining and answering questions
- In Buchanan they have CBO to bring together the Fanti and Kru. No problems there.
- Fanti and Kru working together in River Cess but not in such an organised way.
- Changing the way we conduct ourselves and address problems can be a challenge
- Thanks given to the community organisers for their support and assistance for Robertsport CMA

The discussion moved on to capacity building and the Robertsport CMA took the opportunity to extend thanks to Dr Braimah, Yerma Peters, Emmaunal Yarkpazua and Andrew Sumo for their work supporting the establishment of the CMA and capacity building. The importance of capacity building was emphasised and also the role that Robertsport CMA could play in helping to build the capacity of the CMAs that are initiated in the other communities. Key points that were raised and captured on Powerpoint included:

- In capacity building need to learn types of processing and then also to be able to share what they learn with others.
- Capacity building has not just been on co-management but also ways to handle and process fish.

- Future training could include proposal writing, financial management and leadership training.
- What is learned should be shared. Robertsport CMA has responsibilities to help the other communities.

The net exchange programme was discussed and Dr Braimah explained that this was in recognition that people would be affected by the introduction of new legislation related to the use of monofilament and small mesh size nets. As a humane measure the project was intending to make available nets meeting the new regulations in an affordable way and allowing an agreed timeframe within which the nets could be exchanged. At the same time illegal nets currently in use would be collected and burnt in a public place to ensure that they are not recycled. The exchange programme could also be an opportunity for the CMA to generate revenues through a mark up on nets sold. This revenue can be used to purchase further legal nets, extending the programme. The programme will start in Robertsport and, having learnt lessons, it will be rolled out in other areas as the CMAs come into existence. This is an important programme as in Ghana one of the reasons that co-management failed was that the leaders were continuing themselves to use illegal gears and were reluctant to enforce gear regulations as a result. The point was raised from the floor that it would also be important to stop the importing of illegal gears and that this is a role that the government should take on. In this part of the discussion the following points were recorded:

- When decisions are made that affect people, e.g. Lake Piso MPR, then need to help the people affected – livelihoods activities, net exchange.
- Net exchange will be introduced as the CMAs and by-laws are established.
- Need also for restrictions on the importing of illegal nets.
- Experiences with net exchange in Robertsport will be opportunity to learn before extending along the whole coast.

The role of awareness raising was discussed with the point made that the regulations cover all kinds of fishing and some materials for industrial, artisanal and inland fishing could be developed. The BNF explained that materials such as brochures have already been developed for industrial fishing and similar materials will be developed for the artisanal fisheries and will be passed through the CMAs. It was also pointed out that so far the BNF has been focused on the licensing of industrial vessels but now, with the artisanal canoe registration completed, the BNF would be beginning to start artisanal canoe licensing from next year. A participant from Buchanan suggested that a role could be found for the Governors to assist in this process as it could help ensure compliance. A participant from River Cess also asked about addressing illegal fishing. They reported that the county authority may sometimes take payments from illegal fishers and not enforce regulations. The BNF representatives explained that they were aware of issues surrounding illegal fishing and that the BNF and WARFP-Liberia are working to address the issues. The following points were recorded:

- Need to develop educational materials that can be used to raise awareness about key parts of the regulations.
- CMAs will have an important role in raising awareness for artisanal fisheries.
- Suggestion that Governors could have a role in collecting license fees to ensure compliance.
- BNF request that if illegal activities are observed they should be reported.
- CMA can provide an important link with the BNF

Prof Pomeroy concluded the session by pointing out that the CMA represents a means of getting a direct link to the BNF to ensure that they would be aware and helping to address such issues.

Session 4

Session 4 started with a presentation by Patrick Sayon and Charles Simpson of the community science programme. Patrick Sayon began by explaining what community science is and the aims of the programme and how this could support shifts in management towards 'rights based' and co-management. Charles Simpson explained the work that the volunteers were doing in Robertsport and the kinds of monitoring procedures that they were following to monitor the local environment, how they were recording this and the ways that this information could be of use to the CMA (see Annex). The presentation highlighted the introduction of the 'trawler spotter' device that can be used to capture photos of illegal activities and upload them to World Bank, US Embassy and BNF. Work on addressing illegal fishing activities by the community sciences in Robertsport has helped to reduce the level of illegal activity by foreign trawlers and the amount of gears lost by local fishers.

This session was also intended to provide an opportunity for the participants to reflect on the issues and opportunities that they saw in their own communities and to think about whether co-management and the establishment of a CMA and CMA network would help them in addressing these. In doing so the session was intended to build on the earlier sessions where co-management had been explained (Session 1) and where the Robertsport CMA representatives had explained the initiation and achievements of the CMA at Robertsport (Session 3). Prof Pomeroy provided a recap on the possible functions of the CMA and the ways that a network of CMAs might provide additional opportunity for learning and collectively addressing common challenges and for linking with other organisations and agencies. In the second part of the session the participants were divided into groups representing the four communities present – Robertsport, Buchanan, River Cess and Tailor Kru Town. In the session the groups from Robertsport and Tailor Kru Town worked together as they were nearby and felt that they faced similar issues. The groups were joined by representatives of the BNF and community science and facilitated by the WARFP staff. The groups were tasked to think in turn about the issues and opportunities that they faced. In doing so they were facilitated by the WARFP staff. Each group then presented the issues and opportunities back to the whole group.

Group 1 (Buchanan)

Issues	Opportunities
Sea erosion (no landing site)	Availability of fish resource
Inadequate fishing skills	Increase of markets
Inadequate skills in fish processing	Investment in Education
Lack of fishing input, store	Reduction of dependency

Buchanan raised particular issues of coastal erosion, a lack of skills and a need to develop new fish products for the high value markets as issues and the presence of fish resources as a positive. Through developing marketing they can get more money and afford to educate their children and reduce dependency and poverty.

Group 2 (River Cess)

Issues	Opportunities
The Ivoirians canoes are giving serious problems to our fishing in the county	Availability of high quality fish on fish ground
Lack of good landing site	Availability of credit facility: Bigger boats Better nets Outboard motors
Lack of fishing materials (nets, hooks, lines, etc.)	Interest of youths to go fishing
Lack of funds to purchase fishing materials	
No place of processing (smoking)	
No cold storage	
No electricity	
No good selling place	

River Cess highlighted a particular issue from 7-8 canoes from Ivory Coast who come fish illegally and, because they catch lots of fish, the catches of the local canoes are affected. They also highlighted the problems local fishers face for landing sites and problems with canoes being set adrift. Processing in River Cess was considered to be hampered by the lack of a place for marketing, cold storage and electricity.

Group 3 (Robertsport/Tailor Kru Town)

Issues	Opportunities
The Presence of illegal fishing boats in our waters	Capacity training
Use of monofilament nets	Jobs creation
Availability of fishing materials	Increase catch
Inability to pursue the trawlers	Establishment of a modern landing site
Membership registration of the CMA	Fishing rights
Bad fishing habits	Community coastal patrol
Enforcement of fishing regulations	Introduction of aquaculture techniques
	Social benefit for the community
	Establishing link with other CMA
	Nets exchange program
	Micro-finance program
	Introduction of modern processing methods
	The introduction of tuna and snappers fishing
	The establishment of this marine protected area
	Improve marketing strategies

Robertsport/Tailor Kru Town highlighted issues of monofilament nets ghost fishing as being an issue and that aquaculture and tuna/snapper fishing represented future opportunity. The exercise highlighted that there were common issues of lack of fishing materials, need for skills training and illegal fishing as well as opportunities presented by the presence of high quality fish resources that could provide additional benefits for people if marketing could be developed. The development of the CMA in Robertsport appeared to bring with it new issues and opportunities. The registration of

fishers was a new issue while capacity building had helped identify new opportunities and the potential to link with and share experiences with other communities in Liberia.

Prof Pomeroy followed on from the exercise to explore the potential of co-management and CMAs and CMA network to address the issues and opportunities that had been raised. Going around to the groups that have not yet been involved in starting a CMA, representatives were asked if they felt that co-management would be of interest and it would be something that should be initiated in their communities. The response was unanimously positive from all that they felt that co-management could help them address issues and realise opportunities.

Following a short break Prof Pomeroy introduced a suggested draft statement that could be presented to the government representatives on the following day at the workshop. This is a statement that could be delivered to government officials coming from the community representatives intended to capture the positive interest in co-management. The draft had been prepared by Prof Pomeroy and Robert Arthur in advance as a statement that the group could discuss, modify or reject. This read:

Draft Shared Agenda on Working to Advance Fisheries Co-management, Fisheries Co-management Associations, and a National Network of CMAs in Liberia

We, the participants of the Workshop to Validate a Strategy Document for Establishing Fisheries Co-management Associations and a National Framework for Fisheries Collaborative Management in Liberia, representing fishers and other fisheries stakeholders, want to highlight the importance of fisheries to our livelihoods and food security. Proper management of the fisheries is critical to ensure their sustainability for the future. We understand the benefits of fisheries co-management and establishing fisheries co-management associations (CMAs) to address the issues and opportunities in the fisheries sector and for improved fisheries management and of the potential for a national network of CMAs. We call on government and others to support us in our efforts to establish fisheries co-management and CMAs in Liberia.

In the discussions it was suggested that the words should be modified to make clear who the stakeholders were representing and that there should be a link to the names of the people who were participating in the workshop. A modified draft was printed out and presented to the participants for them to review. The comments would be discussed and addressed in advance of presenting on Day 2.

The evaluation forms were circulated and the workshop was closed in the final session by James Davis who reviewed the objectives and outputs to identify those that had been achieved and those that remained outstanding this was followed by a closing prayer.
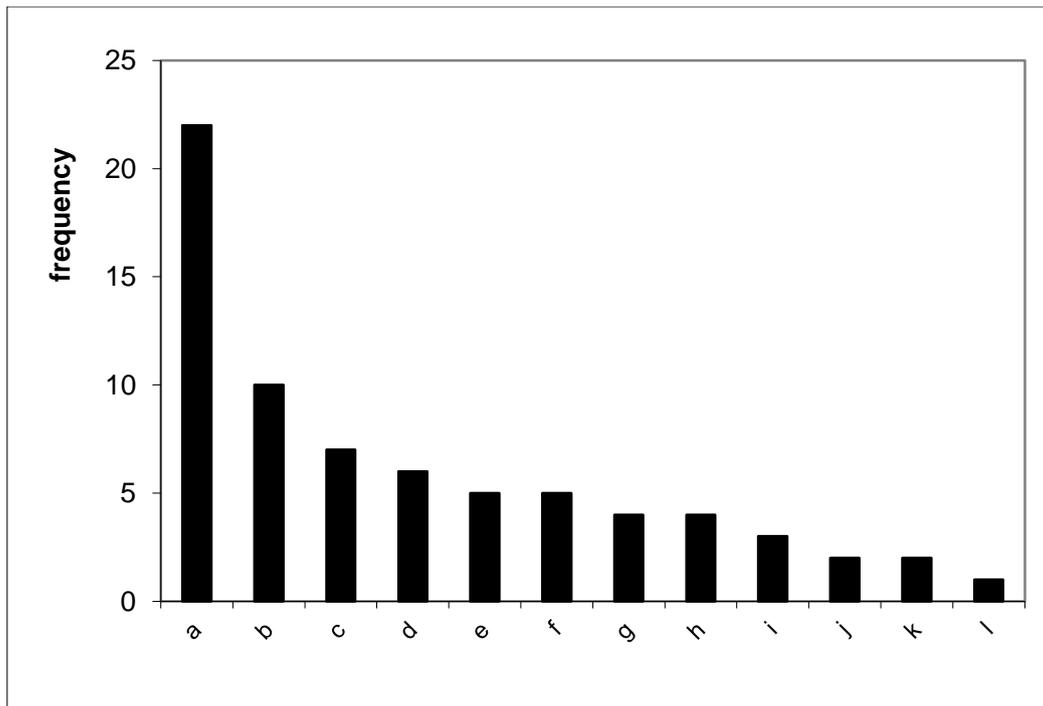
Day 1 Workshop evaluation

The evaluations reflect the views of the participants from Robertsport, River Cess, Buchanan, Tailor Kru Town, LAFA and the BNF at the end of the first day.

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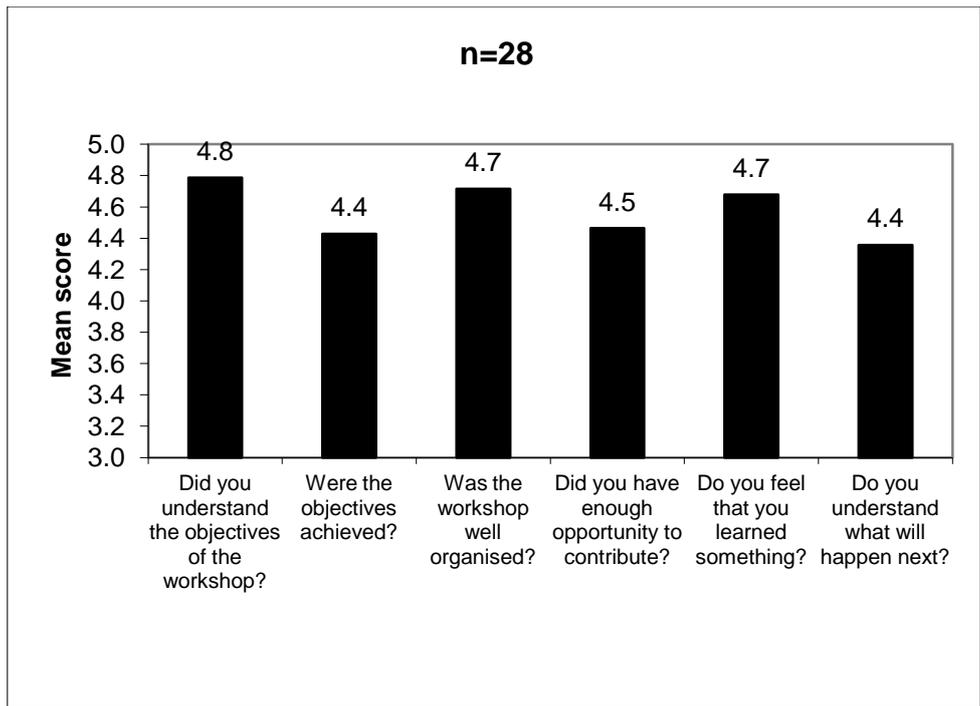
Overall the scores in the evaluations were very encouraging, participants informing that they felt that the workshop was well organised and that they had understood well the objectives and that the workshop had provided an opportunity to learn.

Less positive (although still scoring highly) were the questions relating to whether the objectives had been met, opportunity to contribute and understanding what will happen next. For the first of these the objectives for the workshop covered the two days and by the end of the first day two of the objectives had been fully achieved. There had been a lot of presentations during the day and this may have limited the opportunity to contribute by all. Finally, the next steps were not covered in any detail at the end of the day.

Workshop participants also had the opportunity to highlight things that they though good or less good about the workshop. All the responses were positive and the evaluations highlighted the value of hearing from the Robertsport CMA members about their experiences and the opportunities to share experiences and learn from each other (see figure above and table below).

Aspect	Label
Process of establishing CMA in Robertsport	a
Importance of working together	b
The group discussions and statement of intent	c
Draft framework for co-management	d
Co-management experience from Ghana	e
Fishing, marketing and trading opportunities	f
Regulations and net exchange programme	g
Presentation by community science	h
Importance of managing marine resources	i
Participatory assessment results	j
Workshop well run	k
Illegal fishing	l

Day 2: Validation of a Strategy Document for establishing fisheries co-management associations and a National Framework for Fisheries Co-management in Liberia

Following a shared breakfast Trokon Tarr welcomed the participants to day two of the workshop. Dr Braimah provided the welcoming statement emphasising the importance of fisheries resources and the potential of sharing management responsibilities through co-management. Opening remarks were given by the Deputy Minister for Technical Services from the Ministry of Agriculture Dr Sizi Subah. Dr Subah welcomed the participants and highlighted the contribution that well managed fisheries can make to national development. In the past Liberian fisheries were productive and well managed but as a result of conflict fisheries development has stalled and Liberian waters have become vulnerable to illegal fishing. The WARFP is making an important contribution to the fisheries sector development and the national strategy document for co-management is an important part of this, providing a means for fishers to be involved in management and contribute to sustainable management and poverty alleviation. Dr Subah emphasised that participants in this workshop have an important role to play in developing vibrant co-managed fisheries within Liberia. At the end of his statement Dr Subah declared the workshop officially open.

After participants had introduced themselves Prof Pomeroy reviewed the workshop purpose and agenda and gave an update on what had been covered in the first day of the workshop.

Session 1

In Session 1 Prof Pomeroy described the development of co-management and the roles of different actors in the process. This was the same presentation as in Session 1 on Day 1 and provided an introduction to, and overview of, co-management that could put the activities during the day in perspective. In the presentation the role of external agents and government was emphasised. At the end of the presentation questions were asked about how the fisheries would be regulated under co-management. Prof Pomeroy explained that through co-management local fishers would be able to contribute to developing local rules so Robertsport fishers will be developing fisheries rules for Robertsport.

Session 2

The second session began with an introduction to the statement of intent that had been prepared on Day 1. Robert Arthur described how on the previous day the participants had considered the possibilities and potential of co-management, a CMA and CMA network in relation to the individual and shared issues and opportunities that they perceived in the fisheries sector. This had resulted in a statement of intent that was read out to the participants.

A question was raised by Alfred Kawreh of the LAFA as to whether the names of the participants could be added to the statement. This was agreed. The point was also raised by Dr Subah and others that as a statement of intent the statement fell short as it did not convey intent by the communities to establish co-management. It was agreed that during the lunch break a small working group would amend the statement and present it back in plenary to get agreement on a new form of words that was stronger in expressing intent.

Following discussion of the statement Prof Pomeroy began to give an overview of the strategy document that had come from the experiences in the Robertsport pilot. Prof Pomeroy explained the process of co-management and the way that it was undertaken in Robertsport following a series of structured steps. This presentation was followed by a presentation by Yerma Peters that illustrated what this process had looked like in terms of the meetings that were held and decisions made to date. These drew on the presentations that had been given in Sessions 1 and 2 in Day 1. The participants acknowledged the achievements of the people of Robertsport, in particular bringing the community together, understanding co-management and the fisheries regulations.

In the discussions the question was made that Fanti are more powerful and successful than the Kru and had this been taken into consideration. Yerma Peters pointed out that the project was for all people and that the landing site had to be at Fanti town because the coastal erosion meant that it would not be possible to construct at Kru Town. The government and the project have a responsibility to ensure the landing site endures. Dr Subah added that the CMA would be making key decisions, including economic. The Government of Liberia was stressing that the CMA needed to make decisions that would ensure that the benefits from the fisheries go to all and through co-management the fishing communities would represent all groups in the community and be responsible for them. The fish landing site is not for the Fanti or the Kru, it is for all fishers and should benefit fishers beyond Robertsport.

A participant asked about the CMA in Robertsport – how many people does it represent? Another question - Are there intentions to establish CMAs in other places, if so where and when? Yerma Peters replied that the CMA represented some 3,000 people. Dr Braimah explained that Robertsport is considered as a pilot and that the intention is to extend co-management to Buchanan, River Cess and Tailor Kru Town. A number of concerns were raised by J. Voker of the Environmental Protection Agency (EPA). Amongst these was the type of environmental education that was conducted, what had been done, especially in respect to resource sustainability as the communities themselves were making reference to poisons and explosives being used. Reference was made to strategic environmental assessment. Was this done? In observations in the area the people are collecting mangrove and the fish processing areas need to be improved. What assistance will the project provide to the people to address the environmental issues? The EPA has been isolated in the process, in particular in the process of resettlement. In other areas the EPA has been involved.

Dr Subah responded and emphasised that the EPA did indeed have a role to play. WARFP was also not the only project. There is an FAO project on post harvest and processing so issues would be addressed through different initiatives. WARFP also did not do the resettlement this was a Government of Liberia initiative. The fish landing site is intended to address some of the post harvest issues. The WARFP project is still in its infancy but education will be part of the process, for example through the community sciences. Dr Braimah added to these comments to highlight that the preparation stage of the project involved an environmental assessment and the consultants who did this consulted with the EPA. The resettlement plans were advertised in the newspaper and again there were consultations with EPA. The project recognises that there are environmental problems but it is anticipated that the landing site will help to address some of these. The project will help to

revive fish exports that can add value to what people are doing and increase employment as a contribution to this a trainer was brought from Namibia to help develop capacity.

Other participants added to the comments to highlight that the project had undertaken a number of capacity building initiatives. Harry T Kanneh, Development Superintendent for Grand Cape Mount County, highlighted the role of illegal fishing and the need to address this. The introduction of the landing site will make a significant change to Robertsport. The project and Dr Braimah in particular was thanked for the support to Robertsport and the cooperation that was developed in the community. From the county administration perspective full support is given to the project. Construction and the project will have a very big impact in Robertsport. An opportunity is given and all people in Robertsport, Kru, Fanti or other can benefit if they choose Minister for Youth representative reiterated the importance of involving the EPA in the process to help address the environmental issues.

Prof Pomeroy concluded the session by reiterating that there was a clear need for a management plan to be developed in Robertsport and an agreement made with the government about the objectives, regulations and activities. This is the next step. The CMA will need also to consider how to address conflict, set up monitoring and enforcement. Prof Pomeroy highlighted that rights based management was an approach that was gaining prominence and one type of right is Territorial Use Rights in Fisheries (TURFS). In this boundaries are drawn and a community is given ownership of that area and can make the rules. Around the world it is suggested that where fishers are given rights and ownership fisheries can be better managed. The participatory assessment included consideration of TURFs and whether there were boundaries that could be drawn for a TURF around Robertsport. These could be established within the IEZ. Prof Pomeroy left the idea of TURFs as something to think about and drew the attention of participants to Section 10 of the strategy document for establishing co-management. When discussing the national framework in the afternoon TURFs are something that could be considered in the context of the framework. Dr Subah picked up on the theme to point out that the fish resources are depleted and there was a need to protect the breeding areas. The IEZ will be managed exclusively for the artisanal fishers and the community science volunteers have a role to ensure that this zone is secure. The TURF could be the area around Robertsport where they are fishing. There is a need to identify the boundaries between communities where the communities can manage. The six month moratorium should help to rebuild stocks in the IEZ. To establish the TURFs and management there is a need to talk with the communities and identify the areas and the types of rights within the area.

River Cess participant and LAFA representative raised the issue that canoes from Ivory Coast were coming and fishing illegally. Dr Subah responded that this was the start of the process and there is a need to address it. The community science volunteers and MCS should help to tackle this. In the past used to see lots of trawlers. Now we have new commitment to enforcing the IEZ and developing national fisheries. The MCS system tracks vessels and there are regulations and enforcement capabilities to support this. Have to enforce the IEZ as a first step. Mr Yevewuo Subah from the BNF added that every vessel fishing Liberian waters needed to have a fishing license. If they want to take the fish out of the country then export taxes needed to be paid. Referring to the point raised in Day 1, it was suggested that the focus should be on the licensing. Furthermore, when TURFs established then fishers coming to fish in the TURF will have to pay fees. Enforcement will be something that communities will have to expect to play a greater role in. Emmanuel Yarkpazua asked what the

structure was in River Cess to enforce local rules. If fishers catching fish they must be landing so what are the local leaders doing to address the issue - If someone was jailed then the question is why.

A point was raised about regulating species. People are catching sharks, dolphin and turtles. What kinds of fish are people supposed to be catching? Yevewuo Subah responded that EPA has a list of species that are protected including turtles and these should be released if caught. Similarly all sea mammals are protected. There are some sharks that are endangered but there are no regulations on this. There are also size restrictions and this is why the mesh size regulations were introduced. For crustaceans berried females are to be released. These regulations need to be more widely communicated. LAFA president said that it might be difficult to identify where the 6nm boundary is. A key aim is to reduce interaction between industrial and artisanal fishers and LAFA request that some demarcation is undertaken. Dr Subah explained that there is discussion to establish boundaries, Fishers do tend to know how far out they are. The IEZ will represent the outer boundary of the TURF. The issue is to define the boundaries between communities and this is something that we need to work on. This will all take time but already we are seeing that there is more regulation of the IEZ with tracking and observers on the industrial vessels. Dr Braimah concluded the session by explaining that most countries that have been involved in these types of initiatives there has been demarcation. But in Liberia it will be down to the communities to have a role in identifying boundaries. There are fishers who are complaining that industrial fishers are causing problems but they themselves have no license. It is important that there is fairness and that everyone is licensed and legal.

Session 3

The session was intended to be constructed around three presentations highlighting co-management experiences from other parts of Africa and Southeast Asia. As the discussion in Session 2 had been valuable it was allowed to run on and a presentation by Robert Arthur on selected lessons from Southeast Asia was the only one that was given before the participants broke for lunch. The planned presentations by Br Braimah on co-management in Ghana and by Prof Pomeroy on co-management in Africa were not presented. The presentation by Dr Arthur was intended to focus on the role of external agents and government agencies to support co-management. It was stressed that conserving resources and deriving benefits are outcomes that are achieved through effective management or co-management. Ensuring effective management in turn requires an emphasis on developing capacity. Engaging in co-management by government and external agents and supporting capacity building can be guided by five principles that, while sounding simple, can be challenging in practice. These included:

- Building on strengths rather than focusing on weaknesses;
- Legitimacy is a crucial principle for building institutions of management and governance;
- Support people to be involved in the management process and developing their capacity to engage in decision-making;
- Recognise that people need to see that there is a benefit from working together – personal or collective;
- Starting with a pragmatic assessment of what is achievable and providing opportunities for reflection and adaptation are key principles.

Following the presentation the representative from the EPA asked whether it was really the case that we should focus on strengths when there may be significant problems that might undermine progress. Dr Arthur responded that using capabilities as a starting point and bringing people together can help to address and overcome these issues. Dr Braimah added his experiences from the Sustainable Fisheries Livelihood Project. This had also focused on strengths as it was by focusing on strengths and building these strengths that people could begin to address issues and problems for themselves. There will always be problems and enabling people to have the capabilities to address these themselves can be a better long term strategy.

After lunch the participants considered the revised statement of intent. The statement had been revised to include the phrase "we intend to pursue co-management..." as a means to strengthen the intent. The revised statement was read out to the participant and discussed. The discussion began with a consideration of whether the statement should identify counties rather than specific communities. The response was that the statement was drafted by the communities and was perhaps not representative of the intent of other communities in these counties (for example Sembehun in Grand Cape Mount County). The question was also raised as to who the statement should be directed at. In the discussions it was agreed that the statement should be addressed in the first instance to the Ministry of Agriculture but call on the government as a whole. These changes were made to the statement and it was printed out for the participants. The final agreed statement read:

Draft Shared Agenda on Working to Advance Fisheries Co-management, Fisheries Co-management Associations, and a National Network of CMAs in Liberia.

To: Ministry of Agriculture

We, the participants of the Workshop to Validate a Strategy Document for Establishing Fisheries Co-management Associations and a National Framework for Fisheries Collaborative Management in Liberia, representing fishers and other fisheries stakeholder (from the communities of Robertsport, Buchanan, Cestos and Tailor Kru Town, LAFA and BNF), want to highlight the importance of fisheries to our livelihoods and food security. Proper management of the fisheries is critical to ensure their sustainability for the future. We understand the benefits of fisheries co-management and establishing fisheries co-management associations (CMAs) to address the issues and opportunities in the fisheries sector and for improved fisheries management and of the potential for a national network of CMAs. We intend to pursue co-management and call on government and others to support us in our efforts to establish fisheries co-management and CMAs in Liberia.

The final part of the session was used to focus on the national framework that had been drafted. Prof Pomeroy introduced the session by explaining how the existing national laws did not specifically allow for co-management of specify what co-management is. In order to address this gap the co-management consultants had convened a broad group including national and community level representatives to consider what should be developed. The document presented to the participants was the outcome of their deliberation and contains a rationale; definition of key terms; general principles; scope and characteristics of co-management

The participants were divided into three groups:

Group 1: to consider the general principles

Group 2: to consider roles in co-management

Group 3: to consider the structure for co-management

As there was not enough time in the workshop the participants would not have enough time to address Sections 5 onwards of the document but would focus on the general principles, roles and structures drawing on what they had been hearing in the other sections. The three groups were given 25 minutes to look at the relevant sections. As the task was quite complex and generated some rich discussions the groups were allowed additional time to discuss.

Group 1 – general principles
The group considered 3.1 to 3.4. On 3.2 there were some agencies such as EPA and Liberian Maritime Authority and FDA who could also represent responsible institutions.

Group 2 – roles
They considered the bullet points under section 1. When they came to conflict management they believe that this should be the responsibility of the CMA rather than the central government. In the discussion on the presentation it was suggested that this could be the responsibility of both depending on the nature of the conflict and that BNF would have responsibility for external conflict. The rest of the bullets were fine. For the roles of the CMA these were fine but suggest that add that CMA has primary responsibility for conflict management internally to the list of responsibilities.

Group 3 – structures
In section 4.3 the group considered the numbered points:

1. Suggested change that 'authority delegated from BNF to the CMA through LAFA'.

2. Suggested that LAFA 'should be involved' not 'may be'

3. Accepted as is

4. Anyone who comes in and has a role in supporting and facilitating should be through a general agreement with LAFA.

The plenary discussed the proposed changes. First question was whether LAFA and the CMA are different. It was confirmed that they were. Yevewuo Subah made the point that LAFA are an interest group and it is not necessary to go through LAFA. This should be possible but not mandated. LAFA after all may not be an enduring organisation while government and CMA are the primary partners. Any involvement of LAFA should be discretionary. In response it was pointed out that the Director of BNF identified LAFA as the association of artisanal fishers to represent their interests. The risk is that if LAFA are not mentioned in the by-laws there is a risk that they would be excluded. Response from Yevewuo Subah was that LAFA is a voluntary organisation that it was the choice of fishers to join or not. LAFA have no mandated role so it is not right in the context of this document to present LAFA as the sole representative of artisanal fisheries. EPA representative added to this that if LAFA does not represent the interests of all fishers in Liberia then identifying LAFA may be problematic if there are other groups representing fisher interests. Even if LAFA were representing all interests then what would be the role of LAFA compared to the CMA? Yevewuo Subah reiterated that there were three

or four organisations representing fisher interests. These groups took fees from fishers but didn't represent their interests and disbanded. It is not impossible that other groups could emerge and that LAFA could go down.

Prof Pomeroy pointed out that CMA was representative of local communities. LAFA is an NGO representing and advocating on behalf of artisanal fishers. EPA – have to be careful if this is an organisation not representing all fishers and 'may' would be a more appropriate form of words. Dr Braimah added words of caution. In Liberia there is one fishers' organisation but this may not always be the case and need to ensure that these groups can also work with the CMAs. We should not give the impression that LAFA are the only fisher representatives. Other groups who come up and become strong should also be able to work directly with CMAs. LAFA president reminded the group of where LAFA came from. In Senegal conference the Liberian government was requested to form an organisation to speak on behalf of fishers. There were elections at Min Ag and got accreditation from Ministry of Interior. LAFA represents all fishers of Liberia and speak on their behalf. Based on petitions by LAFA, and evidence from the community sciences, Ministry of Agriculture acted to impound vessels. The point was made that fishers should be allowed to choose to join whichever group they feel best represents their interests. Yevewuo Subah said that if LAFA mandated by parliament as only group then yes, could be in the document in this way but until then LAFA is an interest group and can be involved but not critical. Another view was presented that including them would mean that LAFA will remain strong. Emmanuel Yarkpazua gave an alternative perspective and pointed out that it is perhaps too early to include LAFA. If LAFA is able to prove itself then the fishers will come to them anyway. It was agreed that for now the existing form of words would be retained.

At this point the group took a break for coffee. Returning from the break at 3:45 Yerma Peters led the group in looking at the agenda and reflecting on whether the objectives and outputs had been achieved over the course of the workshop. It was agreed that all objectives and outputs had been achieved.

Dr Braimah concluded the workshop by thanking the participants, in particular those who had travelled to attend and asking for brief impressions from participants.

First participant thanked Dr Braimah for bringing us to the workshop and for the support in establishing the first CMA in Grand Cape Mount County and Liberia

Second participant gave thanks for allowing them to participate and for a well organised workshop. She assured the participants that what was done in Grand Cape Mount County would be repeated elsewhere in Liberia and that the workshop had been a wonderful opportunity.

Thanks were given to those who had assisted in organising the workshop and the workshop was closed with a prayer.

Day 2 Workshop evaluation

A number of participants had left at the lunch break and, with the workshop running over time it was decided that the evaluation forms would not be used. On reflection, with the majority of participants involved in both days of the workshop, it would have been more appropriate to conduct a single evaluation at the end of Day 2.

Next steps

Following the workshop, the next steps in the co-management process will be to continue to build on the success to date in Robertsport, extending co-management from this pilot site to other parts of Liberia, starting with Buchanan, River Cess and Tailor Kru Town, and to further develop the national framework for co-management. The workshop helped to highlight aspects that it would be important to consider in doing so.

Developing and extending co-management in Liberia

The process of creating co-management can provide an important opportunity to bring together communities to collectively address the development of the sector, although it was recognised that this could also be challenging. Using the issues raised by the community groups on Day 1 could provide a useful starting point for discussing development of co-management in those areas. In initiating co-management, experiences shared at the workshop suggested that within this, existing rule-making arrangements and the role of, and relationships with, the fisher chiefs can be critical. Once established, it is important that co-management associations develop local by-laws and work plans. Within these issues such as the length of tenure of the executive committee members, roles and responsibilities can be critical. This will be important in the future development of the CMA in Robertsport and also in guiding the establishment of co-management in other areas.

Supporting the development of capacity was emphasised as critical to each of the steps in developing a transparent, accountable co-management process that enables and provides incentives for local people to engage in decision-making about local resources. This includes developing the capacity of the BNF to engage with local groups and respond to their needs and aspirations as well as of the CMA and CMA members and ensuring that BNF assigns support the co-management efforts. Lessons were presented that emphasised the potential of local and national agencies to support this process, bringing additional resources and helping to secure long term support. For example, the role of community science, support for the development of financial planning and financial management capacity and sharing experiences and learning through a CMA network were emphasized. Identifying and mobilizing the various kinds of capacity and resources available, working with them to support the co-management process and the local CMAs will be an important next step. This was reflected in the statement that was made by local participants calling on government and other agencies to support their efforts to establish co-management in Liberia.

Development of the national framework for co-management

The presentations and discussions also highlighted that developing regulations would require a co-ordinated effort. What could be possible would be constrained and enabled by the national framework for co-management that was being developed. Issues of how rights and jurisdiction can be reconciled with stocks and existing fishing practices will need to be considered in the finalisation of the national framework. Current fishing practices are legitimised under a variety of arrangements that provide for a range of rights. Existing rights, e.g. of the semi-industrial fishers and of fishers who migrate seasonally to the coast, and how these rights might be affected through the development of co-management, will need to be explicitly considered at an early stage and addressed in the framework.

The issue of jurisdiction was also emphasised in the workshop. Currently the framework emphasises co-management within the IEZ yet artisanal fishing activities often extend beyond the IEZ, especially

in the dry season. How these activities outside the IEZ are regulated and management plans for the stocks fished are developed needs to be considered further. With artisanal activities inside and outside the IEZ, the framework or other measures will also need to include ways to address and avoid conflict between the artisanal and industrial fleets.

Within the IEZ management plans and regulations developed by the CMAs should account for existing fishing patterns. Fishers seasonally (and within seasons) move between fishing grounds and landing sites. To make enforcement simpler, consideration will need to be given to how these existing activities can be accommodated and alternative rights-based approaches (for example, TURFs or the landing site based regulations that are currently used) will need to be explored.

WEST AFRICA REGIONAL FISHERIES PROGRAM (WARFP – LIBERIA)
MINISTRY OF AGRICULTURE
Bureau of National Fisheries
P. O. Box 10-9010
l000 MONROVIA 10, LIBERIA-Cell 0880747469

AGENDA

Workshop to Validate a Strategy Document for establishing Fisheries Co-Management Associations and a National Framework for Fisheries Collaborative Management in Liberia

December 13th and 14th, 2011 at *P. A. Rib House*, Monrovia, Republic of Liberia

Organizers   Ministry of Agriculture, Bureau of National Fisheries

Purpose: The **goal** of this workshop is to validate a strategy document for establishing fisheries co-management associations as well as a national framework for the effective development, coordination, and governance of fisheries collaborative management (co-management) in the Republic Liberia.

Related to this goal, there are four **objectives** to be achieved during this workshop:

Objective 1:   To establish a framework to coordinate the development and implementation of a fisheries co-management at the national level;

Objective 2:   To form a national network of current and proposed participating fisheries co-management associations (CMAs);

Objective 3:   To finalize a strategy document for establishing fisheries co-management associations in Liberia; and

Objective 4:   To inform national and county authorities of the rationale for and purposes of fisheries co-management, as well as the progress achieved to date and future needs of national policy and program implementation.

The intended **outputs** of the workshop are:

1. Creation of a national fisheries co-management framework and coordinating body;
2. Statement of intent for a national network of participating CMAs from Liberian community representatives;
3. Strategy document prepared for establishing fisheries co-management associations in Liberia;
4. Increased national and county agency awareness and support for implementation of fisheries co-management in Liberia; and
5. Increased awareness and sharing of the experiences and lessons learned from initiating fisheries co-management in Robertsport, Grand Cape Mount County.

AGENDA

_Day One__: Development of a National Network of Fisheries CMAs (December 13th, 2011)_

08:30   Participant arrivals; coffee and tea served

09:00   **Workshop Welcome**

- Welcome statement by the Host *(Yarnga)*
- Opening remarks by the Organizer *(Braimah)*
- Brief attendee introductions
- Review of workshop purpose and agenda *(Pomeroy)*

09:30   **Session 1: Summary of Progress to Date**

- Overview of BNF/WARFP *(Davis)*
- Overview of WARFP co-management activities (timeline, synopsis of key challenges and achievements to date) *(Peters)*

10:00   **Session 2: Establishing Fisheries Co-Management Associations (CMAs)**

- Summary of the process used to establish the Robertsport CMA *(Pomeroy)*
- Issues arising from the resource assessments *(Arthur)*
- Presentation of conclusions and recommendations on the establishment of other fisheries CMAs throughout Liberia *(Pomeroy)*
- Group discussion/question and answer

11:00   Break; group photo

11:30   **Session 3: Sharing Lessons Learned**

- Sharing experiences and lessons learned from fisheries co-management in Ghana *(Braimah)*
- Sharing of experiences and lessons learned by representatives from the Robertsport CMA regarding:
  (a) The challenges and issues in initiating the Robertsport CMA; *(Adams)*
  (b) The achievements and successes experienced to date; and *(Massa)*
  (c) Recommendations to other CMAs based on lessons learned to date. *(Edwin)*
- Group identification and discussion regarding national-level needs *(Moderated by the Co-Management team, Robertsport)*

13:00   Lunch

14:00   **Session 4: Developing CMAs and Potential for a National Network of CMAs**

- Presentation by the Community Science volunteers – monitoring and issues identified in the coastal communities *(Charles/Sayon)*
- *Statement of Intent on a CMA Network*
  - Introduction to group exercise *(Pomeroy)*

- Group discussion on how, through co-management, CMAs and/or CMA network might work in the future to address local and shared opportunities and constraints and what support from BNF or other agencies this might require
- Develop a draft statement of intent on working to advance fisheries co-management and good governance at their communities and collectively *(group)*

16:45   **Meeting Close**

- Review progress made against meeting purpose and intended output; pass out written workshop evaluation *(Peters)*
- Closing remarks and thanks – Host and Organizers

17:00   Adjourn

__Day Two__: Validation of a Strategy Document for establishing fisheries co-management associations and a National Framework for Fisheries Co-Management in Liberia (December 14th, 2011)

8:30   Participant arrivals;

09:00   **Workshop Welcome**

- Welcome statement by the Host *(Braimah)*
- Opening remarks by the Minister of Agriculture *(Florence Chenoweth)*
- Brief attendee introductions
- Review of workshop purpose and agenda (*Pomeroy*)

9:30   <u>Session 1</u>: **Introduction to Fisheries Co-Management**

- Introducing Fisheries Co-management and its global application *(Pomeroy)*

10.00   Break

10:30   <u>Session 2:</u> Presentation of strategy document

Present strategy for establishing fisheries co-management associations in Liberia using Robertsport as a case study:

- Group discussions
- Plenary

12:00   <u>Session 3:</u> **Development of a National Fisheries Co-Management Framework**

- Review of experiences and lessons learned from national and international fisheries co-management in Southeast Asia *(Pomeroy and Arthur)*
- Recommendations and lessons learnt from assessment of Co-management activities in Ghana funded by the World Bank *(Braimah)*
- Group discussion regarding the development of a national framework for fisheries co-management in Liberia, including: (a) constraints and issues; (b)

opportunities; and (c) practical aspects of national ministry support to development of national fisheries co-management framework, including mandates, roles, and responsibilities *(Pomeroy)*

13:30   **Meeting Close**

- Review progress made against meeting purpose and intended output; pass out written workshop evaluation *(Peters)*
- Closing remarks and thanks – Host and Organizers

14:00   Adjourn

Annex B – Participants

Day 1

N0.	Name	Org/institution	Position
1.	John Adams	CMA	Gen. Secretary
2.	Massa Kiazolu	CMA	Co. Chair
3.	Cecelina Johnson	CMA	Co. Chair
4.	S.E. Adu-Auteoh	Fanti comm.	Secretary
5.	Kofi Atta Panyin	Fanti Comm.	Fishermen Chief
6.	B. Boakia kiawu	CMA Rep.	Member
7.	Sando Kiatama	CMA	Assistant Secretary
8.	Luarenzo N. Karteh	CMA	Financial Secretary
9.	Joseph Onumah	Fanti Assist. Governor	Governor
10	Anthony Jackson	Fanti Sea Chief	Sea Chief
11	Isaac Klay	LAFA	Coordinator
12	Williams Sayon	Kru Town	Assist. Governor
13	Nimeye Doe	CMA	Internal Auditor
14	Mustapha Kiawu	CMA	Member
15	Solomon Tucker	Buchanan –MOA	Fisheries Inspector
16	Savice Doe	LAFA	Fishing chief
17	J. Septinus Teah	LAFA	Secretary
18	Robert Arthur	MRAY	Director
19	Robert Pomeroy	UCONN	Professor
20	Ernest Kiazolu	WARFP-Liberia	Dashboard Operator
21	Miatta Taylor	WARFP-Liberia/BNF	Internal Auditor
22	Patrick Wesseh	WARFP-Liberia/BNF	Adm.Assistant
23	Mimred Morris	WARFP-Liberia/BNF	Observer
24	Tonia A. Johnson	WARFP/BNF	Observer
25	Krubo M. Jallah	WARFP/BNF	Observer
26	A.Trokon Tarr	WARFP/BNF	Comm. Marketing
27	L.I Braimah	WARFP/BNF	Coordinator
28	Peter Manning	NFDS	Consultant
29	Yevewuo Z.Subah	BNF/MOA	Good Governance
30	Sadiko Kondo	World Bank	Junior Professor Officer
31	Patrick Sayon	Com. Science	Coordinator
32	Yarnga B.Tokpa	BNF/MOA	Officer incharge
33	Yerma R. Peters	WARFP/BNF	Com.DEV.Specialist
34	J.Edwin Kalen	WARFP/BNF	Chairman CMA
35	James Davis	WARFP/BNF	Deputy Coordinator
36	Charles Simpson	Comm. Science	Chairman
37	Nyamto Sleh	LAFA	President Opp.
38	Alfred N.Kawreh	LAFA	President
39	Glassgo Togbah	BNF/MOA	Head of Marine
40	Bazak Nyemah	LAFA	Secretary
41	Johnson Voker	EPA	MEA Coordinator
42	D.Wesseh Kay	BNF/MOA	Research/Statistic
43	Emmanuel Yearkpazoa	WARFP/BNF	Comm. Organizer
44	Nod Koifee	Community	Chief
45	Robert W. Wilson	WARFP-Liberia/BNF/MOA	Dashboard Operator

Day 2

No.	Name	Org/institution	Position
1.	Sando Kiatama	CMA	Assistant Secretary
2.	Solomon Tucker	MOA	Fisheries Inspector
3.	Joseph Onumah	LAFA	Assistant Governor
4.	Massa kiazulo	CMA	Co. Chair
5.	Cecelia Johnson	CMA	Member
6.	Williams Sayon	Rivercess	Governor
7.	Anthony Jackson	Rivercess	Sea Chief
8.	Sara zeo	Rivercess	City Mayor
9.	Josiah Teah	Rivercess	Youth Coordinator
10	Laurenzo N.Karteh	Robertsport (CMA)	Financial Secretary
11	John Adams	RobertSport(CMA)	Gen. Sec.
12	Kofi Attah	LAFA	Fishing Chief
13	S.A.Adu Arkoh	Fanti Comm.	Secretary
14	Savice Doe	LAFA	Kru Fishing Chief
15	Septinus Teah	Buchanan	Secretary
16	Mustapha Kiawu	Kru Town	Rep.
17	Boakia Barba Kiawu	CMA Kru Town	Member
18	Glassgo Togbah	BNF/MOA	Head of Marine
19	Nimene Doe	CMA	Auditor
20	Bazak Nyemah	CMA	Member
21	Dennis Bartee	MPEA	M&E Assistant
22	Charles Simpson	Comm. Science	Chief
23	Isaac Klay	LAFA	Coordinator
24	Odecious F.Fatomah	MPEA	Acting CDO/M&E
25	Samuel W. Cooper	MPEA	Acting CDO/M&E
26	Larry S.Koleh	MOA/Riverces	CAC
27	Botoe B Massaqui	MOA/C/Mount.	CAC
28	A.Trokon Tarr	WARFP/BNF	Comm./Marketing Specialist
29	Jerome Smith	MOA/River	Co.Officer
30	Dr.Sizi Subah	MOA	Deputy Minister
31	Peter Manning	NFDS	Consultant
32	J. feaurray Wilson	MYS	Coordinator
33	Nyantee Sah	LAFA	Vice President
34	Alfred Kawreh	LAFA	President
35	Sachiko kondo	World Bank	Jr.Professional officer
36	Yevewuo Z. Subah	BNF/WARFP	Good Governance
37	Yarnka B. Tokpa	BNF/MOA	Officer in charge
38	Bailey Togbah	MOA	Asst.Sapt
39	Bill S. Cephas	FLY	Asst. coordinator
40	Jeron Koku	FDA	Sr.Ex.officer
41	James Davis	WARFP/BNF	Deputy Coordinator
42	Emmanuel Yarkpazoa	WARFP	Comm. Organizer

43	Paolo Nasiata	UNMIL	CA Officer
44	Daniel D.Wleh	Power TV	Reporter
45	Edwin Tayiah	Daily Observer	Sr. Reporter
46	D.Wesseh Kay	BNF	Research/Statistic
47	J. Edwin koln	WARFP	CMA
48	Anthony Nimely	Rep.Lib	Acting City Mayor
49	Milred Morris	WARFP/BNF	Observer
50	John R.Nyamah	MPEA	Pling.Officer
51	Joyce Koloah	MOA	CAC/ Rivcess
52	Krubo Jallah	WARFP/BNF	Fisheries Observer
53	Tonia A.Johnson	WARFP/BNF	Fisheries Observer
54	J. Voker	EPA	MEA.Coordinator
55	Aguslin Tonren	INI	Ex. Director
56	Aban Bondon	INI	Protocol Officer
57	James G. kiazolu	MIA	City Mayor
58	Harris Karnah	MIA	ASD
59	Atty Zakoma Harris	MOJ	Grand Cape Mount.

Annex C - Establishing Fisheries Co-management Associations in Liberia: Guidelines

Establishing Fisheries Co-management Associations in Liberia: Guidelines

Robert Pomeroy
Consultant
Co-management Specialist

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1. Introduction

During the last decade, there has been a shift in the governance of fisheries to a broader approach that recognizes fishers' participation, local stewardship, and shared decision-making in the management of fisheries. Through this process, fishers are empowered to become active members of the fisheries management team, balancing rights and responsibilities, and working in partnership, rather than antagonistically, with government. This approach is called co-management.

It is becoming increasingly clear that governments, with their finite resources, cannot solve all fishery problems. Local communities will need to take more responsibility for solving local problems. In order to do this, however, communities must be empowered and resources provided to make decisions locally and to take actions that meet local opportunities and problems. The assistance and support of government will still be needed to achieve these results, although the role and responsibilities of government will also need to change.

It is important for the fisheries manager to be creative and innovative. There is no blueprint formula for managing a fishery; each one is different. Different approaches will need to be tried and integrated. There will be success and there will be failure. There must be learning and adaptation. The community of fishers and the government, through a co-management arrangement, will need to work together to decide the best combination of approaches for their situation.

The purpose of these co-management association guidelines is to support broader stakeholder involvement in the fisheries management process in Liberia.

2. Co-management

Co-management is an approach to implement fisheries management with stakeholder involvement. Cooperative management or co-management can be defined as a partnership arrangement in which the community of local resource users (fishers), government, other stakeholders (boat owners, fish traders, boat builders, business people, etc.) and external agents (non-governmental organizations (NGOs), academic and research institutions) share the responsibility and authority for the management of the fishery (Figure 1). Through consultations and negotiations, the partners develop a formal agreement on their respective roles, responsibilities and rights in management. Those involved in co-management have both rights and responsibilities, with the rights in this case being management rights – the right to be involved in design and implementation of management measures.

Figure 1. Fisheries co-management is a partnership
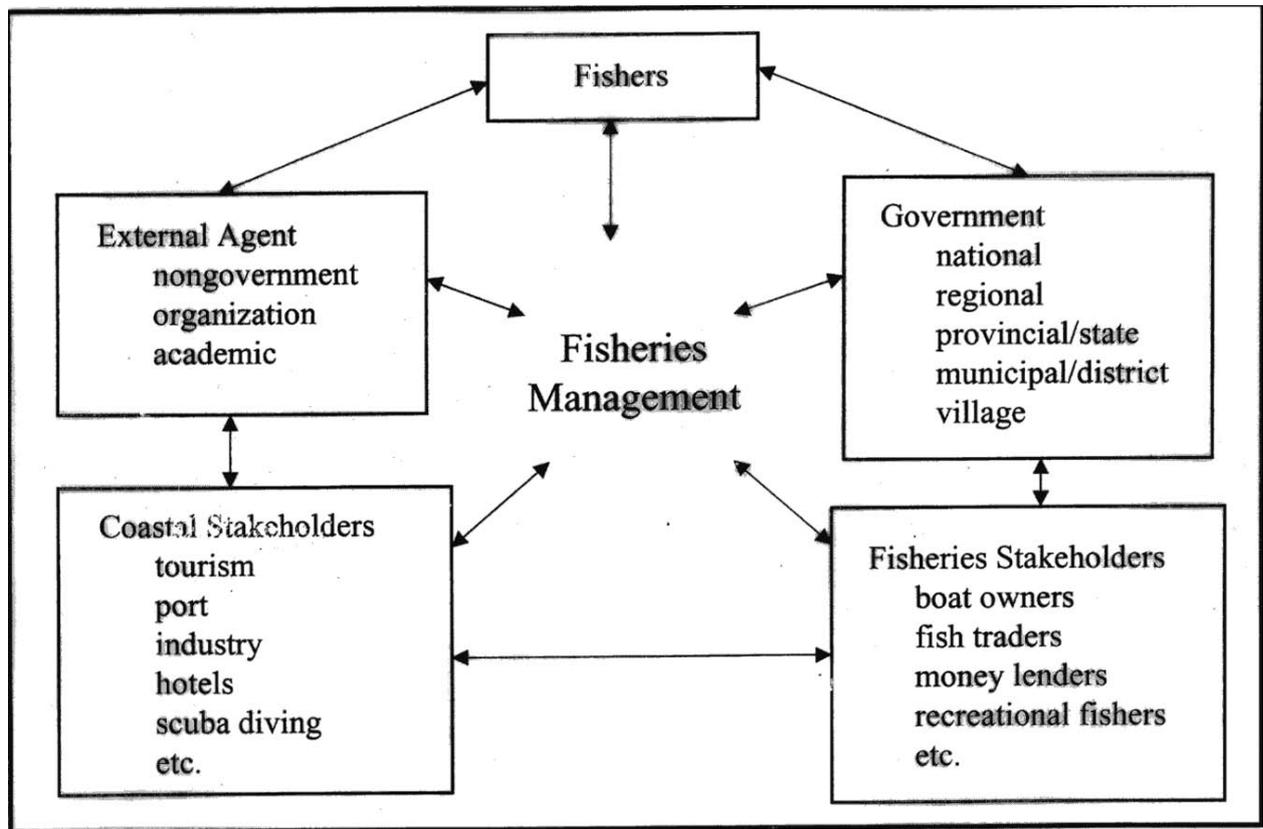
Fisheries Co-Management is a partnership.

Co-management covers various partnership arrangements and degrees of power sharing and integration of local (informal, traditional, customary) and centralized government management systems (Figure 2).

Figure 2: Co-management covers various partnership arrangements

Consultative co-management	Collaborative co-management	Delegated co-management
Government interacts often, but makes all of the decisions	Government and the stakeholders work closely, and share decisions	Government lets formally organised users or stakeholders make decisions

The motivation for co-management initiatives includes their potential to: (1) reduce conflict between stakeholders and government, as well as between stakeholders themselves, by clearly defining rights and responsibilities, by providing an institutional forum for discussion among decision makers, and by encouraging support for the management process, and (2) build a conservation ethic, by bringing fishers and others into the decision making process, so they share responsibility for sustainability in the fishery.

3. Stakeholder Involvement through Community Organizations

The active participation of people in a community in the co-management program is at the heart of co-management. Success of co-management is directly related to a well-organized community that has been empowered to take action to manage and conserve its aquatic resources. Community organizing is much more than just establishing organizations, it is a process of empowerment, building awareness, promoting new values and behaviors, establishing self-reliance, building relationships, developing organizations and leadership, and enabling communities to take action. Thus, environmental education, capacity development and social communication are central elements of the co-management process.

It is useful to note that the term 'community' can have several meanings. Community can be defined geographically by political or resource boundaries or socially as a community of individuals with common interests. For example, the geographical community is usually a village political unit (the lowest governmental administrative unit); a social community may be a group of fishers using the same fishing gear or a fisher organization. A community is not necessarily a village, and a village is not necessarily a community. Care should also be taken not to assume that a community is a homogeneous unit, as there will often be different interests in a community, based on gender, class, ethnic and economic variations. Recently, the term 'virtual community' or 'community of interest' has been applied to non-geographically based communities of fishers. Similar to the 'social community', this is a group of fishers who, while they do not live in a single geographical community, use similar gear or target the same fish species or have a common interest in a particular fishery.

To participate in co-management, the stakeholders will need to organize themselves and arrive at an internal consensus on the interests and concerns that they want brought forward. Meetings and discussions are held among the individual stakeholders to identify and clarify their interests and concerns and for those individuals with common interests and concerns to organize themselves into groups. Effective community participation in co-management requires a strong community organization(s) to represent its members. In some cases, community organizations capable of representing their members in co-management already exist in the community. In other cases, organizations will either need to be strengthened or newly established. One or more community organizations may be needed in the community depending upon its size, diversity and needs. An appropriate person(s) from the organization must be selected to represent them on the larger co-management organization.

Fishing cooperatives and fisher associations exist in many communities. However, these organizations will not automatically be suitable as representative organizations in co-management. It is likely that they were established with objectives that relate more to expanding exploitation, improving marketing and increasing the incomes of members. Changes in outlook will be necessary for these organizations to play major roles in resource management. These changes may be difficult and lengthy, especially if the organization is still struggling with its original mandate. Putting more focus on management may strain the internal cohesion of the organization.

4. Establishing co-management associations

There are a number of specific activities and interventions in the establishment of co-management associations (CMAs). These include community entry and integration, research

and participatory research, environmental education and capacity building, and community organizing.

4.1 Community entry and integration
Community entry and integration are usually the first steps in the establishment of CMAs. Extension workers and community organizers (COs) begin to identify the main stakeholders, those groups and individuals with an interest in co-management, and facilitate the process. It is often difficult to determine who is and who is not a legitimate stakeholder and at what level in the co-management partnership they should be involved. The extension workers and community organizers establish initial relationships and credibility with community members, targeting project participants and local leaders at this time. The COs, working with the local people, identify and study the communication and participation structures in the community, including local social structures and power relations, forums for discussion and conflict management, communication barriers by gender and class, and participation in decision-making. A series of meetings and discussions is held with resource users, stakeholders and government officials to share the concept and process of co-management, to begin to develop communication and a consensus on their interests and concerns, and to build awareness about resource protection, management and rehabilitation. Community members actively participate in these activities. Other activities include identifying key individuals and groups to be involved in co-management, the organizing of a start-up team composed of community members, answering questions about the program, raising awareness about issues, the process and the program, and participating in community activities such as fishing and local events. Government and local leader approvals are sought. At this point, it is useful for the CO, working with community members, to conduct a feasibility analysis to determine whether a co-management arrangement would be possible. The legal, political, institutional, economic and socio-cultural feasibility need to be considered. A household census may be conducted to collect socio-economic data on the community to initially identify problems, needs and opportunities. Community integration of extension workers and community organizers can be a long process and requires those workers to have the skills, energy, commitment and personality to listen, share and work with the people of the community on an equal basis.

4.2 Research and participatory research
Participatory research is conducted to collect and analyze baseline data on the community, its people and its natural resources and to generate new knowledge. The baseline data are used in the preparation of development and management plans and strategies, for decision-making, for monitoring and evaluation and for process documentation. A participatory research process involves the people of the community, working with the researchers, in the design, collection, analysis and validation of the output. The participatory research process can also raise awareness and educate community members about their community and natural resources, as well as being useful in the formulation of potential solutions. Participatory research, which is conducted using a mix of scientific and rapid-appraisal methods, includes the collection of traditional and indigenous knowledge. Participatory research can have four components, conducted in an interactive and iterative manner: (i) resource and ecological assessment (REA); (ii) socio-economic assessment (SEA); (iii) legal, policy and institutional assessment (LIA); and (iv) problem, needs, issues and opportunities assessment (PNIO). A REA provides a scientific and technical information base on the coastal and marine resources of the area. It usually includes three interrelated assessments: capture fisheries, coastal habitat (coral reef, mangrove, sea grass) and water quality. A SEA, which provides baseline information and a profile on social, demographic, gender, cultural and economic

characteristics and conditions in the community, includes both stakeholder and conflict analyses. An LIA profiles the institutional arrangements (formal and informal rights and rules), organizational arrangements, legislation and policies and programs (internal and external to the community) for coastal resources management. The PNIO is a participatory assessment of opportunities, problems, issues and needs, which is conducted by and with the stakeholders through a series of community meetings, key informant interviews, surveys and one-on-one discussions. Community members share with each other, as well as with government and external agents, ideas for their community's future and their vision on how to achieve that future. Drawing on the baseline data from these four assessments, participants discuss the feasibility of developing a co-management agreement. The baseline data also serve as a basis for the future monitoring of the program and for the evaluation of success and impacts.

4.3 Environmental education and capacity building
Environmental education and training, integral and ongoing activities of the co-management program, are the main methods of capacity building for community members and government. The external agent usually implements these activities, based on the assessments conducted earlier. The education and training should recognize and build upon the existing experience and knowledge of community members and government. Information is exchanged and the CO can learn from and with community members and government. Education methods, formal and informal, include small-group work, seminars, cross visits, role-playing, radio, video and fisher-to- fisher sharing of local knowledge. Environmental education is a priority goal of these activities, as is the building of community members' and government officials' and staffs' capabilities and confidence so they can make informed choices and decisions about problem articulation, management and development objectives, strategies and plans, and implementation.

4.4 Community organizing
Because community organizing is the foundation for mobilizing local human resources, community organizations and leaders are needed to take on the responsibility and authority for management and development activities. These organizations and leaders may already exist in the community, may emerge by themselves or may be newly established. Their focus is on participation, representation, and power sharing in the community. The members of any such group or organization must be willing to take on the responsibility. Existing organizations and leaders in the community are identified through the stakeholder analysis and LIA. Various types of organizational structures can become involved, including associations, cooperatives, unions, management councils and advisory committees, and may have differing levels of participation. Organizations may be formed at levels ranging from the fisher to the village to the municipal/district to the province/state. Organizing is often associated with work aimed at community members who are economically disadvantaged and/or with the least political power.
Education and training can empower the organization or leaders, developing their ability to take on management responsibility. Leadership development is an important part of this step, since strong and dedicated leadership is necessary if co-management is to succeed. Existing community leaders, such as elected officials and senior fishers, play an important role but may be too closely tied to the existing community power structure to be advocates of improved equity. New leaders, often individuals with the motivation but not the means to take on leadership, can invigorate the process and increase its legitimacy. Terms of office for leaders should be short enough to decrease the possibility of corruption and power grabbing. Adequate time must be provided for the organizing and leadership development processes.

Lack of social preparation is often the cause of program failure. It is during this step that the roles and responsibilities of organizations, leaders and stakeholders are delineated and clarified. Formal and informal fora for discussion and debate should be established, with stated place, time and rules for their meetings. Bridges are built between groups and organizations to improve communication and collaboration. The core groups and organizations advocate for support for policies, laws and local initiatives. Initial consultations and/or planning meetings are held among the partners to develop the co-management agreement.

5. Community Entry and Integration

Community entry and integration entails a number of activities to initiate the project including:

- Formally introducing the program to the community;
- Answering questions about the program;
- Identifying potential leaders;
- Core group formation; and
- Assessing existing organization in the community.

5.1 Community Meetings

Community meetings are one method to introduce co-management to the community. The community meetings should have the general purposes of:

- Introduce the program and its objectives;
- Introduce the concept of co-management;
- Introduce the approach to be taken to community participation and activities;
- Determine the role of community members;
- Open communication and dialogue;
- Determine the level of support;
- Encourage participation and cooperation; and
- Determine the needs of the community members in terms of training and awareness raising.

These community meetings can be part of previously organized meetings, such as government, social or religious gatherings. They can be meetings organized by the CO specifically for the purpose of informing community members about the program. Or these meetings can be informal where the CO meets with groups of people in daily settings such as the market or fish landing site. The CO should hold as many meetings as needed to ensure that community members are informed and aware of the program, are familiar with the CO and know how to contact the CO. The meeting agenda should include an introduction of people associated with the program (CO, government and community leaders, external agent), a presentation about the program and open discussion about the program and any inputs and concerns from the meeting participants. The CO should have a formal presentation prepared which covers the above topics about the program. A formal presentation will ensure that the same information about the program is presented at each meeting. Published materials about the program (including purpose, objective, partners, role of community, co-management) should be available. The presentation and published materials should be easily understood and in the local language.

5.2 Identify potential leaders

The CO should identify candidates in the community who could become leaders in the co-management program and help in their training and preparation. The CO may want to identify a range of candidates to develop diversity in leadership and to serve specific activities. Fishers tend to be independent people but co-management requires leaders to lead the process and the organizations which are involved in co-management. Leaders are needed to motivate, inspire, manage and energize the organization and process. Leaders may have some natural ability to lead, but leadership can also be learned through experience. A good leader:

- Is willing to share power with the group;
- Listens;
- Communicates;
- Collaborates;
- Expresses the values of the organization;
- Pulls together strengths and talents of the group;
- Has a caring and positive attitude towards people;
- Values consensus;
- Is open-minded, flexible and willing to compromise;
- Leads by example; and
- Considers the group over self.

A leader is a steward, or caretaker of an organization, one who has been entrusted to work for the benefit of all.

5.3 Assessing existing organizations

Organizations are groups of individuals bound by a common purpose to achieve objectives. Organizations can be formal (i.e. those registered with government) and informal (i.e. those that are traditional). Organizations may be called cooperatives, associations, councils or nongovernmental organizations, and may exist for a number of purposes including resource management, fishing, religious, youth, women, sport, marketing, etc. An organization may have a formal management body and rules or may be an informal grouping of individuals for a specific purpose. In co-management, community organizations and their representatives participate in decision-making and managing and protecting the fisheries and aquatic resources.

Before deciding to form a new organization, the CO should identify and assess the existing organizations in the community. Organizations may exist in the community that are already capable of engaging in co-management or just need to be strengthened. In some cases there may be existing organizations providing services or operating projects in the community. If these services can be useful to the project, the CO should consider the possibility of executing a memorandum of agreement with the organizations so as to avoid duplication of services and interventions. Secondary data and the community census can provide information on organizations in the community. The CO may also want to interview community leaders and key informants to identify community organizations. Formal organizations may be easier to identify than informal organizations. It will be important to talk to a wide range of individuals in the community to identify all organizations.

For each organization the following information should be obtained:

- Name;
- Address/location;
- Purpose;
- Years in existence;
- Formal/informal;

- Contact person;
- Names of management members (president, vice-president, treasurer, secretary, board members);
- Number of members (male/female);
- Annual reports;
- Strategic plan/rules/regulations;
- Meeting schedule.

Several factors to be considered in assessing existing organizations include:
- Does the organization represent the different sectors in the community (e.g. youth, fishers, women, etc.)?
- Was the organization formed to address issues related to co-management or resource management?
- Does the organization have a mechanism to deal with dynamics/issues within the group (e.g. interpersonal conflicts, delineation of roles and functions, etc.)?
- Does the organization have a legal personality and/or credibility in the bigger community?
- Is the leadership structure and pattern democratic enough to promote maximum participation from members?

For each organization, a profile with the above information is prepared which will assist in assessing the organization's capability to engage in co-management.

5.4 Formation of core groups
A core group is a small group of individuals from the community (perhaps four or five) who will initially work with the CO to guide the co-management program. The core group should only operate until viable and functional community organization(s) and a co-management body are in place. The members of the core group should represent different sectors of the community. The core group is crucial as it gives initial real responsibility and power to the community members for management. The core group will be:
- A highly cohesive and committed group;
- The basic building block of the organization(s);
- A training ground for leadership;
- A forum for practicing people's participation; and
- Initial co-management management team.

Depending upon the size of the community and the context, there may be several core groups established to address specific co-management activities or issues. The core group can serve to:
- Facilitate the circulation of information among community members;
- Develop dialogue and provoke social discussion about community and resource management issues;
- Facilitate community organizing;
- Identify problems, issues and opportunities;
- Assist in program decision-making;
- Identify stakeholders and stakeholder groups;
- Assist in the gathering of information.

The core group members may come forward by themselves and volunteer to be involved based on personal motivation, such as the initial leaders identified earlier, or they may be selected by the CO and/or community leaders. Depending upon the situation, the CO may be a member of the core group.

The following criteria can assist in choosing the core group members:
- Be credible to community members (either certain community groups or the majority of the community);
- Be accessible to community members;
- Represent a diversity of community interests and groups;
- Be well-respected;
- Be conscientious and resourceful in their work;
- Have good communication skills;
- Be open-minded and desirous of change.

Other criteria may be added for a specific context and community. Some key qualities of a good core group are:
- Being active, efficient, fair, multi-disciplinary and transparent in decision-making;
- Acting on the basis of consensus and collaboration;
- Being determined to launch but not to lead or dominate the co-management process.

It can be expected that there will be differing levels of knowledge and experience among the core group members about co-management and the various activities associated with it. The CO will need to provide information and training to the core group on specific topics and issues, such as the co-management program and various activities, as needed to assist them in their work. The core group may need to meet regularly during the initial phases of implementation to make decisions and guide the program. If core group members are hesitant to join in the co-management program, consider having informal discussions with community members to find out probable causes why they are unwilling to participate. Consider any past experiences with co-management or development projects in the community and success or failure.

6. Research and Participatory Research

Research constitutes the information gathering activities of the co-management program. A great deal of information is gathered about coastal resources, resource use activities and people. During this activity, both secondary and primary data are collected and analyzed and a community profile is prepared. The community profile will serve as the basis for planning and management activities and as a baseline for future monitoring and evaluation. The community profile incorporates the community's problems, needs and opportunities assessment. The decision on the scope and scale of the community profile and research is made by the core group, based on information needs for decision-making and on available resources and time.

While some of the information used in the community profile comes from secondary sources, other information will come from scientific studies by experts and from participatory research with resource users and other community members. Scientific information is very useful and important for the community profile, but the type of information collected by scientists often differs from that obtained from resource users, and the tools and methods of collecting the information are also different. A significant amount of information can and should come from

the community. The 'indigenous or local knowledge' of resource users and other community members (including women and elders) is critical information for planning and management.

6.1 Community Profile

The community profile will serve as the basis for planning activities, provides a context for management and serves as the baseline for monitoring and evaluation. It provides the community with information about itself, often information which the community may not even know or be aware of it, such as similarities and differences and views and attitudes. The community profile should be sufficiently detailed to provide the reader with a clear understanding of the environmental and social conditions at the site, why management is needed and how management might improve coastal conditions. The profile should help to answer key questions:

- What are current resource conditions, patterns of resource use, and resource use problems and how are they changing over time?
- What problems or obstacles for coastal management are revealed?
- What are patterns of power as they relate with resource use and exploitation? And gender differences?

From a CO perspective, it is also important for the community profile to contain community responses to problems and issues because this gives us an idea of what issues resulted in some collective action, and in what ways the community members cooperated with one another. A community profile should contain detailed data on aquatic habitat distribution, resource conditions, demographic and socio-economic conditions, existing legal and institutional arrangements for resource management, and identification of problems, needs and opportunities.

Detailed maps are included to better illustrate the habitats, resources and socio-economic activities. A community profile includes five components:

- Resource and ecological assessment (REA);
- Socio-economic assessment (SEA);
- Legal and institutional assessment (LIA);
- Problems, needs and opportunity assessment (PNOA);
- Management issues and opportunities.

Each component of the community profile will involve use of different methods, but all combine participatory research and scientific assessment. The preparation of the community profile is a multi-step process for gathering information:

1. Preparation;
2. Secondary data collection;
3. Fieldwork/assessment/research;
4. Database and profile preparation;
5. Prioritizing results and analyzing causes;
6. Validation.

6.2 Secondary Data

All relevant secondary data on the parameters and sub-parameters are identified. Secondary data are those that have already been collected, analyzed and published in various forms, including:

- Official and unofficial documents;
- Statistical reports;

- Reports of previous assessments and surveys;
- Research reports, including academic papers, e.g. thesis;
- Documentation of previous or ongoing projects, including monitoring and evaluation reports;
- Maps;
- Aerial photographs and satellite images;
- Historical documents and accounts;
- Websites on the internet.

These data will be used to:
- Identify gaps in existing knowledge in preparation for the field data collection;
- Ensure the field data collection does not collect information that has already been collected;
- Provide a basis for cross-checking information collected during the field data collection;
- Provide supporting documentation for the field data collection;
- Refine the lists of objectives, stakeholder groups, study sites and parameters.

In the process of collecting secondary data, the team may make contact with individuals who have worked in the community or area in the past. In addition to the materials provided, these contacts can often provide valuable information and insights from personal experience.
The search for secondary data should go beyond the usual government offices. Unofficial materials or 'grey publications' exist from student theses and NGO project activities. There is no detailed methodology for gathering secondary data. It is mostly a matter of writing letters, making telephone calls, visiting offices and libraries, interviewing officials, teachers, scientists and researchers. When a document is located, check the references section and try to locate relevant references. Always credit the source of the material in the community profile.
The secondary data should be compiled so that it can be easily used during the research. A filing system should be developed to code, record and store the secondary data. The team should read through the secondary data to identify information related to the parameters and to determine the quality of the data.

7. Environmental Education, Capacity Development and Social Communication

Environmental education, capacity development and social communication (ECB) are integral parts of community organizing. The environmental education, capacity development and social communication activities can come before or at the same time as the other community organizing activities. The issues of co-management are generally complex and there is a need to promote environmental awareness in the community and to develop people's capacity to actively participate in the co-management program. This includes the capacity of community members, as well as government officials and staff. The purpose of environmental education, capacity development and social communication is to empower people with knowledge and skills in order that they can actively participate in the co-management program, begin to take greater control over resource and economic and social problems and needs, negotiate a fair agreement, and increase their awareness and understanding of fisheries resources and their management. Through ECB, community members and government officials and staff are able to better understand the need for co-management, the approaches to co-management, and their individual and collective roles in co-management. In some cases, the community and government may need to be convinced of

the need to protect and manage their own resources and for co-management. While ECB is a continuing activity throughout the co-management program, it should be noted that it is important to start the ECB activities as soon as possible in order to empower people with knowledge and skills so that they can actively participate in the co-management program.

Activities aimed at increasing awareness, knowledge, skills and institutional capacity, such as environmental education, capacity development and social communication, are sometimes taken together under the term 'social preparation'. Social preparation has several functions in co-management:

• Reducing social conflict and resource impacts;
• Creating positive change in values and behavior towards the environment;
• Gaining support for co-management;
• Increasing knowledge and skills of fishers and other stakeholders;
• Fostering participation in community-based co-management;
• Enabling community members to assert their rights to use and manage its resources.

The ultimate goal of social preparation is to achieve behavior and attitude changes so that resource use and management and the co-management program can be sustainable. Social preparation is focused on building a constituency for co-management through a critical mass of people in the community who are environmentally literate, imbued with environmental ethics, shared responsibilities, and shared actions towards the sustainable management of aquatic resources.

It should be noted that social preparation activities alone will not cause people to change unsustainable practices and behavior. There need to be several actions operating concurrently, such as changed community values, availability of alternative behaviors, and possible sanctions for unsustainable activities.

Environmental education, capacity development and social communication are individually distinct but complementary activities.

Environmental education introduces environmental concepts and principles related to coastal and aquatic resource issues, and empowers the community with information and knowledge in order to take the appropriate action to address the issues. The success of aquatic resource management depends on the level of the community's awareness and knowledge of their coastal and aquatic environment. Environmental education activities are directed towards the development and enhancement of resource management capabilities of individuals and organizations through formal and non-formal education and skills development training. Environmental education can build consensus, clarify perspectives and interests about issues, generate a receptive context for change, get people to help carry out activities, help monitor change and create a long-term commitment in the community.

Steps in designing and implementing a public environmental education program include:
1. Analyze the local context and define the major coastal issues
   • What is the scale and significance of the problems?
   • Are there important social, economic or ecological dimensions to each of the problems?
   • Have technical causes been identified?
   • Have technical solutions been identified?

2. Identify target audiences
- Who has a direct stake in co-management?
- Who will be directly affected by co-management?
- Who uses coastal resources?
- Who decides how coastal resources will be allocated?
- Do these audiences have special information needs?
- Do they have a unique perspective or knowledge of coastal issues?

3. Identify the message and program content
- What is the education program attempting to accomplish?
- Are the target audiences directly affected by resource deterioration? In what ways?
- What role will these audiences play in implementing possible solutions?
- What do people need to know or feel strongly about in order to act?

4. Select techniques and media
- How do the various target audiences keep informed?
- How accessible are the target audiences? Are there convenient distribution networks?
- Is the educational message simple? Or complex?
- How much money is available? What are the local resources (both financial and human) that can be drawn upon?

5. Evaluate the program
- Did the information reach the target audiences?
- Was the message accurately conveyed by mass media?
- Did people understand the information?
- Was there a response from the target audiences?

Capacity development provides skills and institutional capacity for fishers, resource user organizations, local-level government officials and staff, and other stakeholders to take an active role in co-management. Capacity building often implies that activities are carefully planned and executed, and that they follow a clear plan. In reality, capacity building often involves more experimentation and learning. For this reason, the term capacity development, which implies an organic process of growth and development, is more appropriate than capacity building. Capacity development can be defined as:

> "the process by which individuals, groups, organizations, institutions and societies increase their abilities to: (1) perform core functions, solve problems, define and achieve desired objectives over time; and (2) understand and deal with their development needs in a broad context and in a sustainable manner."

This definition highlights two important points: (i) that capacity development is largely an internal process of growth and development, and (ii) that capacity development efforts should be results-oriented.

Local capacity is built in order to:

- Make local resource users, groups and organizations, fishing communities and the local government unit charged with fisheries management more capable of performing this task;
- Make local resource users, their organization leaders, local government officials and staff, and other stakeholders able to undertake their roles and responsibilities in co-management;
- Improve the quality of fisheries management taking place at the community level.

Social communication generates an on-going flow of information and dialogue between the fishery manager and the community members, and among the community members themselves in order to have informed decision-making and to face change. Social communication initiatives can promote social discussions about problems, opportunities and alternative courses of action, including co-management, for the community. Social communication initiatives are very different from education initiatives. They do not merely aim at 'passing on a message about an issue' but at promoting its critical understanding and appropriation in society.

ECB activities should involve as many of the sectors of the community, including government, as possible in order to build up a critical mass of local people with a common understanding of co-management and aquatic resource management. Efforts should be focused on cultivating potential local resource persons who could effectively conduct ECB activities on their own (e.g. local teachers to their students and other teachers) and in the process disseminate information to even more members of the community, leading to the greatest positive impact in the shortest period of time. It is important to monitor and evaluate the effectiveness of ECB activities, including changes in the community's attitude to the need for co-management.

8. Community Organizing

To participate in co-management, the stakeholders will need to organize themselves and arrive at an internal consensus on the interests and concerns that they want brought forward. Meetings and discussions are held among the individual stakeholders to identify and clarify their interests and concerns and for those individuals with common interests and concerns to organize themselves into groups. Effective community participation in co-management requires a strong community organization(s) to represent its members. In some cases, community organizations capable of representing their members in co-management already exist in the community. In other cases, organizations will either need to be strengthened or newly established. One or more community organizations may be needed in the community depending upon its size, diversity and needs. Fishing cooperatives and fisher associations exist in many communities. However, these organizations will not automatically be suitable as representative organizations in co-management. It is likely that they were established with objectives that relate more to expanding exploitation, improving marketing and increasing the incomes of members. Changes in outlook will be necessary for these organizations to play major roles in resource management. These changes may be difficult and lengthy, especially if the organization is still struggling with its original mandate. Putting more focus on management may strain the internal cohesion of the organization. The process of community organizing is seldom 'tidy'; it doesn't always happen in neat, predictable steps. Activities may occur simultaneously. Community organizing involves learning, sharing and adapting. It often involves building upon existing institutions and organizations in the community. Community organizing is led by the CO, but must be a collaborative effort of all the stakeholders in co-management.

There are several components in community organizing:

1. Preparation
   • Create a core group(s) and core leaders;
   • Assess the situation (research);
   • Hold visioning exercises;
   • Decide on a mission for the organization.

2. Mobilization
- • Seek out community support and build a base of support among community members;
- • Hold meeting(s) to discuss the vision or mission, reach consensus and agree on developing an organization or join an existing organization;
- • Develop organizational goals and objectives, organizational structure, leadership/membership and action plan;
- • Appoint a representative of the organization.

3. Strengthening
- • Environmental education, capacity development and social communication;
- • Building alliances and networking;
- • Organizational sustainability to keep members and funding.

4. Evaluation

8.1 Preparation

Community organizing starts with the preparatory component which involves the CO working with a leader(s) from the community to establish a core group to lead the community organization. This core group should be small (three to five people) and include individuals who are enthusiastic, have a common interest, and represent a cross-section of the community. The leaders should be individuals who are acceptable to the community and who command sufficient respect. The core group should hold meetings to assess the situation in the area. Information from the research activities conducted earlier can be utilized to gain a broad understanding of the situation. People in the community may be asked to identify issues. The core group then decides on the initial direction of the organization and a mission for the organization. Questions to be asked include:

- • What are we trying to do?
- • What size of area are we going to organize?
- • Who will support our efforts?
- • What is a good idea for our first action?
- • How are we going to reach out to others?

8.2 Mobilization

After the core group has decided upon a mission statement for the organization, they canvas the community for support and build a base of support among community members. The community members are contacted one-on-one by the core group members and CO to request their opinions/advice on the identified mission, including activities they themselves can undertake. The individuals should be encouraged to discuss their concerns and the costs and benefits it could bring to them and the community. This process provides an opportunity to gain insight into the perceptions and interests of stakeholders and to identify common interests and potential conflicts. It also allows individuals with common interests to be brought together. Non-organized fishers can be identified and asked about becoming members of an organization. Go to where people are. Try to include those who are under-represented.

Meeting(s) are held to discuss the purpose/objective, reach consensus, and to agree on developing an organization or join an existing organization. The core group organizes a series of meetings with stakeholders to discuss the mission and to share their views. The first meeting should be started on a neutral tone and do not deal with sensitive topics initially. The first meeting must focus on the concerns of the fishers and the possible need for them to form

an organization to address these needs. The main objective of the meeting should be to reach agreement about the formation of an organization.

Encourage people to come together when they are ready and not when it is imposed on them. Be aware of power structures within communities and institutions which may inhibit some stakeholders from contributing. The facilitation of these meetings is crucial to their success. If meetings are well managed, they can provide an opportunity for each stakeholder to hear and appreciate others' views and concerns. Social communication activities can be used to help ensure support for the organization and its mission.

Every stakeholder will have different information, concerns and interests which need to be considered and developed. Making sure that all stakeholders are able to develop their own position and form of representation may initially result in challenges to community organizing. It must be remembered that building an organization is a slow process. People need to feel that being part of an organized group is necessary to protect their interests.

Once there is agreement on the organization, a meeting(s) is held to specifically define the organization's goals and objectives, organizational structure, leadership, membership, dues and finances and action plan. Organization structure is the framework around which the group is organized. Structure describes how members are accepted, how leadership is chosen, and how decisions are made. Structure give members clear guidelines for how to proceed and it binds members together. There are three elements to organizational structure:
1. Some kind of governance to make decisions;
2. Rules by which the organization operates; and
3. A distribution of work.

Each organization may develop roles for individuals to play in the organization. There may be a variety of committees within an organization, such as the executive committee, action committee and finance committee, which carry out specific roles and responsibilities. Organizational structure is best decided upon internally, through a process of critical thinking and discussion. Organizational structure will be guided by such factors as the purpose of the organization, size, volunteer or paid staff, and whether it is advocacy- or service-oriented. Successful organizational structure usually includes:
- An elected leadership;
- Regular meetings;
- A newsletter;
- A means of delegating tasks and responsibilities;
- Training for new members;
- Social time together;
- A planning process;
- Working relationships with power players and resource organizations.

A goal is set and objectives are devised that will lead to the goal. To be effective the organization should, at least initially, pursue only one objective at a time. The organization should generate ideas to achieve the objective, and then carry them forward into an action. Once the organization's members agree on an action, create an action plan. The action plan should identify strategies to achieve each objective. Work should be broken down into manageable tasks. The action plan should include a timeline to identify when things should be done and by whom, an ordered list of tasks to complete, persons responsible for each task, facilities and funds.

Members and leaders make all organizational decisions, from by-laws to slogans. Members raise and select organizational issues based on the self-interest of the group, and broad agreement among members is necessary before the organization will pursue an issue. Each organization should discuss, agree on, and post guidelines for decision-making. Some decision-making approaches include straw polling (a show of hands to see how the group feels about an issue), voting and consensus (bringing the group to mutual agreement by addressing all concerns).

The organization, if they want to take part in the co-management negotiation process, will need to identify and appoint one or more individuals to represent them. In cohesive organizations this may be easier than in non-cohesive organizations. Criteria such as honesty, knowledge of the area and issues, negotiation skills, maturity and status in the community and others may be used to select a representative.

8.3 Strengthening

To ensure sustainability of the organization, there must be continual strengthening of the organization and its members; this includes government. Strengthening means obtaining the necessary attitudes, knowledge, skills and resources to take part in the co-management program. This can be achieved through the environmental education, capacity development and social communication activities. Change does not occur in the blink of an eye. Individual change in terms of values and awareness takes time to change and must be strengthened through information, education and capacity development. The value transformation of individuals is enhanced through an organization resulting in collective action.

In addition, the CO should help the organization in building strategic alliances with other organizations with common interests. Networking establishes linkages with other organizations working for a common goal. The strategy is to share information with other organizations so as to bring about greater understanding as well as social and policy change.

Once the organization is formed, efforts need to be made for sustainability. Several measures can be undertaken:
- Members should be notified of meetings in good time.
- One of the most difficult pitfalls in community organizations has to do with keeping up the momentum. Almost inevitably, the attendance at meetings will be high initially and then fall as the meetings become dull and routine. Each meeting should offer some particular issue for discussion which will captivate the members, or there can be a special person invited to address the meeting, or there can be a fisheries education exercise.
- Personality clashes can weaken or even be the death of community organizations, as very few people have the time or the energy to come to meetings which are nothing more than a collection of individual ego trips. For community organizations to be strengthened, ways have to be found to neutralize these personality problems. The problem people need to be spoken to and shown how their behavior is affecting others. Special training may be needed to be able to handle these cases.
- Financial irregularities can affect any organization. To address this problem, there should be suitable training on financial accounting, there should be frequent financial reports to the members, and there should be a bank account where all organization funds are deposited.

- Meetings should be an opportunity for informing the members and community about what is happening and planned. Any hint of secrecy should be absent from a well-run organization.
- Stay in touch with each other. Every opportunity should be taken to provide information to members, such as a newsletter. Representatives of the organization to the larger co-management organization should report to the membership not just the leadership.
- Act more, meet less.
- Keep time demands modest.
- Provide social time and activities.
- Work in pairs to improve communication, make work less lonely and ensure tasks get done.
- Provide skills training.

8.4 Evaluation

Evaluation is used to measure the success or failure of the organization to meet its goals and objectives and the reasons why. Monitoring is a continuous process of gathering information about the organization and its management The membership of the organization, as well as community members, should be involved in the monitoring and evaluation. Evaluation should be an iterative process which leads to modification and improvement of the organization to better suit the needs of its members and current conditions. After each activity has been implemented and completed, the evaluation should ask:

- What has been accomplished?
- What still needs to be done?
- What was done well?
- What could have been done better?

9. Other Co-management Implementation Activities

Following community organizing, several other activities are undertaken to implement co-management:

9.1 Co-management plan and strategy

The community-level organizations, working in partnership with other stakeholders and the government, develop a resource management and community development plans whose objectives and strategies include a co-management agreement. Community members participate in the creation of the plan, validating its drafts along the way. The plan will include a common vision for the future, identification of a coordination mechanism and a financing strategy.

Reaching the co-management agreement may involve a series of meetings to negotiate and reach a consensus on its structure and to support management of conflicts. These meetings will involve identifying the key issues, as well as extensive bargaining and compromising in order to reach decisions.

The co-management agreement may include, specifically stated, a definition of roles, responsibilities and authority; identification of fora for meetings; conflict management mechanisms; and rule-making procedures. The agreement should be widely circulated to inform and obtain comments from relevant communities and stakeholders. A co-management body may be established at the end of the process of developing the agreement to represent all the partners. Participants would specify who is represented on the co-management body,

what is its mandate and its level of authority and tasks. Indicators of success or monitoring and evaluation of the plan are specified. This can be done through a logical framework analysis (LFA) where outputs, activities, verifiable indicators and means of verification are stated.

The financial resources to implement the co-management plan should be identified early in the program and made available before implementation. If external funding is needed to implement all or part of the plan, this is the time to identify a source and apply for the funds.

It should be noted again that the strengthening of linkages and partnerships and networking between resource users, stakeholders, government and the external agent is an ongoing and continuous process that extends beyond the implementation phase. The roles and responsibilities of the partners will change and adjust as the community-based co-management program matures.

Institutional support will be sought, for example, to have formal recognition of the community organization or passage of a government ordinance legitimizing local institutional arrangements (rights and rules). The process of rights- and rules-making can be as difficult, yet as critical, as any other activity in the co-management program.

9.2 Conflict Management
Since conflicts will inevitably arise, the agreement must contain forms and mechanisms to address and resolve conflict. Conflict management is a process of dialogue and negotiation. A facilitator (a person who enables organizations to work more effectively), mediator (serves as a neutral party to assist stakeholders in finding a resolution to the conflict) or arbiter (makes a decision for the stakeholders at the request of the stakeholders) may be needed to guide the process towards constructive results. Participants should designate a forum for negotiation and agree on some rules for the process. They may generate and discuss various options for action, formally agreeing on one of those options. The conflict management mechanism should be multi-level to allow for an appeal process.

9.3 Plan Implementation
The activities and interventions of the co-management plan are implemented through sub-projects. These may be resource management-related, such as marine reserve or sanctuary creation, mangrove reforestation, erosion management or fishing gear restriction. On the other hand, they may be about community development: such as a water well, a road or livelihood development, such as agriculture, aquaculture or small business enterprise. As needed, the responsibilities and rights of partners are clarified, conflicts are managed, and the agreement is enforced – possibly resulting in changes in the agreement or the development of a new agreement.

9.4 Evaluation
Monitoring and evaluation should be central elements of the overall implementation process, although evaluation may also be conducted during the turnover or post-implementation phase. The indicators of success specified earlier are used in monitoring and evaluation, both done in a participatory mode. Participatory monitoring allows for adaptive management: interactive learning and a feedback system of success and failure while the program is being implemented. It provides the community and external agents with information, during the life of the program, so they can assess whether activities are progressing as planned, and whether modifications are needed. Participatory evaluation allows those internal and external to the

community to evaluate program objectives against results. It allows for planning for the future based on experience. The baseline information collected earlier in the program can be used in the evaluation. The co-management agreement is also monitored on an ongoing basis, with the partners reviewing the results. Performance indicators may be used to measure progress of the co-management agreement, program and implementation.

10. Rights-based Fisheries Management and Territorial Use Rights in Fisheries

To become sustainable and profitable, there is discussion that the fishing industry must move toward management that allows restriction on who can have access to the fishery, how much fishing effort individual participants are allowed, or how much catch each can take. This management approach is called rights-based fisheries management.

Under a rights-based management system, those individuals or groups entitled to have access to the fishery are said to have use rights; that is, the right to use the fishery resources; while others do not have the right to "use" the fishery. Use rights concern (1) how we restrict who has access to the fishery, (2) how much fishing effort each participant is allowed, or (3) how much catch each can take. In practice, a management measure (e.g., the number of traps a fisherman may use in a lobster fishery) can be seen as a (negative) restriction or a (positive) use right, with the fisherman having the right to use that number of traps.

Rights in a fishery define what particular actions the fisherman is authorized to take and a claim to a benefit stream (i.e., fish catch) that is consciously protected, in most cases by the government. For example, a right provides the authority for a fisherman to operate in a specific fishing ground or fishery. The more complete the set of rights, the less exposed the fishers are to the actions of others, the less risk that the fishermen face, and the more stable are expectations concerning catch and management. Rights are also felt to provide fishermen with an incentive for long-term sustainability and greater stewardship. With a right to a share in the fishery, the incentive is to maximize economic benefits by reducing the cost of using one's right and/or by increasing the value of the right; for example, by producing a higher-quality fish product.

10.1 Characteristics of Rights-Based Fisheries

Fisheries management systems that assign rights to a share of a fishery are specified by the feature of the rights, the nature of the shares in the fishery, the type of entities that hold rights, and rules concerning use of the rights. Rights can be considered as being composed of a bundle of individual rights (think of a bundle of sticks composed of individual sticks), such features of rights include access, withdrawal, management, exclusion and transfer. The make-up of the bundle varies with different fisheries and different points in time. In the past, an individual fisherman had only one exclusive right – the right to own the fish caught. Other rights were held in common. As entry to fisheries became limited, those who held permits gained the exclusive right to fish. More recently, rights to some fisheries have been made even more exclusive by assigning individual fishermen or groups (communities, cooperatives, corporations) the rights to catch a specified share of the total allowable catch. Creating individual or group rights that can be bought and sold is an attempt to create benefits by converting most of the sticks in the bundle of rights from shared rights to exclusive rights.

Shares in the fishery can be the amount of fish catch, units of fishing effort (such as days at sea) or an exclusive geographical area and time period when fishing is allowed. In order to be effective, the sum of all of the shares must not result in overfishing. There may be a need for additional rules, such as fish size limits, that apply to all rights holders in the fishery.

The rights holder can be an individual (a person or corporation), community, cooperative, or nominated representatives of a group. In some fisheries, it may be appropriate to vest the rights in a cooperative or community organization. The cooperative or community organization then allocates and monitors use of the resource. There is fear that fishing rights will become concentrated in a few owners. The public interest is ill-served when limited pools of owners gain more and more power over access. There is also concern about whether or not fishing rights will actually promote improved stewardship behavior. In some cases, community ownership of rights is preferable to individual ownership because it precludes individual concentration of ownership.

10.2 Forms of Rights-Based Fisheries Management
There are several forms of rights-based fisheries management including limited entry or access rights, input rights, and output rights. The Individual Transferable Quota (ITQ) is probably the most well known form of rights-based management.

Limited entry or access rights authorize entry into a fishery or into a specific fishing ground. Limited entry can be an effective 'first step' in generating economic benefits and slowing expansion of fishing capacity, but it does not resolve all fishery management issues, such as the 'rush for the fish'. Examples of limited entry include territorial use rights in fishing (TURFs) (where the right to fishing locations is specified) and limited entry licenses (where rights are assigned by licensing to limit participation in fishing).

Input rights typically involve the right to a specific amount of fishing effort (i.e., the number of lobster traps per fisherman). Input rights limit the total amount of effort through such measures as time fished, vessel size, amount and type of gear. Input rights may be a cost-effective management measure and minimize waste; however, it increases incentive's to expand uncontrolled inputs and requires adjustment since technological change increases effectiveness.

Output rights provide the right to take a specific catch. Output rights (catch limits) provide numerical rights to catch a piece of a total allowable catch (TAC). Output rights may reduce the 'race for the fish' and reduce overcapitalization, however, it increases incentives to under-report catches, and to dump, discard, high-grade (i.e., increase waste of the resource). Output rights include community quotas (e.g., Alaskan community development quotas (CDQs) and Maritime Canada ground fishery) and individual quotas (e.g., individual transferable quotas (ITQs) or individual non-transferable quotas (INTQ)).

10.3 Implementation of Rights-based Management
No one form of use right is superior in all circumstances. The choice will depend upon society's objectives, fishery structure, history and traditions, social and cultural factors, economic situation, pre-existing rights, political realities, and fish stock realities. It may not be appropriate for all fisheries. A combination of management measures is generally needed to achieve effective management of the fishery. Rights must be supplemented by biological and technological measures such as protecting juveniles, selectivity of fishing gear and other measures.

Rights-based management systems will depend on how the management is designed, the institutional approach (market versus community-based), how the exclusiveness of the right is specified, the conditions under which it could be transferred, the duration of use rights, and

the basis for the assignment of the rights. Individual fishing rights or group ownership doesn't automatically lead to better stewardship but will depend upon the mentality of the people who participate. Questions of equity arise as use rights define who can and cannot take part in the fishery. Decisions about use rights may be irreversible. Once allocated, it can be difficult to make changes.

10.4 Territorial Use Rights in Fisheries (TURFs)
Territorial use rights in fisheries (TURFs) have been known to exist for centuries. Traditionally they have emerged (and some are still maintained) where certain conditions permit relatively easy acquisition and defense of exclusive rights. Sedentary resources such as oysters, mussels, and seaweeds have long been subject to property rights. Enclosed bodies of freshwater ponds, lakes, and floodplains have also been subject to exclusive use rights for centuries. However, TURFs have also emerged in areas or situations where ease of acquisition and defense of exclusive rights is not readily apparent. They have developed in marine areas such as lagoons, along beaches, and with regard to coral reefs. TURFs generally are thought to be most useful for
near shore species that are sedentary or have a relatively small home range.

TURFs are exclusive fishing rights allocated to coastal communities in certain locations. In TURF systems, a limited number of individual fishermen or a group of fishermen is allocated a spatial property right to an area of the sea. A "group" refers specifically to fishermen who actively coordinate fishing efforts through a cooperative or association; this coordination helps to preserve the sustainability incentive structure underlying true TURF regimes. Access to, and use of, a TURF - however the area is delimited - is restricted to the group which determines how to harvest fish from the fishery and to whom the fish in the fishery are allocated. TURFs provide fishermen with an exclusive harvesting right and, theoretically, the associated incentive to sustainably harvest the target stock. Because of their spatial nature, TURFs may also provide fishermen with the incentive to protect the habitat lying within their allocated area. All else equal, better habitat will enhance the productivity and value of the TURF and the long-term economic returns to the fisherman.

The territory governed by a TURF can relate to the surface, the bottom, or to the entire water column within a specific area. The size of the territory will vary with the use, the resources being harvested and the geographical characteristics. It should be sufficient in size, however, so that use outside of the territory does not significantly diminish the value of use within. The territory should be readily defensible and protected by the laws and institutions of the country. The boundaries of the territory should, therefore, be clearly demarcated and identifiable.

An effective localized TURF generally refers to a relatively small and clearly distinguishable territory; provides rights of exclusion and determination of kind and amount of use and rights to extract benefits; and is relatively specific in its ownership. An effective TURF is one in which use outside of the territory does not significantly diminish the value of use within the territory. As such, effectiveness can be measured in terms of the value associated with the use right. This value will be reflected in the amount that potential owners would be willing to pay to acquire the TURF. In the case of communal TURFs held in perpetuity, the value of the TURF can only be approximated in economic terms and may have significantly greater importance to the welfare of the community than can be measured in economic terms.

TURFs are used to improve the welfare of small-scale fishing communities, enhance self-regulatory measures and develop co-management arrangements. There are several advantages likely to be associated with localized TURFs. They will permit more economically efficient use of the resources and may provide important opportunities for improving the welfare of small-scale fishing communities. The owner of a TURF can limit the inputs of capital and labor at the point where the greatest net benefits are produced. A localized TURF provides the right to determine the objectives to be sought from the use of the territory and the opportunity and the incentive to manage the resources within the territory. Since the owner of a TURF (individual or community) has an exclusive right to future products, it will be in his (or its) interest to ensure the flow of future products. This would facilitate the imposition of management measures as well as the task of enforcement. It can be noted that the most effective form of enforcement occurs where it is in the self interest of the user to comply with the rules.

The major, and fundamental, problem is that the establishment of localized TURFs may require re-distribution of wealth. The provision of exclusive rights means that some present users of the territory are likely to be excluded. Although this may be socially and economically desirable it may also be politically difficult.

Annex D - Managing Artisanal Fisheries through a Co-management Approach

Managing Artisanal Fisheries through a Co-management Approach Using Fishing Rights in Liberia

By-Laws

Revised by the National Fisheries By-Laws Working Group[2]
on September 1st, 2011

1. Rationale

In the Liberian context, artisanal fisheries either involved as full-time or part-time in inshore marine and fresh waters constitute the major part of the fisheries sector. Considering its contributions to local food security, sustainable livelihoods and poverty alleviation, artisanal fisheries are critically important to the country to maintain social and economic security. It is therefore crucial to develop appropriate fisheries management systems and conservation mechanisms for these fishers, fishing communities, fisheries and coastal ecosystems.

The Government of Liberia has a long-term vision of decentralization and power-sharing of management of its fishery resources. The introduction of a co-management approach using fishing rights can be seen as a crucial factor for the effective implementation of innovative management to improve the management of artisanal fisheries and food security and livelihoods. Co-management will allow for improved fisheries governance through greater local stewardship and greater responsibility, authority and participation of fishers in management decision-making. To be implemented effectively, there will be a need to address the current unregulated and "open access" nature of the fisheries and to move toward management that allows restriction on who can have access to the fishery, how much fishing effort individual fishers are allowed, or how much catch each can take. This will provide a sense of ownership over the fisheries by artisanal fishers and provide greater incentive to stop illegal fishing practices.

2. Key terms

Artisanal fishing - small scale commercial fishing using an artisanal fishing vessel where the owner is directly involved in the day-to-day running of the enterprise

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[2] National By-Law Working Group members: (a) BNF/MOA representatives: Dolo, James F.; Kay, D. Wisseh; Kpadeh, Zizi A. S.; Kutu-Akoi, Woiwor; Kumeh, Joyce W.; Nah, Jeremiah W.; Sumo, Andrew Y.; Togba, Glasgow B.; and Weefar, George S.; (b) WARFP representatives: Davis, James F., Sr.; Peters, Yerma R.; Wisseh, Patrick; and Yarkpazua, Emmanuel D. ; and (c) Non-Governmental representatives: Adams, John (Robertsport CMA); Bayon, Theresa S. (LAFA); Blamo, Jerry N. (LAFA); Dukuly, Miatta (Robertsport CMA); Kawreh, Alfred N. (LAFA); Kiazolu, Massa (Robertsport CMA);Kowhoer, J. Edwin (Robertsport CMA); and Sheriff, Alouyisus G. (UNMIL). Working Group facilitation: Pomeroy, Robert S., Ph.D. and Parks, John E. (WARFP consultants).

Artisanal fishing vessel - any fishing vessel, canoe or un-decked vessel of not more than sixty feet which is motorized or un-motorized, powered by an outboard or inboard engine with a capacity not exceeding 40bhp, sails or paddles, used for artisanal fishing in the "Fisheries Waters"

Bureau - the Bureau of National Fisheries (BNF), established in the Ministry of Agriculture of the Government of the Republic of Liberia

Co-management - a partnership arrangement in which the fishers and government share the responsibility and authority for the management of the fishery. Through consultations and negotiations, the partners develop a formal agreement on their respective roles, responsibilities and rights in management

Co-management Association (CMA) - a structure to manage fisheries at community level and which performs as the decision making body for the designated area.

Fisheries Waters - the waters over which the Republic of Liberia exercises jurisdiction or sovereign rights as declared in relevant national laws

Fishery or fisheries -
(a)   one or more stocks of fish, or parts thereof, which can be treated as a unit for the purposes of conservation, development and management, taking into account geographical, scientific, technical, customary, recreational, economic and other relevant characteristics; or
(b)   any fishing for such stocks;

Fishing -
(a)   searching for, catching, taking or harvesting fish;
(b)   the attempted searching for, taking or harvesting of fish;
(c)   engaging in any other activity which can reasonably be expected to result in the locating, catching, taking or harvesting of fish;
(d)   placing, searching for or recovering any fish aggregating device or associated equipment   including radio beacons;
(e)   any operation at sea in support of or in preparation for any activity in relation to a fishing   vessel described in Paragraphs (a), (b), (c) or (d);
(f)   any use of an aircraft which is related to any activity described in Paragraphs (a), (b), (c) or (d), except for flights in emergencies involving the health or safety of a crew member of the safety of a vessel, but does not include aquaculture or the transportation of fish;

Fishing Rights - A kind of right, by which fishers may have exclusive use for a designated area and resources. It is an authorization given to fishing communities to enable them to do fishing.

Inshore Exclusion Zone - the area of the Fisheries Waters up to a distance of six (6) nautical miles from the baseline from which the territorial sea is measured;

Territorial use rights in fisheries (TURFs) - A single fisherman (or firm, organized group, community, etc.) having an exclusive privilege to fish in a geographically designated fishing ground.

Transferability – the ability for fishing rights to be traded or exchanged from one user to another. Transfer of fishing rights affords those who hold the rights the option of selling their rights to other users, and allows outside users the potential to access and gain fishing rights through transfer. Typically, the exchange of rights is done through a transfer agent or agency. Non-transferable rights prevent outside users from being able to access or attain fishing rights through exchange or trade (sale).

3. General Principles

A number of general principles are presented to guide the implementation of these by-laws.

3.1 Target beneficiaries of co-management

The application of co-management targets two specific beneficiaries in inshore marine areas.
     (a) Artisanal fishers (both men and women) and fishing communities; and
     (b) Government (including national and county)

3.2 Responsible institutions and delegation of management functions and responsibilities

Several institutions in Liberia will be partners in co-management and fishing rights including:

3.2.1   Co-management association (CMA) representing fishers and managed by an executive board
3.2.2   Bureau of National Fisheries representing the government of the Republic of Liberia
3.2.3   County government representing local government
3.2.4   Community leaders and elders
3.2.5   Business organizations and owners associated with the artisanal fishing sector
3.2.6   Liberia Artisanal Fishermen Association (LAFA) representing fishers of Liberia

3.3 National legal framework to support managing artisanal fisheries through a co-management approach using fishing rights

The use of fisheries co-management and fishing rights is supported through the following existing legal framework of Liberia:

3.3.1   National fisheries regulations (2010) – granting of fishing rights (Part II, section 2 and 3) and consultation with stakeholders in the development of conservation and management measures (Part II, section 4)
3.3.2   Natural Resources Law (1958) – all natural resources; the legal basis for National Fisheries Regulations
3.3.3   Environmental Protection Agency Act (2003)
3.3.4   Guidelines for National Decentralization (2008)
3.3.5   Draft Fisheries Law/Policy (proposed)

3.4 Equity and Social Justice

The use of fisheries co-management and fishing rights should lead to increased equity and social justice for artisanal fishers. Equity and social justice is brought about through empowerment and active participation in the planning and implementation of fisheries co-management. Responsibility means fishers have a share in the decision-making process and bear the costs and benefits of those decisions. The theme of co-management is that self-involvement in the management of the resource will lead to a stronger commitment to comply with the management strategy and regulations. The mutuality of interests and the sharing of responsibility among and between partners will help to narrow the distance between resource managers and fishers, bringing about closer compatibility of the objectives of management. The establishment of fishing rights will provide for ownership by community over the fisheries resources in order to protect the rights of the fishing sector to the resource to ensure food security and livelihoods.

4. **Scope and Characteristics of Co-management**

4.1 Concept and Scope

The failure of many fisheries has led to a reassessment of how they are managed. A new management philosophy is warranted, one in which the fishers can become active members of the fisheries management team, balancing rights and responsibilities, and working cooperatively with government fisheries managers. Such "co-management" recognizes the need for management decisions to be made in collaboration with fishers who use and depend upon the resource. It is generally acknowledged that not all responsibility and authority should be vested at the community level. The substance of this sharing of responsibility and authority will be negotiated between community members and government and be within the boundaries of government policy. Determining what kind and how much responsibility and/or authority to allocate to the community level is ultimately a political decision in which government will always play a more decisive role. However, the key to co-management is negotiated power where the interaction of the state and non-state actors would be an important factor in defining a common and acceptable balance in sharing power and allocating responsibilities.

There is no blueprint or model for co-management but rather a variety of arrangements from which to choose to suit a specific context. Co-management should be viewed not as a single strategy to solve all problems of fisheries management, but rather as a process of resource management, maturing, adjusting and adapting to changing conditions over time. A healthy co-management process will change over time in response to changes in the level of trust, credibility, legitimacy and success of the partners and the whole co-management arrangement. Co-management involves aspects of democratization, social empowerment, power sharing and decentralization. Co-management attempts to overcome the distrust, corruption, fragmentation and inefficiency of existing fisheries management arrangements through collaboration. Co-management is adaptive; that is, through a learning process, information is shared among partners, leading to continuous modifications and improvements in management. Through co-management, the partners actively contribute and work together on fisheries management. They share the costs and benefits and the successes and failures.

Co-management is not a regulatory technique, although regulations are used in co-management. It is a participatory management strategy that provides and maintains a forum or structure for action on empowerment, rule making, conflict management, power sharing,

social learning, dialogue and communication, and development among the partners. Co-management is a consensus-driven process of recognizing different values, needs, concerns and interests involved in managing the resource. Partnerships, roles and responsibilities are pursued, strengthened and redefined at different times in the co-management process, depending on the needs and opportunities, the legal environment, the political support, capacities of partners and trust between partners. The co-management process may include formal and/or informal organizations of fishers and other stakeholders.

4.2 Roles of parties

As defined for Liberia, there will be two primary partners in co-management:

(1) Central government (represented primarily by BNF) –

- Provide enabling legislation to authorize and legitimize the right to organize and to make and enforce co-management;
- Recognition of legitimacy of CMAs;
- Address problems and issues beyond the scope of local co-management arrangements;
- Provide technical assistance;
- Provide financial assistance;
- Ensure accountability of co-management through overseeing local arrangements and dealing with abuses of local authority;
- Conflict management;
- Appeal mechanism;
- Backstopping local monitoring and enforcement mechanisms;
- Applying regulatory standards;
- Research;
- Training and education;
- Coordination role to maintain a forum for local co-management partners to interact;
- Determination of allocation of management functions.

(2) Co-management associations (CMA) -

- Identification of issues and concerns of the community;
- Representation of members in decision making;
- Mobilization and leadership of co-management activities;
- Participation in research, data gathering and analysis;
- Participation in the planning, design and implementation of co-management activities;
- Community-based enforcement and self-regulation;
- Monitoring and evaluation;
- Advocacy to lobby for changes in or development of policy.

There will be two secondary partners in co-management:

(3) Local Government (secondary partner) -

- Local government (County) – intermediary role between BNF and CMA; informs process.

(4) Non-Governmental Organizations (secondary partner) -

- Including both national and local Non-Governmental Organizations (NGOs). NGOs may be associate or external members of the CMA, or may have no affiliation with the CMA. The Liberia Artisanal Fishermen Association (LAFA) is identified as an important stakeholder in the Liberia co-management process representing fishers and CMAs.

  General roles of national and local NGOs may include:
  (a) NGOs can provide a national voice for the CMAs
  (b) NGOs can link CMAs with international groups and events
  (c) NGOs can provide or represent CMA interests in national discussions
  (d) NGOs can build the capacity of CMAs and its members, such as through training
  (e) NGOs can provide other support to the CMA as requested or needed

4.3 A Structure for Co-management

The following structure for artisanal fisheries co-management in Liberia is proposed:

(1) BNF to work in partnership with local CMAs to give authority for local management of artisanal fisheries; the authority is delegated from BNF to the CMA.
(2) An agreement is signed between BNF and a CMA to undertake fisheries co-management. This legal agreement is between BNF and a CMA involving delegation of specific fisheries management responsibility and authority. To reach and implement this agreement, the county government and LAFA may be involved.
(3) The role of LAFA is to provide support to fishers in reaching an agreement with BNF to do fisheries co-management.
(4) Other (non-LAFA) non-governmental organizations may come in the future and play a role in supporting and facilitating a specific CMA and co-management arrangement.

5. Fishing rights

The National Fisheries Regulations (2010) provides for the granting of fishing rights to artisanal fishers (Part II, section 2 and 3).

5.1 Type and characteristics of fishing rights

"Fishing rights" are interpreted as:

(a) Any licensed fisher (including national citizens or foreign nationals) has the right to fish in Liberian waters. The Bureau of Fisheries has the authority to license and recognize national fishers.

(b) Right of <u>access</u> – BNF may grant exclusive access rights to fisheries resources to the artisanal fishers within a designated area through the appropriate local organization, CMA, not to individuals. For example, a Territorial Use Rights in Fishing (TURF) may be granted to a CMA.

(c) Right of <u>authority</u> – BNF provides authority to a CMA the right to interpret the national regulations in order to develop rules and regulations for the designated area in order to meet their needs and suit their local conditions in managing it. These local fishing rules and regulations granted to the CMA must be consistent with and obey national laws and fisheries regulations. The CMA cannot do any management action outside of national regulations without approval from BNF.

5.2 Exclusiveness

Fishing rights should maintain the concept of exclusiveness to members of the CMA for the exploitation of fisheries resources in the designated areas.

5.3 Transferability

(a) To transfer fishing rights, the CMA must meet specified criteria established by BNF prior to transferring the rights and approval of BNF;

(b) To transfer management rights, the designee must request BNF review and approval prior to transfer.

5.4 Privileges

The individual fishers who are the members of a CMA will enjoy the privilege of exploitation of the identified fisheries resources in the designated area by using appropriate fishing gear and methods and during the appropriate fishing seasons. It is noted that these privileges are accompanied with the obligation to sustain the fisheries in the designated area.

5.5 Other Stakeholders Privileges

Other artisanal fishers, including fishers from other neighboring countries and those outside of the CMA, may be allowed to fish in the designated area with permission from the CMA and must satisfy 5.4, along with other rules such as number of vessels that should be allowed to operate within the designated area per fishing season, including the type of fishing.

6. Designated Areas for Fishing Rights

The designated area for fishing rights management unit needs to be clearly defined to include natural and human components, such as ecosystems, human uses and political boundaries. The management unit will be the legal area covered for co-management and fishing rights under the plan and agreement. The designed area should consider current community boundaries, current fishing areas and use patterns, local capability to manage the area, and existence of a management body. The width of the designated area should correspond with the **Inshore Exclusion Zone** (the area of the Fisheries Waters up to a distance of six (6) nautical miles from the baseline from which the territorial sea is measured). The length of the area should correspond to the geographical local administrative division or to fishing use patterns of the fishing community.

7. Co-management Association

A Co-management Association (CMA) is established with the responsibility of managing the fisheries and to sustain the co-management program, including the plan and agreement through time. It has a mix of decision-making, advisory, operational and coordinating responsibilities. This is a permanent body. The functions of the co-management organization include:

- Conflict management – to discuss and resolve conflicts among stakeholders;
- Policy-making – to prevent conflicts by translating the plans and agreements made into rules with appropriate penalties;
- Implementation – to ensure that management measures are followed by allocating funds and assigning people to different activities;
- Monitoring – to keep track of the effects and impact of the management measures;
- Revising co-management plan and agreements – to sustain and update plan and agreements;
- Financing and fund raising;
- Information and data collection and analysis;
- Education;
- Research

The membership may be representatives of all fishers and stakeholder groups in the community.