Training Workshop Proceedings

# Adaptive Collaborative Management of Fisheries

January 21 – 25, 2013, Boyboison Lodge, Fijai, Sekondi

Compiled by:

Tendayi Mutimukuru-Maravanyika, Cephas Asare, Josephine Laryea, Godfred Ameyaw Asiedu, Theophilus Boachie-Yiadom and David Mills

USAID FROM THE AMERICAN PEOPLE
Coastal Resources Center Ghana
Friends of the Nation
sustainametrix
WorldFish

This publication is available electronically on the WorldFish Center's website at http://worldfishcenter.org and the Coastal Resources Center's website at http://www.crc.uri.edu.

For more information contact:
Coastal Resources Center
University of Rhode Island, Narragansett Bay Campus
South Ferry Road
Narragansett, Rhode Island 02882 USA
Brian Crawford, Director of International Programs
Email: brian@crc.uri.edu
Tel: 401-874-6224
Fax: 401-874-6920

Please cite this report as:
Mutimukuru-Maravanyika T., Asare C, Laryea J., Ameyaw G., and Mills. D. 2013. Training Workshop Proceedings: Adaptive Co-management of Fisheries. January 21-25, Boyboison Logde, Fijai, Ghana. 58 pp.

Disclaimer:
This publication is made possible by the generous support of the American people through the United States Agency for International Development (USAID)/Ghana. The contents are the responsibility of the authors as part of the Integrated Coastal and Fisheries Governance (ICFG) Project and do not necessarily reflect the views of the United States Government or the WorldFish Center. Associate Cooperative Agreement No. 641-A-00-09-00036-00 for "Integrated Coastal and Fisheries Governance (ICFG) Program for the Western Region of Ghana," Under the Leader with Associates Award No. EPP-A-00-04-00014-00.

Cover Photos: Linda Dsane
Photo Credits: Pages 4, 10, 19, 26, 33, 46, Cephas Asare

# Table of Contents


List of Figures ..... iii

Background and Executive Summary ..... 1

Introduction ..... 3

Workshop Methodology ..... 3

Day 1 Presentations and Discussions ..... 7

- International Best Practices in Fisheries by George Hutchful ..... 7
- Discussion: International Best Practices ..... 8
- History of Fisheries Management in Ghana by George Hutchful: ..... 9
- Discussion: History of Fisheries Management in Ghana ..... 9
- Co-management case study 1 by J. F. Ebambey, Chief fisherman, Asanta ..... 11
- Discussion: co-management case study 1 ..... 11
- Co-management case study 2 by Nana Jojo Solomon's, Chief fishermen Elmina ..... 12
- The Current Status of the Fisheries in Ghana by Godfred Ameyaw Asiedu ..... 12
- Discussion: Current status of fisheries ..... 13
- Background and brief introduction of Adaptive Co-Management by Tendayi Mutimukuru-Maravanyika ..... 14

Day 2 Presentations and Discussions ..... 16

- Adaptive co-management by Tendayi Mutimukuru-Maravanyika ..... 16
- Discussion: Adaptive co-management of fisheries ..... 17
- Adaptive co-management core processes by Tendayi Mutikukuru-Maravanyika ..... 18
- Adaptive co-management steps by Tendayi Mutimukuru-Maravanyika ..... 21

Day 3 presentations and discussions ..... 23

- Community entry and mobilisation ..... 23
- Understanding the starting points ..... 24
  - Stakeholder analysis ..... 24
- Visioning ..... 25
- Action planning ..... 25
- Managing implementation of action plans ..... 25
- Participatory monitoring and evaluation (PM&E): ..... 26

Day 4: Fieldwork: Visioning exercise with women, fishers and the youth in Dixcove ..... 29

Day 5: Presentations and discussions ..... 30

- Group presentations of fieldwork process and outcomes ..... 30
- Presentation on fish ecology by Cephas Asare, Josephine Laryea, Elizabeth Effah and Theophilus Boachie-Yiadom. ..... 34

Proposed models for co-management in Ghana by Kyei Yamoah ..... 35
Action planning..... 40
Workshop Evaluation..... 41
Workshop closing remarks and handing over of certificates ..... 42
ANNEXES ..... 43
Annex 1: Workshop Programme..... 43
Annex 2: Participants ratings of their knowledge of participatory approaches at the beginning of the workshop on a scale from 1 – 10: ..... 45
Annex 3: Participants' expectations..... 46
Annex 4: Workshop ground rules and committees ..... 47
Annex 5: Participant list..... 48
Annex 6: Presentations by groups on who should facilitate the adaptive co-management process in Ghana ..... 49
Annex 7: Visioning exercise with women, youth and men in Dixcove community..... 51
Annex 8: Full responses to the evaluation Questions ..... 52

## List of Figures

**Figure 1: Participants during training session ..... iv**
**Figure 2: The workshop road map..... 6**
**Figure 3: Participants acting out a sketch during training..... 6**
**Figure 4: Participants looking at a two-faced picture used to explain causes of conflict..... 15**
**Figure 5: Participants putting into practise what they have learnt during a field exercise ..... 22**
**Figure 6: Fieldwork in Dixcove for participants ..... 29**
**Figure 7: Developed co-management models ..... 36**
**Figure 8 and Figure 9: Mr Kofi Agbogah, Program Director, CRC – Ghana, handing over certificates to participants..... 42**

**Figure 1: Participants during training session**

## Background and Executive Summary

The fisheries sector in Ghana is in a crisis as fish catch has been declining over time. Recent studies show a near collapse of an extremely important fish species (the *sardinella* species) for the artisanal fishing sector that contributes about 70% of marine fish consumed by Ghanaians. Because of this, livelihoods for the fisher folks and food security for Ghanaians are threatened. Many fisheries stakeholders in Ghana have experienced the negative effects and have since been calling for a reform in the fisheries sector. In thinking about this reform, there is no need for Ghana to reinvent the wheel. So far, global and regional experiences have shown that adaptive co-management of fisheries can help in sustaining fisheries and livelihoods for fisher folks. Co-management, however, is not new to Ghana and it is important that lessons from the past experiences be identified and made use of as well, to ensure positive outcomes.

Following the global, regional and local adaptive co-management lessons, the Hɛn Mpoano Initiative has since 2009 been involved in facilitating a reform in Ghana's fisheries sector towards adaptive co-management. The Initiative has worked at various levels (from national, regional, district and community) to create a conducive environment for the emergency of adaptive co-management of fisheries in Ghana. At all levels, the project has focused on, among other things, building capacity for organisations to understand what adaptive co-management of fisheries is and what it entails.

This training workshop was organised to introduce and deepen the participants' conceptual base and understanding of the adaptive co-management concept and equip them with necessary skills for implementing it in practice. The workshop took place over a period of 6 days (from 21 – 26 January, 2013) and was conducted in a participatory way. Facilitators made use of various participatory techniques including role plays, stories, games, buzz group and plenary discussions, in addition to formal presentations. Participants also got opportunities to implement what they had learnt during a field work exercise that was organised with communities in one of the Hɛn Mpoano Initiative focal Sites (Dixcove).

There were two important outputs from the workshop: (1) the community visions by the different groups (men, women and the youth) in Dixcove; and (2) participants' perceptions on a co-management framework in Ghana. These are extremely important and will feed into the Hɛn Mpoano Initiative's on-going activities. The Initiative will continue to work with the Dixcove community members to help them refine, discuss and agree on one joint vision for the community – a crucial component for further work in the community. Perceptions on a co-management framework for Ghana will be presented and further discussed during the upcoming National Stakeholder Dialogue that will take place on the 26$^{th}$ and 27$^{th}$ of February 2013.

### Way Forward

Participants developed action plans on what they wanted to do after the workshop. Many of the participants wanted to share their knowledge with their constituencies and there is need for the Initiative to follow up (as well as offer backstopping support) to ensure the developed plans are implemented. For instance, the Ahanta West team planned to conduct a mini ACM

training workshop for their newly installed district co-management sub-committee and they may need assistance to do this.

Participants also promised to implement ACM in their own work, and therefore it will be necessary to create platforms for them to share their experiences and learn from each other. Such platforms could include newsletters and e-mail discussion fora (the e-mail discussion fora have limitations as many people may not have access to e-mails). It will also be necessary later on, (say after a year) for a refresher course to be conducted for the participants – this will be a platform for sharing, reflecting and learning and an opportunity to gain more understanding on other important elements e.g. participatory monitoring and evaluation which were given less emphasis during the first learning workshop.

## Introduction

The Adaptive Collaborative Management of Fisheries Training workshop was held in Sekondi, Western Region of Ghana as part of the project "Integrated Coastal and Fisheries Governance Initiative" locally referred to as "Hɛn Mpoano". The aim of the project is to support the government of Ghana achieve its development objective of poverty reduction, food security, sustainable fisheries management and biodiversity conservation and contributes to its vision: Ghana's coastal and marine ecosystems are sustainably managed to provide goods and services that generate long-term socioeconomic benefit to communities while sustaining biodiversity.

One of the main focus for the Hɛn Mpoano project is to enhance sustainable management of fisheries. The fishing industry in Ghana is an important economic activity in Ghana. It is a source of livelihood for about 10% of the population and is important for food security in the country. However, due to several reasons including the open access nature for the sectors, the amount of catch has been declining over time, and recent studies show a near collapse of *sardinellas*, a species that the artisanal fishing sector mostly depends on. Following global and regional experiences and success of adaptive co-management of fisheries, the Hɛn Mpoano project has been advocating for reforms towards adaptive co-management of fisheries in Ghana. This training workshop was therefore organised to build stakeholder's capacity in Adaptive Collaborative Management. A total of 20 participants from the fishing industry including; governments, non-governmental organisations (NGOs), Community Based organization (CBO), University, fisher folks and Civil Society Organisations (CSOs) attended the workshop (**Annex 5**). The objectives of the workshop were to:

1. Present the status of fisheries in Ghana and the need for a reform towards adaptive co-management of fisheries
2. Introduce and deepen the participants' conceptual base and understanding of the adaptive co-management of fisheries,
3. Equip participants with skills necessary for implementing adaptive co-management through practical exercises such as role plays and field activities and
4. Assist participants to develop action plans for implementing adaptive co-management of fisheries in their work

## Workshop Methodology

The workshop was conducted in a participatory way. In addition to making formal presentation of the history of fisheries management in Ghana and the current fisheries situation (showing a near collapse of the Sardinella), adaptive co-management concepts, processes and tools, the facilitators made extensive use of role plays, stories, games, buzz group and plenary discussions to enable participants to apply what they were learning to their own situations as well as share and learn from each other's experience. The workshop processes was shaped by the adult learning principle and facilitators came up with numerous exercises for the participants to experience what they were learning.

The workshop took place over 6 days from January 21$^{st}$ through January 26$^{th}$, 2013 and was facilitated by Tendayi Mutimukuru-Maravanyika (the main workshop facilitator) and Godfred Asiedu Ameyaw. Day one began with participants introducing themselves – in the introductions, participants were asked to mention the following: Name; Background; what does your current work involve? Rate your knowledge of participatory approaches on a scale from 1-10 (1-least: 10-maximum); Rate your knowledge of adaptive co-management on a scale from of 1-10 (1-least: 10-maximum); If you were a part of a car, which part would you

be and why? (**Annex 2**). This introductory activity, besides helping to break the ice, helped the facilitator to assess the participants' level of understanding of participatory approaches and adaptive co-management at the onset of the workshop. From their introduction, it became clear that participants had varying knowledge of participatory approaches as well as adaptive co-management – some participants rated their knowledge below 4 (on a scale of 1-10 – 1 being minimum, and 10 being maximum) whilst others rated their knowledge quite highly (**Annex 2**). The workshop was therefore facilitated in a way for participants to share and learn from each other.

After the introductions, participants were asked to come up with their own expectations of the workshop and write these on cards. These were crucial for the facilitator to tailor-make the workshop to meet the needs of the participants. The expectations were grouped into six main categories (**Annex 3**). Those to do with learning about:

- adaptive co-management,
- participatory approaches,
- general fisheries management,
- the current status of fisheries,
- and others (such as how other resources from the sea can best be utilised)

The facilitator later presented the workshop objectives, process and road map. Participants were later asked to come up with the workshop rules and penalties for those who did not follow the set rules **(Annex 4).** Participants were then asked to select members for three workshop committees – a documenting committee responsible for documenting the workshop proceedings; a welfare committee responsible for welfare and housekeeping issues; and a feedback committee responsible for monitoring the workshop process and content and giving feedback on daily basis to the group. Members of the documenting and welfare committees were permanent, whilst the feedback committee changed from day to day.

After identifying participant's expectations, two resource persons gave presentations on (a) international fisheries management best practices, the history of fisheries management in Ghana and Ghana's co-management experiences and (b) status of Ghana Fisheries. Each of these presentations was followed by plenary discussions as well as quizzes to identify key learning points from the presentations. The first day ended with a small presentation on adaptive co-management background and a brief introduction of what it was by Tendayi Mutimukuru-Maravanyika.

The second day began with a recap of activities carried out on the first day. The welfare committee was also given an opportunity to present issues that participants needed to be addressed.
The following presentations were later made by Tendayi Mutimukuru-Maravanyika and these were followed by illustrations, examples, role plays and exercises in small groups.

- Adaptive co-management: what is it? Conditions for success (the design principles); what does it entail? Common challenges faced?
- Adaptive co-management key processes: Facilitation, documentation, conflict resolution and levelling the playing field for all stakeholders to participate effectively.
- Adaptive co-management steps: Team and partnership building.

Day three began with a recap of activities carried out on the second day and a presentation from the welfare committee. This was followed by presentations on the following ACM

steps: Community entry and mobilisation; understanding the starting points (context studies, baselines, diagnostic studies); contextualising change (developing shared visions); action planning; implementation of action plans and supporting implementation; and participatory monitoring and evaluation.

The day ended with participants planning for the next day's fieldwork activity. The participants were divided into three groups to facilitate discussions with the following groups in Dixcove: youth, women and men. The group was asked to plan for a discussion to identify key challenges faced by each group and facilitate their group to develop a vision for the coming 10 years. In developing the visions, the groups were encouraged to help participants incorporate both development and ecological issues in the vision. Participants were also asked to give each other the following tasks: Facilitator, documenter, observer and time keeper.

The fourth day of the workshop was dedicated to fieldwork to come up with a vision for the groups following the previous day's plan. Participants left for the field early in the morning and came back late in the afternoon. Because of the tiring trip, participants were dismissed so as to get enough rest for the next day's activity.

The fifth day of the workshop started with a recap of days 3 and 4, followed by a report by the welfare committee. After this, participants were asked to go back into their respective fieldwork groups to discuss and reflect on the exercise using the following guidelines:

- What was the objective of your activity?
- What did you plan to do in the field (e.g. which facilitation tools did you plan to use)?
- What actually happened in practice (the process)?
- What was the outcome of the process? What went well? What did not go well?
- What lessons did you learn?

Each group presented their results and afterwards Kyei, the program coordinator for Friends of the Nation (FON), presented the models that have been developed to kick start discussions on what co-management should look like in Ghana. After his presentation, participants were divided into groups in which all key stakeholders present were represented (Fishermen, chief fishermen, fisheries commission and the Civil Society Organisations). Each of the groups was asked to discuss the models, adopt, adapt or come up with new models if they did not agree with any of the proposed models. They were later asked to present these models in plenary. The discussions ended with a final address by Kofi Agbogah, the Program Director for CRC – Ghana, and presentation of certificates to participants. (See Figure 1 for the workshop Roadmap)

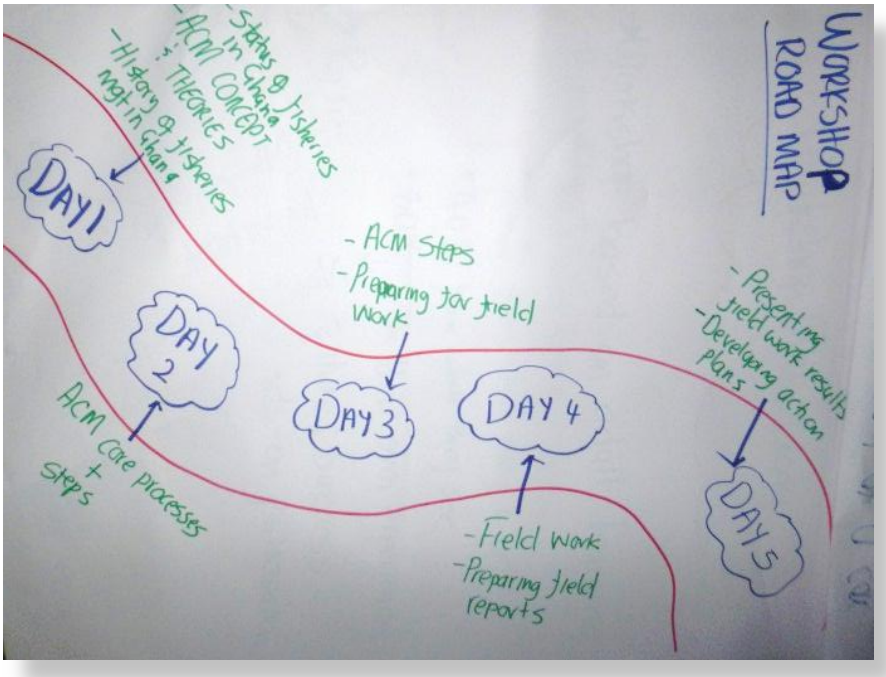



**Figure 2: The workshop road map**

**Figure 3: Participants acting out a sketch during training**

## Day 1 Presentations and Discussions

George Hutchful, the policy coordinator for the Hɛn Mpoano, presented on *International Best Practices in Fisheries* and History *of Fisheries Management in Ghana* were he took the participants through the reasons why the international best practices emerged. In the second part of his presentation, he gave participant an overview of the various management systems the fisheries had gone through in Ghana– from the centralized, to the decentralized, to the community based management approach. This was followed by Godfred Ameyaw Asiedu's presentation, on *Status of the Fisheries in Ghana*. It emphasized the decline in fish catch due to the increased effort and certain damaging fishing methods. The presentation also showed the near collapse of the sardinella fisheries in 2009 (13 % of the historical maximum); a situation not so dissimilar to the Atlantic cod fisheries. Each presentation was followed by plenary discussions. The presentations and discussions are presented below in details.

### International Best Practices in Fisheries by George Hutchful

**Key Messages:**

- Research has shown that about 80% of the world fish stock are fully or over exploited due to overfishing - the single greatest threat to marine wild life globally.
- Ghana, like many other countries, faces the challenge of declining fish stock due to poor fisheries management .
- Fishing is the backbone of economies of many countries – the reason why it was important to develop international best practices. The international best practices help to address challenges faced in the fishing industry such as: overcapitalization, poor fishing practices, over exploitation, declining stocks, depleted stocks and collapse of fisheries.
- International best practices include:
    - reducing fishing effort;
    - controlling effort **(**maintaining effort by not adding to number, or replacing fishing vessels**)**;
    - limiting vessel capacity **(**Replacing bigger vessels with smaller ones),
    - replacing destructive gear with selective gear;
    - use of quota system and closed seasons and areas;
    - the establishment of marine protected areas (MPAs);
    - contribution to fisheries research by industry;
    - increase in net mesh sizes to prevent catching of juveniles;
    - use of effective monitoring systems;
    - promotion of mari-culture (farming fish in the sea);
    - IUU free fishing (Certifying exported fish as having been caught IUU free); and
    - improving traceability – through consumer education to increase demand for responsibly produced sea food.
- For success of fisheries management: adequate funding, effective policies, stakeholder involvement and effective monitoring systems are crucial
- To be able to manage our fisheries effectively there is the need to adopt some (if not all) of the international best practices and there is need for commitment by all stakeholders

## Discussion: International Best Practices

| | |
|---|---|
| **Question:** | **Nate:** Why did the past co-management approach (which employed the use of the referee–player method between the government and local communities) not work? |
| **Response:** | **George:** Each party had a different focus and point of interest at first and the locals did not participate in decision making process. |
| **Contributions:** | **Felix:** I think more attention should have been turned to stakeholder analysis, as this makes it easier for compliance.<br>**Peter**: I think the fishers do not understand the fisheries laws in Ghana. The Ghanaian fishers in Ivory Coast and Senegal do understand and obey the laws of those countries. When such issues are mentioned here in Ghana, it is tied to politics and the "big men". I propose that the government should sit up and educate local communities on the fisheries laws so that they can obey them. |
| **Question:** | **Ebambey:** If fisheries laws are enforced in other countries, why are we not using our own systems to enforce our own laws? |
| **Response:** | **George:** It seems in Ghana law enforcement is done selectively. Before the enforcement, there is need for education of fishers on these laws. |
| **Question:** | **Theo:** You talked about the cod fish in the North Sea. I want to know if there was a total depletion of the stock after the collapse. |
| **Response:** | **George:** Yes, there was a total depletion of the stock after the collapse. Improper management of the fisheries could lead to the collapse of the fisheries and we don't need to wait till the stocks are at a near collapse before trying to recover it. |
| **Question:** | **Emelia:** You mentioned the control of effort and the limitation of vessels under the international best practices. How are other countries doing this? |
| **Response** | **George:** In some cases, smaller nets with bigger mesh sizes are used. In other cases, the government buys back some of the vessels and destroy them. |
| **Question:** | **Peter:** How did the Fisheries Commission help the fishermen in managing their resources? |
| **Response:** | **George:** The first top-down approach, which was the Government-regulated fisheries approach failed because they did not involve the fishermen in decision making processes. |
| **Question:** | **Timothy:** How do you combine the quota system with fish farming? |
| **Response:** | **George:** The quotas are shared among fishers and when one catches fish that is equivalent to the set quota, he cannot fish again. |
| **Question:** | **Johnson:** In more developed countries, they have been able to implement their fisheries laws and it is working for them. How can we also do that here in Ghana? |
| **Response:** | **George:** That is why we want to educate ourselves and promote the knowledge of adaptive co-management. |

## History of Fisheries Management in Ghana by George Hutchful:

**Take home messages**

- Fishing is an economic activity that provides livelihood and fish food security for coastal communities.
- Fisheries management in Ghana can be divided into 4 phases: colonial era, centralised fisheries management, decentralisation and co-management
- Fishing activity remained largely unregulated in the colonial era. Best nets were considered as good as they caught most fish.
- Fisheries management became centralized at independence; with regulation to guide the fisheries department
- Around the 1980s when the government was implementing decentralisation policies, management of fisheries became the responsibility of the district assemblies. Agriculture officials with little interest and knowledge in fisheries were tasked to handle fisheries matters whilst the national level fisheries department remained responsible for setting policy, monitoring and enforcement.
- Community based management was tried in the 1990s as a new management approach to fisheries. This gave the management of fisheries to local communities by establishing structures that encouraged involvement and responsibility at the community level. This management was largely unsuccessful mainly because control was limited to the canoe fisheries only in area of jurisdiction and the fishers could not influence semi-industrial and industrial vessels.

## Discussion: History of Fisheries Management in Ghana

| | |
|---|---|
| **Question:** | **Tendayi:** Who was responsible for performing what duty when the CBFMC was instituted? |
| **Response:** | **George:** The chief fisherman was responsible for overseeing the fishing activities; however their authority seemed to wane over time. Then there was the attempt to revive the chief fishermen's authority when the CBFMC's were instituted; Unfortunately, again because of the lack of participation by community members in decision making, this resulted in the referee (government) – player (locals) approach. |
| **Question:** | **Felix:** What was the objective of the fisheries department? |
| **Response:** | **George:** To establish a long term sustainability of the fisheries through co –management. |
| **Question:** | **Felix:** Why were the drawbacks not identified during the project phase, but later on? |
| **Response:** | **George:** Due to the time-bound nature of projects, and sustainability issues were not factored when the co-management institutions were being established. It could also be due to the lack of funds. |
| **Contribution:** | **Tendayi:** From the demise of the past co-management attempt, it is clear that we must incorporate opportunities to learn within the project period rather than trying to learn lessons when the project is finished. We must set up project in a way that we can monitor, reflect and learn as we go by, and adapt to changing situations. This is what adaptive co-management is all about. |

| | |
|---|---|
| **Question:** | **Eshun:** You separated the canoe owners from the outboard motor owners when mentioning the members of the various groups that were involved in the CBFMCs, I think everybody that owns a canoe has an outboard motor so why separate them? |
| **Response:** | **Emelia:** It is not all the canoes that use the outboard motors, some use oars/paddles so they are separated sometimes. If it happens that the canoe owner and outboard motor owner is the same person, it is just fine. |
| **Question:** | **Theo:** Were co-management committees formed at the districts? If no, why were they not and how were fisheries issues incorporated into the various coastal district agenda? |
| **Response:** | **George:** They were not included at the initial stages and there had to be persistent lobbying till they were formed (e.g. in Shama District, where a fisheries sub-committee has recently been formed). Most districts however did not manage to do so. |
| **Question:** | **Marfo:** From the presentation, we saw that from a total of 133 committees that were formed, only about 25 % are still functional. Why? |
| **Response:** | **George:** Where the co-management was successful, the chief fishermen of those areas were proactive and able to mobilize funds and wielded authority that was recognized and respected (the chief fishermen were powerful). Because of this respect, they managed to enforce the by-laws they came up with |
| **Question:** | **Theo: G**iven a situation where some fishermen are ineffective, should they still lead the co-management committees? |
| **Response:** | **George:** Co-management committees that were functional had powerful chief fishermen as their leaders. I suggest the role of the chief fishermen as the highest local authority should be maintained. |
| **Contribution:** | **Emelia:** I suggest that the committee members be given opportunity to come up with their own chairpersons. In situations where the members think the existing chief fisherman is better positioned to be their leader, they must be free to choose him. In places where the members think the chief fisherman is not really effective, the chair person (who can be anyone selected) should lead the committee. |
| **Question:** | **Marfo:** How are the chief fishermen appointed? |
| **Response:** | **George:** It is hereditary, like that of the chiefs. |
| **Question:** | **Johnson:** Elaborate on the issue of infrastructure that was lacking for the CBFMCs to work? |
| **Response:** | **George:** An office and meeting place with furniture, minute books, a secretary and funding. They required everything an office needs to run. |
| **Question:** | **Theo:** Most migrant fishers are less powerful and this may have led to the failure of the CBFMCs previously. Is it not better to also include the traditional authorities, like the chief to lead the co-management activities? |
| **Response:** | **George:** The traditional council could send a representative to be part of the committee, but the chief fisherman should be maintained since he is subservient to the chief in all the places. They should however work hand in hand. |
| **Contribution:** | **Nana Solomon:** Every chief fisherman swears an oath to the chief, and it is recognized. The role of the chief fisherman should thus be |

respected. If he is side-lined he loses respect before fishermen, thus the chief fisherman should be made to be the chairman of the co-management committee.

**Question:** **Timothy:** In some cases, the fishermen may not be educated - how do we get them to contribute to the constitution that governs them?

**Response:** **Nana Solomon:** This perception that fishermen are not educated is a wrong mind-set. We do have some common knowledge to be able to govern ourselves. I think it is not right for a constitution to be made for us.

**Comment**: **Tendayi**: Participation of all relevant stakeholders is key for the success of co-management initiatives. No one knows everything and everyone knows something. The fisherfolks have certain knowledge that many stakeholders do not have and their knowledge must be respected as well.

In order to get more understanding of how the CBFMCs functioned in practice, Tendayi asked two chief fishermen who participated in the process to share their experiences with all present. The following presentations were made by the chief fishermen.

## Co-management case study 1 by J. F. Ebambey, Chief fisherman, Asanta

In his presentation, Ebambey said that when the co-management committee was formed, it consisted of 11 members including: the Chief fisherman, 7 fishermen/canoe owners, Assembly man, the chief and a secretary. He said that the committee was formed around 2000, and he was the chief fisherman in the committee. They had a constitution but it was not being enforced. He mentioned that they met once in a month on a Tuesday to settle conflicts. The fishermen paid dues of GHc 0.20 (formerly ¢2000) and the money was kept in the bank and used for welfare purposes of the group e.g. taking care of visitors, traveling expenses, funeral expenses. People were made to pay fines if they broke any of the laws. The venue for the meeting was the chief fisherman's house for more than 8 years. Along the line there were misunderstandings (prioritizing funeral meetings over committee meetings and reluctance in payment of dues) and the members were not cooperative as before. Eventually they suggested the money in the bank should be shared amongst members.

Now using experiences from the co-management committee, Ebambey said that they recently started something similar – the Asanta-Ankobra-Bobrama Fishermen Council and this seems to be working well.

## Discussion: co-management case study 1

**Question:** **Marfo**: How did you feel as the chief fisherman? Was your authority in any way undermined because there was a chief?

**Response:** **Ebambey:** Not at all. There was nothing of that sort.

**Question:** **Cephas:** I met with you the first time in July 2011 for an interview, you informed me that your CBFMC was functional well but from what you just said it appears it was not. Can you clarify this?

**Response:** **Ebambey:** It was functioning at that time, but shortly after that it started falling apart; mainly because of the attitude of the members towards attending meetings and paying dues.

## Co-management case study 2 by Nana Jojo Solomon's, Chief fishermen Elmina

The committee was formed in 2004 and consisted of the following 13 members: chief fisherman, hook and line fishers representative, *watsa*[1] gear representative, ashekon[2] gear representative, seiko[3] representative, konkohene (chief fishmonger), fish smokers representative, salted fish processors representative, *tenga*, in-shore fishers representative, assembly man, chief fisherman's linguist and the arbitration committee member. The committee was however **dead on arrival** (DOA). Before the CBFMCs were instituted, there was a traditional council which was recognized by the community and the fishing council. The traditional council was made up of almost the same stakeholders who formed the new committee including: chief fisherman, hook and line fishers, *watsa* gear users, *ashekon* gear users, *tenga*, chief fisherman's linquist and arbitration committee members.

The reason for the death upon arrival of the Community Based Fisheries Management Committee (CBFMC) was mainly due to conflicts between the new committee members and the traditional institution over whom to carry out which duty and authority. The traditional council however had instituted some by-laws which prohibited stealing, fighting at the beach and unnecessary making of noise in the fishing community. After the death of the CBFMC committee, the traditional institution continued to exist to this present day.

**Lesson learned**

- Policy makers should involve stakeholder especially fisher folks in decisions making and planning processes
- The traditional council is still functioning in spite of the collapse of the CBFMCs. and that is the 'difference between the mustache and the eyebrow' - the traditional council was in existence before the CBFMCs came and would still remain even when CBFMCs are no longer in existence.
- There is need to understand the existing institutions before going on to introduce a new system. We must aim to upgrade and build capacities of existing institutions rather than just putting in place new institutions that may not work.
- The composition of the CBFMCs may differ from community to community based on their needs.

## The Current Status of the Fisheries in Ghana by Godfred Ameyaw Asiedu

**Key Messages:**

- Fisheries are important for nutrition and food security, livelihoods support, foreign exchange earnings, employment, income generation and poverty reduction.

[1] Purse seine nets used mostly for sardinella fisheries
[2] Gillnet
[3] This is used to refer to transshipment

- The contribution of fisheries to the above goods and services and Ghana's economy has declined over time and recent research has shown a near collapse of the the sardinella stock
- Main reasons for this decline include:
    - the use of unsustainable fishing practices including light fishing which allows fishers to fish all year round.
    - There are too many fishing boats and the number still continues to rise and increase in effort.
- Without reforms in fisheries management in Ghana, the future of goods and services are by no means assured.
- Adaptive co-management has been tried and tested world-wide and this the recommended way forward for the management of Ghana's coastal fisheries.

## Discussion: Current status of fisheries

| | |
|---|---|
| **Comment:** | **Tendayi:** The near collapse of the Sardinella should awaken us and make us take action quickly |
| **Question:** | **Nate:** Based on these statistics, what do you think will happen to the fisheries in Ghana? |
| **Response:** | **Godfred:** All indications show that we are headed for a crisis and the time for change is now. |
| **Question:** | Is the decline in fish catches peculiar to Ghana only? |
| **Response:** | **Godfred:** Based on global results from FAO, it is not only peculiar to Ghana, it is happening globally. |
| **Question:** | **Josephine:** With regard to the decline of fish, does it apply to Senegal too since from the presentation you said they get about 40 refrigerating trucks full per day? |
| **Response:** | **Godfred:** Senegal was once at the verge of the collapse of their fishery, however their situation is much better now. |
| **Contribution:** | **Marfo:** We are approaching a crisis but there is hope since the fisheries is a renewable resource. If we change our attitude and behaviour, it would help. |
| **Question:** | **Nana Solomon:** What should be the focus of our management? |
| **Response:** | **Godfred:** We should manage people. The fish cannot change its behaviour it is rather the people that should change their behaviour. |
| **Question:** | **Timothy:** How does the cutting down of the mangroves result in the depletion of fish stock? |
| **Response:** | **Godfred:** Due to the harsh conditions in the sea, some of the fish prefer to spawn in estuaries and wetlands. When you cut the mangroves, the fish loses the spawning grounds.<br>**Nate:** Litter from the leaves is also a source of nutrients. |
| **Question:** | **Eshun:** Some of the politicians in high positions are responsible for using illegal fishing methods: are huge trawlers monitored? |
| **Response:** | **Godfred:** We are not here to point fingers but rather find solutions. We would present these findings to them when we get the opportunity. |

| | |
|---|---|
| **Question:** | **Nani:** Since there is no research vessel for the fisheries sector to carry out research, how valid are the results you have presented to us? What is the basis for the statistical values given here? |
| **Response:** | **Godfred:** There are many ways of estimating the amount of fish in the sea. One of these is by the catch records and this is what the research division uses. The data I just presented is from the research division. You can also do stock assessments but this is expensive and has not been done because of lack of vessels and technical expertise. |
| **Comments:** | **George:** Over exploitation leads to overfishing and eventual collapse. We should not relax till the fisheries collapse before taking action. We need to wake up and do something urgently to salvage the situation. |

## Background and brief introduction of Adaptive Co-Management by Tendayi Mutimukuru-Maravanyika

Tendayi briefly explained why participatory resource management approaches had emerged after the failure of top-down resource management approaches. She also went on to explain that most participatory projects however had produced disappointing results due to several reasons including the following, among others:

- Underlying assumptions for such project have not changed and remain disturbing – the projects continued to pay lip-service to local community needs
- They failed to incorporate learning as an integral part of resource management
- The concept of participation slides easily in a discursive continuum – some projects though participatory on paper, did not devolve decision making power to the local communities

She went on to explain that failure of participatory approaches fuelled debates on which way to go: with conservationist calling for stricter enforcement of protected areas whilst proponents of participation see this as a reinvention of a square wheel and call for alternative approaches that can lead to positive results. She however emphasized that although there are many challenges and criticisms to participatory approaches, there was hardly any other alternative but to seek ways to make participation work. And this is the reason why the adaptive co-management approach has been developed to bring about positive changes to the status of resources and the well-being of communities that rely on natural resources.

**Take home messages**

- Adaptive-co-management approach aims to seriously enhance both status of natural resources and human well-being.
- Learning by doing is a key element of management due to complexity of natural resource management
- Under the adaptive co-management approach, participation of all stakeholders (including marginalized groups such as women) in decision making, planning, implementation and monitoring and evaluation is crucial

**Figure 4: Participants looking at a two-faced picture used to explain causes of conflict**

## Day 2 Presentations and Discussions

The next day's meeting started at 0845hrs. There was a recap of the day one's activities by the recap team for the day – Elizabeth and Nate. The welfare committee also gave a feedback on the accommodation and feeding issues.

### Adaptive co-management by Tendayi Mutimukuru-Maravanyika

Building on the presentation on the short presentation on adaptive co-management from Day 1, Tendayi continued with a presentation on adaptive co-management. She explained in detail what adaptive co-management was and some common challenges for implementing it.

**Take home messages**

- Adaptive co-management has two key components: adaptive management and co-management
    - Adaptive management is a way for addressing complexity and uncertainty inherent in natural resource situation. Simply put it is 'learning by doing' and helps resource managers to take action even in complex situations where it is difficult to predict cause and effect relationships
    - Co-management are partnership arrangements in which the government and fisher folks share responsibility and authority for managing fish resources. Co-management does not mean giving all powers and authority to the fisher folks, but devolving authority and responsibilities to them depending on the fisheries resources in question.
    - In co-management, governments have a critical role in deciding how much authority should be devolved to local communities and for which resources. However, where governments implement co-management as an instrument to achieve their own management objectives, such efforts have not been successful.
    - There are a number of factors that make co-management successful – the design principles
- Adaptive co-management is a collaboration and learning based approach where there is conscious and explicit attempt to: embed learning whilst managing, foster collaboration among all stakeholders in managing their resources
- Adaptive co-management is characterized by deliberate efforts by groups to communicate, negotiate and seek opportunities to learn together and adapt management practices
- A number of principles guide the co-management approach including:
    - Management and decision making are based on shared intentional learning and experimentation
    - Planning and decision making include attention to relationships within and between human & natural systems
    - Planning and decision making must clearly reflect links to desired future
    - Stakeholders identify and deal effectively with uncertainties
- A number of challenges could be faced in implementing adaptive co-management of fisheries and these must be addressed

## Discussion: Adaptive co-management of fisheries

| | |
|---|---|
| **Comments** | **George:** There is need for clearly defined boundary for co-management to work.<br>**Tendayi:** The change for Ghana begins with us and we should put pressure on and try to put the co-management legislation in place especially at the meeting with members of the government and the Fisheries Alliance[4] at the end next month because we need a reform.<br>**Peter:** With regard to the boundaries, some people could move from one place to another and use illegal methods to catch fish in that area. It would also help if there is a law that ensures that before one fisherman moves to a different area, he needs the permission and consent of chief fisherman of that place.<br>**Nana Solomon:** The mandate of authority at the local level should be given to only the chief fisherman else the process would be corrupted.<br>**Emelia:** It should be the shared responsibility of the committee members and not the chief fisherman only.<br>**Felix:** If these things are not backed by policy, they will not be effective. In Tanzania, the policies are in place and they are being implemented. They said they learnt about decentralized management system from Ghana and it is effective there. Why then is it not working here? There should be something wrong.<br>**George:** It probably could be because of vested interest by politicians<br>**Emelia:** In Tanzania, they do not mix politics with their policies. They have three sectors that are not influenced by any change in government and progress is cumulative. These are education, health and agriculture. Any change in the government would therefore not affect or interfere with their developmental plans or processes.<br>**Ebambey:** By-laws should be enforced with regard to the boundaries regardless who enters. |
| **Question:** | **Tendayi:** How can we put in place the boundaries? |
| **Response:** | **Godfred:** It could be done by using buoys with coloration, which would differ from community to community. |
| **Comment:** | **Elizabeth:** There is no unity between the community members and their chiefs. There seems to be a communication gap between them<br>**Tendayi:** It is the responsibility of the facilitator to identify and resolve existing conflicts before initiating co-management. Conflicts will always be there but we should seek to resolve them whenever they arise. |

[4] Some of the members were present – e.g. Nana Jojo Solomon

## Adaptive co-management core processes by Tendayi Mutikukuru-Maravanyika

After this presentation, Tendayi introduced the core processes of adaptive co-management namely; facilitation, documentation and conflict resolution

**Facilitation: Take home messages**

- Facilitation is a fundamental element of adaptive collaborative management. It is a process of creating an environment that empowers people to become more expert managers of their own situation; it involves applying a set of processes and "soft skills" to help groups to attain their objectives.
- Facilitation determines success/ failure of ACM in reaching its objective
- Facilitation is a process of creating an environment that empowers people to become more expert managers of their own situation
- A good facilitator needs to be familiar with a set of processes and tools that can be drawn upon to assist a group of stakeholders in realizing their objectives. These include:
    - Listening
    - Speaking
    - Observing
    - Questioning skills
    - Visualisation
    - Codes
    - Paraphrasing
- The principles of facilitation include:
    - Informality and Humility
    - Inclusiveness
    - Open Dialogue
    - Ownership by Participants
    - Mutual Respect
    - Transparency
    - Integrity and Impartiality
    - Flexibility
    - Thinking Outside the Box
    - Honesty and Political Incorrectness
    - Empathy –seeing problems through others eyes
    - Deliberation
    - Cultural and Social Appropriateness
    - Humour
    - Attentiveness.

**Discussion: Facilitation**

**Question:** **Timothy:** Can a facilitator administer questionnaires in the community as a part of the process?

**Response:** **Tendayi:** It is better to prepare some guiding questions that would help you get the information you require before even going there. Try not to limit their participation, but rather allow them express their views whilst you guide them. Some questions that may come up could be follow-up questions to previous ones, and would help clarify on a

| | |
|---|---|
| | particular issue. Administering the questionnaire does not give chance to such a situation. It however depends on the demands of the situation at hand, and it is up to the facilitator to employ the method that best fits. |
| **Comment:** | **Theo:** Most of the time, questionnaire would end up "faci-pulating" rather than facilitating. |
| **Question:** | **Josephine:** How best do you handle the issue of translation during the facilitation process to ensure that the translator is getting the right message across? |
| **Response:** | **Tendayi:** It is a challenge. You just have to get a translator whom you think is capable of doing a good job and just trust him. |
| **Comment:** | **Nate:** The appearance (way of dressing) of the facilitator is also important. You should not "overdress", or project yourself highly important than the people you are talking to. |
| **Comment:** | **Tendayi:** As a facilitator, you should not try to give any special attention to yourself. Especially in the sitting arrangement - it should be such that everyone is placed on a level ground where they could see each other and interact freely. |
| **Question:** | **Eshun:** What if there is a challenge of space for the meeting and you have an arrangement in which some would be in the front row whilst others are at the back row, rather than an open arrangement? |
| **Response:** | **Tendayi:** You may have to work with that for the start. Or otherwise seek their inputs on how best to get it done – either you get a new venue or modify the arrangement in that same space to suit an open arrangement. |
| **Comment:** | **Josephine Opare-Addo:** If you have an arrangement that puts some of them in the front row and others at the back, the facilitator could intermittently move in between the rows to get all the participants involved in the process.<br>**Tendayi:** The facilitator should also establish eye contact with participants whilst talking to establish a connection and also show interest.<br>**Johnson:** Sometimes, giving incentives to the people could be helpful in motivating them.<br>**Tendayi:** We shouldn't force people to participate by enticing them with material things. We should let them understand the benefit they can get at the end of the process. This may not be easy but it is possible. |

**Conflict resolution: Take home messages**

- Conflicts are inherent in natural resource management due to various reasons such as scarcity of resources, power or social opposition and differing value system. Conflict occurs at various levels and it involves different stakeholders.
- Unresolved conflicts can lead to resource degradation and constrain community organisation and cohesiveness.
- Conflict can be a creative, constructive force if we develop skills to analyse and use it in a peaceful manner
- There are various ways of dealing with conflicts including: facilitation, mediation and litigation and each method has advantages and disadvantages

**Documentation: Take home messages:**

- Documentation is a process of recording, analysing and reflecting on facilitation approaches used and their outcomes. Process Documentation report provides a complete record of activities carried out.
- Documentation should be immediately carried out for all activities carried out by the ACM team in the communities or with other stakeholders.
- Some of the key components of process documentation report includes:
    - Date when activity was carried out
    - Who participated
    - Objective of the activity
    - What was planned with regards to the process of facilitating the activity?
    - What happened in practice?
    - What was the outcome?
    - What went well?
    - What did not go well?
    - What lessons did you learn?
    - Recommendations

**Discussion: Process documentation**

**Comment:** **Ebambey:** There is a problem with the documentation and fishermen. In Ivory Coast, all fisheries related matters are documented in an office. I don't have an office or the resources to do documentation.

**Response:** **Godfred:** Fishermen are rich but they have this mind-set that they are not. You could collectively put together some resources to build an office for the chief fisherman rather than waiting for the government to do that for you. If you at least start the process, you could ask for help later.

**Response:** **Ebambey:** We have started raising funds and have asked Tullow for assistance but they have not yet responded.

**Contribution:** **Godfred**: At Anlo, the women were ready to start building the market they wanted with bamboo and Hɛn Mpoano seeing the readiness in them contributed bags of cement to be used for concrete floors in their market.

**Nate:** You could start in a small way and not wait till you have all the funds to start the project.

**Nana Adam:** Nowadays, through education things are changing and some of us have also started keeping documents.

**Johnson:** Things are changing and we shouldn't keep on with some of our old practices. Book keeping is important and you could even decide to start today. It may not necessarily require you to be the person documenting, you could seek the help of another if you cannot.

**Ndah:** Documentation does not require any special skills. All you need is a pen and a book. You could start writing first in the book and work towards getting the office you require.

**Godfred:** Documentation is important because it helps you keep information which you could draw out as your evidence in any event. It helps get people accountable.

**George:** Documentation is important. It would have helped if people had started practicing it long ago, especially with the chieftaincy

| | |
|---|---|
| | disputes. We could have made reference to documents if we had them, but we are found wanting because we did not document earlier and we keep arguing.<br>**Nana Solomon:** There was an incident when I was being accused for misappropriation of funds regarding premix, but I had documentation on all the funds. When I was called, I presented my documents as evidence and I was vindicated. Premix is what is getting most of the chief fishermen into trouble. If they document, they would not get into trouble. |
| **Question:** | **Nana Adam:** What is the difference between minutes, document and file? |
| **Response:** | **Emelia:** Minutes could be proceedings or a report from a meeting. It could also serve as the evidence of the proceedings of a meeting since "book no talk lie". A file is a where you keep your records. |

## Adaptive co-management steps by Tendayi Mutimukuru-Maravanyika

Tendayi later presented the adaptive co-management steps. Key messages for each of these steps are presented below:

**Team and partnership building**

**Take home messages:**

- The ACM team should be made up of people with research and development background and is mutually responsible for the implementation of the adaptive co-management process.
- The ACM team is responsible for identifying key stakeholders to participate in co-management
- ACM team members should have facilitation and analytical abilities.

**Figure 5: Participants putting into practise what they have learnt during a field exercise**

## Day 3 presentations and discussions

Tendayi proceeded to present to participants the necessary step involved in Adaptive Co-management.

## Community entry and mobilisation

**Take home messages**

- Mobilisation is a process through which participants in an adaptive co-management process become interested and get self-organized and motivated to work together toward a common goal.
- It is important that the necessary protocols are observed in contacting communities.
- Tips for effective mobilization include: ensure that aims of project are transparent; give equal opportunity for all stakeholders to participate and express their opinions; and ensure that politically, economically or socially marginalised groups are not left out.

**Discussion: Community entry and mobilization**

**Question** **Tendayi:** How to go about community entry when the chief fisherman is not part of the ACM team?

**Response:** **Nana Jojo Solomon:** He stated that in a case were the chief fisherman is not part of the team entering into the community the protocol should be:

- Visit the chief and his elders in his palace to explain your mission and ask them to organise meetings with various stakeholders in the community
- Meet with various splinter groups: Konkohene + elders, Fish processors, Fish mongers

**Question :** **Tendayi**: Is it the same for all community or different for some communities?

**Response:** **Ebambey:** Being he chief fisherman for Assanta, he stated that community entry would be different in other communities and he cited that for his community as an example. Below is how the protocol looks like

- Send a letters to chief fishermen to inform him about visit
- Visit the chief fisherman who send them straight to the chief's palace
- Organise broader meetings with various stakeholder groups

**Question:** **Tendayi:** Are there a group of people you think may not come? And what can be done to make them participate in the organised meetings?

**Response:** **Ebembey:** Everyone will come to such meetings.

**Emelia:** If it is during the fishing season the men may not come because they would tell you they need to mend their nets so they would delegate a crew member to come. Women too may not come because they need to make money.

| | |
|---|---|
| **Question:** | **Tendayi:** So what are you recommending? |
| **Response:** | **Emelia:** Off season would be the best.<br>**Nana Solomon:** This boils down to what Mr Hutchful said; it depends on how assertive the chief fisherman is. Once the "*gong gong*" is beaten you stop work and attend because e.g. if people from World Bank are coming you wouldn't ask them to come during the off-season.<br>**Tendayi:** We need to liaise with chief fisherman; explain what the intentions are so he can advise how best we can organise.<br>**Bentum:** Non-fishing days would not work because the fishermen now fish every day and they stay longer at sea due to their use of ice.<br>**Nana Efua:** It is easy to get people in the small community but in big community it is difficult because there are so many fishermen.<br>**Nana Solomon:** Traditional norm should be followed e.g. the giving of Schnapps – 1 for paramount chief and 1 for chief fisherman<br>**Nana Adam:** He also agreed that mobilization in smaller communities would be easy, but in big communities such as Takoradi, it would be difficult.<br>**Felix:** Traditional norms are not cast in stone and can be bent occasionally. He also agreed that working in small communities was easier than the big ones.<br>**Nana Solomon:** First port of call is the chief. "You cannot by-pass him because he owns land every chief fisherman swore an oath of allegiance to him." |

## Understanding the starting points

**Take home messages**

- It is crucial to know the starting point before initiating action through the PAR process. Assessing the starting point can be done using different tools including baseline study and characterization studies.
- Baseline should be relevant to the project and should be delivered on time.
- Characterization studies are mainly qualitative in nature and can be done through discussions with key informants using a checklist of questions.

To broaden the above step, Felix Nani of Wildlife department was asked to give a presentation on stakeholder analysis; the steps and processes involved.

**Stakeholder analysis (By Felix Nani)**

**Take home messages**

- Stakeholder analysis is a methodology used to facilitate institutional and policy reform processes by accounting for and often incorporating the needs of those who have a 'stake' or interest in the reforms under consideration
- Stakeholder analysis can help us identify:
    - The interest of all stakeholders who may affect and be affected by the program/project;
    - Potential conflicts or risks that could jeopardize the program;
    - Opportunities and relationships that can be built on during implementation;

    - Groups can be encouraged to come on board at different stages of the program;
    - Appropriate strategies and approaches for stakeholder engagement;
    - Ways to reduce negative impacts on vulnerable and disadvantaged groups.
- Key steps for stakeholder for analysis:
    - Identifying the key stakeholders and their interests (positive or negative) in the project;
    - Assessing the influence and importance of each stakeholder as well as the potential impact of the project upon each stakeholder;
    - Identifying how best to engage stakeholders.

## Visioning

**Take home messages**

- Visioning is a process where stakeholders identify their desired future.
- For visioning to be successful the following tips should be considered:
    - all stakeholders' views must be taken into account for their buy-in.
    - Different stakeholders may have other vision items that may not be incorporated into the main vision – take note of these.
    - When combining visions, start by identifying common elements and later facilitate a discussion of the different items.
    - Allow the community members to develop their own vision – don't impose your vision on them

## Action planning

**Take home messages**

- Vision development should be followed by action planning
- Action planning helps stakeholders to move to their desired future (vision)
- Facilitate discussions for stakeholders to develop their action plans with the following components:
    - What (Activity)
    - How (Approach)
    - Who (Roles and Responsibilities)
    - When (Timeline)
    - With what Resources (local first, from appreciative inquiry, followed by external)

## Managing implementation of action plans

**Take home messages**

- Managing implementation of action plans is a very long process and requires huge investments by facilitators during the initial stages
- The process includes regular visits to monitor implementation and regular phone calls to check on progress

- There is need to start with activities that generate quick results even if these may not have a direct connection with fisheries to boost stakeholder confidence in the process. This requires some money to be set aside to assist in kick starting activities
- Capacity building for all stakeholders is crucial during this stage

## Participatory monitoring and evaluation (PM&E):

**Take home messages**

- Participatory Monitoring is the systematic recording and periodic analysis of information by insiders with the help of outsiders.
- PM&E is not just a matter of using participatory techniques within a conventional M&E setting, It is about radically rethinking who initiates and undertakes the process, and who learns or benefits from the findings.
- PM&E provides information for decision makers: problems are identified and solutions are sought early
- Steps in monitoring and evaluation include the following:
    - Step 1: Revisit the vision developed by stakeholders
    - Step 2: Discuss and agree on reasons for monitoring
    - Step 3: Discuss the information needed to help know if activities are going well. Focus on questions "What do we want to know?" and "What do we monitor that will tell us this?"
    - Step 4: Establish direct and indirect indicators that will answer each monitoring question
    - Step 5: Decide on information gathering tools e.g. record books, financial accounts
    - Step 6: Decide on who will do the monitoring
    - Step 7: Analyse and present results to all
- For PM&E to be effective, there is need to develop a PM&E plan. The plan must clearly state the following: what is being monitored, the data collection tools, who will monitor what and when and when the data will be analysed and shared among stakeholders
- It is important to be innovative when presenting the PM&E results. This can be done through drama, vedios, graphs, photographs etc.

**Discussion: Adaptive co-management steps**

| | |
|---|---|
| **Question:** | **Godfred:** How do we go about monitoring, evaluation and impact assessment? |
| **Response:** | **Felix:** You use information from the evaluation to feed back into the process, it is done regularly. Impact assessment is done at the end of the process. From the school setting, you could liken evaluation to home work and impact assessment to exam. Impact assessment is long term. |
| **Comments:** | **Nana Solomon:** Monitoring and evaluation is simply follow, correct and control. I don't think impact assessment should be done at the tail end of the process. It could be done periodically.<br>**Tendayi:** They are interrelated and could be like end of term exams and WASSCE/final exam. The trick is when exactly to do the baseline so you can measure the progress of the project. |

**Felix:** With reference to the Hɛn Mpoano project, we did some monitoring and evaluation when it started and at the end, we would compare the results of our current state to where we were before to be able to monitor and assess the progress so far.

**Tendayi:** What you have said is correct if you are talking about a project. However, in situations where there is no project and stakeholders will continue to implement activities, this is different. Impact assessment will need to be done at the end of the visioning time period to check if the vision has been realised or not.

**Nate:** Interaction with the people is necessary as part of the process and the use of questionnaires do not really involve that.

**Question:** **Nana Adam:** When is it right to conduct impact assessment?

**Response:** **Felix:** Impact assessment at the end of the process – it is done to measure how the project or activity has affected the beneficiaries.

**Question:** **Theo:** In big communities like Elubo where it is difficult to get the same stakeholders when doing a visioning exercise what do you do?

**Response:** **Tendayi:** These are always challenges but my hope is that you would continue to work with the same people over time. Some may drop off, but you may remain with a core group who are committed to go through the process.

**Question:** **Johnson:** Were the district assembly members involved in your process in Anlo Beach?

**Response:** **Tendayi:** The Shama District Assembly was and is still very much involved in our work. The district members have participated in many meetings with community members and in some cases even give them advice on how to approach the district. For instance, when community members were discussing their problem of lack of safe drinking water, the district officers told them that the district will soon be embarking on a project to bring pipe bone water to Formaye, a neighbouring community and that they must quickly address the district and notify them about their challenge so that they may also be included in this new project. There are however some challenges faced in working with the district. For instance for a long time now, community members are waiting to get a site plan for their market from their presiding member and without this, they cannot do anything about their market.

**Question:** **Johnson:** Is Timothy aware of the site plan issue Tendayi is talking about?

**Response:** **Timothy:** Yes we are aware of the issue of the site plan at the assembly. The issue of the grader too we are aware and as I speak it is being repaired and will soon move back into the community to continue its work.

**Response:** **Tendayi:** The objective of me saying these things is not to put Mr Timothy on the spot but to give an example of some of the challenges one can face in working with the districts. The Shama District Assembly has so far done a fantastic work and they are extremely supporting – but challenges can still be faced.

**Question:** **Ebambey:** He commented that he was very impressed in the process facilitated in Anlo Beach. He said based on the guidelines he has got from the presentation he hopes to start something in the same direction in his community.

| | |
|---|---|
| **Response** | **Tendayi:** She stated that visioning is very important and can be applied in every aspect of our lives including our personal lives. |
| **Question:** | **Peter:** People should be elected to help the assemblyman like the unit committee. |
| **Responses:** | **Timothy:** As an assemblyman, I have delegated my authority to my unit committee and when I'm not around the chairman represents me.<br>**Tendayi:** I hope we all learn as we go on – this is the essence of adaptive co-management.<br>**Response:** There should be a good relationship between the assemblyman and the unit committee.<br>**Timothy:** Political affiliation needs to be put aside so as to be able to focus on development devoid of party sentiment.<br>**Emelia:** The problem with some assemblymen is that they do not want to work with other political parties are always running around doing everything by themselves. |

At the end of the discussion participants were put in groups and asked to prepare for the fieldwork activity on day 4. Each group was given a set of guidelines (**Annex 7**) to direct the group's preparation.

## Day 4: Fieldwork: Visioning exercise with women, fishers and the youth in Dixcove

Participants went to Dixcove for field work and met with 3 groups (women, men and the youth) to facilitate a visioning process. The meetings too place for about four hours and each group had a facilitator, a documenter, observer and a time keeper. The outcomes of the meeting for each of the groups were presented on the fifth day.

**Figure 6: Fieldwork in Dixcove for participants**

## Day 5: Presentations and discussions

### Group presentations of fieldwork process and outcomes

In their presentations, groups were asked to present the objective of their field work activity, the process they facilitated to achieve the objective, the outcome of the discussions and an analysis of the process (what went well, what did not go well) and lessons learned. Group presentations were followed by plenary discussions.

**Presentation by Group 1: Women**

**Objective:** To facilitate a process to develop a vision for fishmongers in Dixcove.
**Process:**

- Help fishmongers to identify the challenges they face in their work
- Help them to rank the challenges
- Help them propose possible solutions to the challenges
- Help them to develop a vision for their community and fishing industry in the next 10 years

**Challenges**

| PROBLEMS | RANKING |
|---|---|
| Unsatisfactory method of smoking fish | 4 |
| Irregular supply of pre-mix fuel for fishing | 1 |
| Poor quality of fish | 5 |
| Lack of storage facility | 2 |
| Difficulty in getting loans | 3 |
| Publicity | 6 |

**Vision for Dixcove in the next 10 years**

1. Constant fish catch
2. Acquisition of new skills for livelihoods
3. Provision of storage facility
4. Regular supply of pre-mix fuel
5. Modern expanded educational facilities
6. A vigorous marketing campaign and networking
7. Expand health facility and equip with doctors and nurses and gadgets
8. Provide accommodation for doctors and nurses and teachers
9. Establish second cycle schools- SHS, technical and vocational institutes
10. Provide more basic schools
11. Attitudinal change in sanitation. Less dependence on Zoomlion/ Zoil (the sanitation agencies)
12. Landing beach/fishing harbor

**What went well?**

- Reception was good
- Full participation due to level playing field
- Objective achieved

**What did not go well?**

- At a point all team members were facilitating the discussions and this brought about some confusion
- Interference from outsiders – some people just came and joined the groups
- Non-conducive atmosphere - there was too much noise from other groups
- Lateness in getting to Dixcove due to problems with transport affected interactions with the people

**Lessons learnt:**

1. Asking leading questions for them to come out with the visions
2. Recapping of points already raised for discussion
3. Reporting back to the whole house about what they have achieved

## Presentation by Group 2: The Youth

**Objectives**

- to build the capacities of the youth on self-help initiatives
- to get them identify some of their challenges and propose solutions
- to develop a short-term, mid-term, long-term vision

**Process and tools**

There were 16 people present in the youth group. Upon meeting with them, Nate took the lead to introduce the facilitators to the group, and afterwards the youth also introduced themselves. Nate engaged them, in a way to get eased up and feeling comfortable by asking the question; if they woke up one day and they had changed to the opposite sex, what would they do? The group used a number of participatory rural appraisal techniques including**;** focus group discussions, scoring and ranking, coding, participatory engagement and role play

**Challenges**

They collectively came up with some of the challenges they felt were in their community and linked it to how they would want it changed in years to come. Afterwards they ranked the challenges, and it is presented below in the order of priority as they decided – in order of priority:

- No proper toilet facilities
- No other job apart from fishing
- Strong waves affect them at the beaches because there is no sea defence
- We work with premix fuel, in case there is an accident and fire breaks out, there is no fire service post close to us
- Our education system ends only at the J.H.S level so most of us just have education up to that level
- We have only one Doctor and he is not able to handle all our cases, we need more doctors
- There is no special place to land the catches when the fishermen return from sea
- There is no proper accommodation facility for the nurses when they come, so they end up leaving to other places where they would feel comfortable
- It is not all of us that are interested in the fishing business but there is no particular market place for us to go and sell other commodities if we would want to
- There is no secondary school in the community so we have to travel far to school in other communities
- The sanitation in the community is poor, especially along the beach
- There is no recreational center in the community like a library or an ICT center to engage us when we are bored

**Vision for the next 10 years in order of Priority**

- Fishing harbour like the one in Sekondi, to be situated around the bridge in Dixcove, with a toll gave
- Higher education (Secondary school, Vocational institute)
- Jobs from industries (fish cannery, rubber companies)
- Fire service
- Teachers' quarters
- Sea defence
- Doctor
- Nurses' quarters
- Recreational facilities (library, ICT centre)
- Sanitation
- Market
- Cold stores

**Observation**

- The time given was not enough for the group to exhaust all their ideas
- The visioning part was not completed

**Action plan**

- Would seek the help of the D. A with regard to the harbour

Would see the chief and propose the idea of the S.H.S and/or vocational institute for the community to him

| What went well? | What did not go well? |
|---|---|
| • The facilitation<br>• The participation<br>• The co-ordination<br>  o Would rate as 90 % of the objectives achieved | • Limited time<br>• A slight misrepresentation during the role play<br>• We could not share the roles for responsibilities during the action plan |

**Lesson learnt**

- The participatory approach process encouraged ownership, which would lead to sustainability

## Presentation by Group 3: Fishermen

**Objectives:**

- To identify the challenges they face in their fishery industry
- Help them develop a vision of what they want to see in their community in the next 10years

**Process:**

- Help fishermen to identify the challenges they face in their work
- Ranking the challenges
- Help to develop a fish for the community and the fishing industry in the next 10 years

**Tools:** Participatory approach e.g. Focus group discussion, ranking and scoring

**Challenges**

According to these fishermen some of the main challenges they face in their work include:

- Premix fuel: It is very expensive and not enough for the fishermen and sometimes result in conflict between fishermen
- Gear Acquisition: Their fishing gears are very expensive and when it gets destroyed, they are not able to mend them e.g. Canoes, nets, outboard motors etc.
- Illegal fishing practices: These include the use of light, chemical and monofilament nets. These also makes fish to go bad before they are landed.
- Absence of a landing site in the community: Risk involved in storms and waves during landing. Boats capsizing when they are offloading their fishes after their trips.

**Vision for the coming 10 years**

- Fishing harbour
- Banning of light fishing
- Premix fuel
- Second cycle schools to improve the lives of the young ones
- Alternate livelihoods
- Storage facilities
- Equipment to improve their fishing technique e.g. detecting devices to know if fishes were caught with chemicals like dynamite etc.
- Building of hospitals to improve their health and create employment for their young ones
- Toilet facilities to improve sanitation and health
- Cold stores to preserve their fish from going bad
- Building of wharf against waves and storms
- Infrastructure development e.g. roads, guest houses, market etc. to facilitate easy mobilization

| What went well | What did not go well |
|---|---|
| • There was a better understanding of the Adaptive Co-management approach by the fishermen<br>• Time was managed | • Interference by outsiders<br>• Difficulty in understanding the process at the initial stage<br>• Argument among the fishermen in the course of the process<br>• Tailoring of vision by facilitator (facipulating) |

**Lessons learnt:**

- There should be effective law enforcement
- Effective education on the Adaptive Co-management Approach to community to understand the concepts of the approach
- Improvement in facilitation skills

**Presentation on fish ecology by Cephas Asare, Josephine Laryea, Elizabeth Effah and Theophilus Boachie-Yiadom.**

The group presented some basic information about fish ecology which they said was important for fisheries co-management. They highlighted that such information is normally obtained through ecological studies. The group emphasized that fisheries co-management should be based on sound understanding of fish ecology and that baseline studies should be done before management activities commence so as to measure change later on. The group highlighted that fisheries co-management should be based on sound understanding of fish ecology. They explained that ecological research was a tool for understanding fish ecology and gave an example of a research that has been recently conducted in Akwidaa, a fishing community in Ahanta West District to identify the diversity of fish species in the local lagoon, as well as species coming to spawn from the sea. The research used a mixture of participatory (e.g. resource mapping) and quantitative techniques for data collection techniques as well. In this research, community members were involved in identifying the relevant natural resources and this gave them opportunity to learn as well as take ownership of the research outcomes. Increased understanding of fish ecology if important as it helps resource managers make effective decisions on for instance, when to impose a fishing ban/ closed season for certain area and species.

**Key Messages**

- Fish ecological and social research can help resource managers to understand different types of environments that fish live in, and basic water characteristics that are conducive to support the development of different species of fish. Like all other living organisms, different fish species survive in different environments and if such conditions change, their productivity is affected. If conditions required by a certain species are altered, this could slow its development and may result in death in extreme cases.
- Basic parameters that are normally measured to check the condition of a water body include:
    - **Salinity:** Amount of salt in a water body. Freshwater bodies have only an insignificant salt content, marine water bodies have higher salinity compared to fresh water, and brackish water bodies are in the middle in terms of their salt content.
    - **Temperature:** Degree of hotness or coldness in a water body.
    - **Dissolved oxygen:** Amount of atmospheric oxygen present in the water in a dissolved state.
    - **pH:** The acidity or basicity of a the water body.
    - **Turbidity:** Amount of suspended particulate matter in a water body.
    - **Transparency:** How clear a water body is.
- Several instruments can be used to measure different parameters. If the value of the different parameters/"indicators" required for the proper development of certain fish species is known, this helps managers to know when to take which actions when environmental changes occur.

**Discussion**

**Comment:** **Nana Adam**: Some fish species live in brown, clear or green water, yet the fish are able to survive? How does the change in environment affect them since they are already living in bad water already?

**Response:** Some fish species thrive in unusual water conditions because they have adapted to these conditions over time. However, with close examination, one

may discover that such fish may be stunted in growth, and they remain small even when they reach maturity.

**Question:** **Nana Solomon:** Language can be a barrier to research work: Is it possible for all scientists to be forced to learn all our local languages at the university.

**Response:** **Cephas:** This is a tall order as researchers do not have time due to their busy work. One way they can get over this challenge is to work with local people who can act as their translators.

**Question:** **Johnson:** If water body is brackish or fresh, is it important to record the water temperature?

**Response:** Yes, because it helps you to know the condition of the water and if it is tolerable for the fish species under study. If the temperature is too high, the environment becomes uncomfortable as this reduces the amount of oxygen in the water body. The fish could suffocate and die under extreme temperature conditions.

**Comment:** **Ebambey**: Looking at the Trigger fish (locally known as *Ewurafua*) that vanished in Sekondi, from what you just said, probably the change in the environmental conditions could have resulted in their death.

**Comment:** Different environments support different species i.e. freshwater, marine and brackish waters. However some species can move from one type of water body to another for a period of time for either feeding or reproductive purposes. Species that spend most of their life at sea but migrate into rivers to breed (e.g. salmon) are referred to as *anadromous* fish, whilst other species that spend most of their life in rivers, but migrate to the sea to breed (e.g. eel) are referred to as *catadromous*.

**Question:** When fish migrate to other environments e.g. rivers to spawn, will the juveniles survive when they go back to the sea?

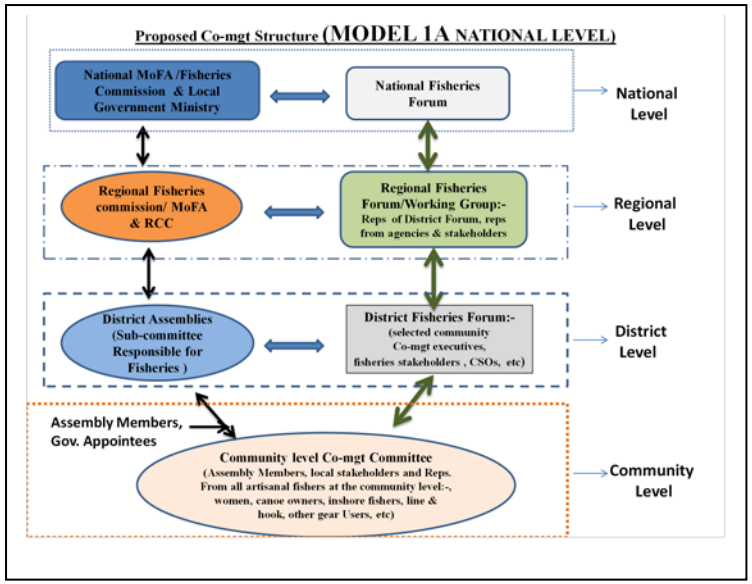
**Response:** They indeed will survive as this is part of their genetic make-up. When they move back to the sea from the river, they quickly adapt to the new environments.

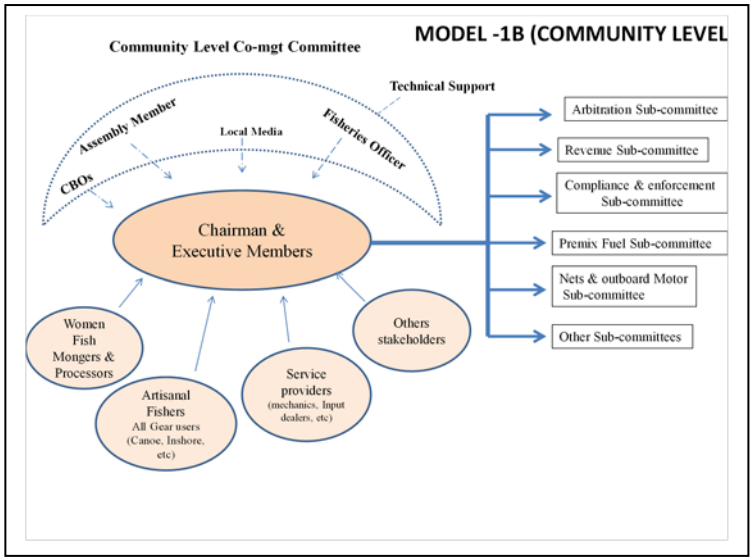
**Comment:** **Nana Solomon**: We have learnt new things here. As fishermen, we always think we know the sea better than anyone and this information is new and valuable to us. We will definitely share this information with other fishermen when we go back to our respective areas.

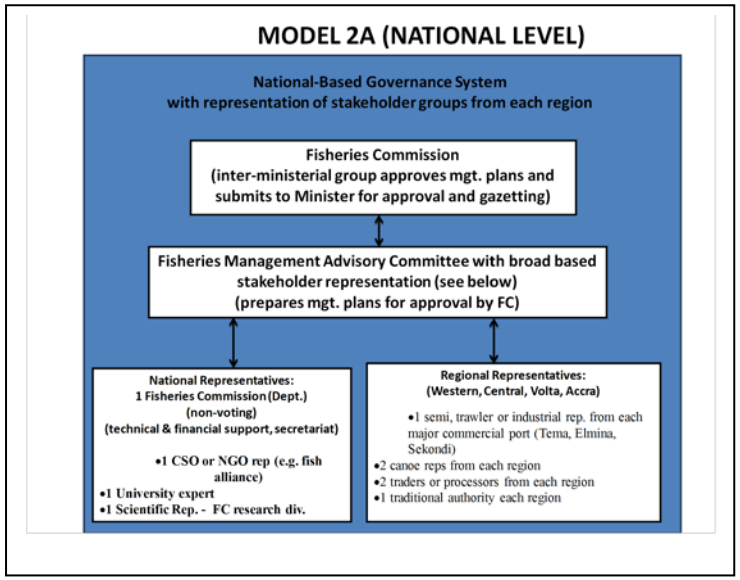
## Proposed models for co-management in Ghana by Kyei Yamoah

Kyei presented the models that have been developed to kick start discussions on what co-management should look like in Ghana. He told participants that these models had so far been discussed in two stakeholders – fora in the Western and Central Regions. He told them that the models are not final but participants should feel free to adopt, adapt or develop new models altogether. He told them that the outcome of the discussions will be presented during the upcoming dialogue meeting (at the end of February) where all key stakeholders in Fisheries will meet to discuss and agree on a way forward for a legislating framework to support co-management in Ghana. The models he presented are provided below:

After Kyei's presentation, participants were divided into groups in which all key stakeholders present were represented (Fishermen, chief fishermen, fisheries commission and the NGOs). Each of the groups was asked to discuss the models, adopt, adapt or come up with new models if they did not agree with any of the proposed models. They were later finally asked to present these models in plenary.



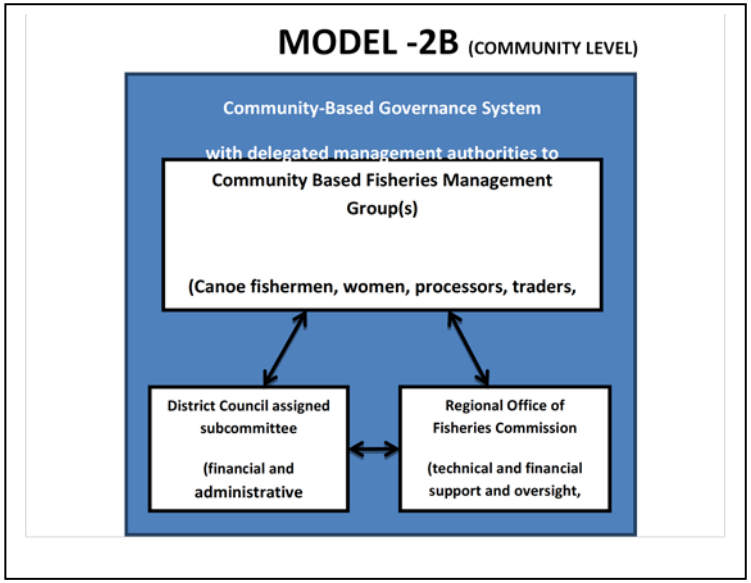
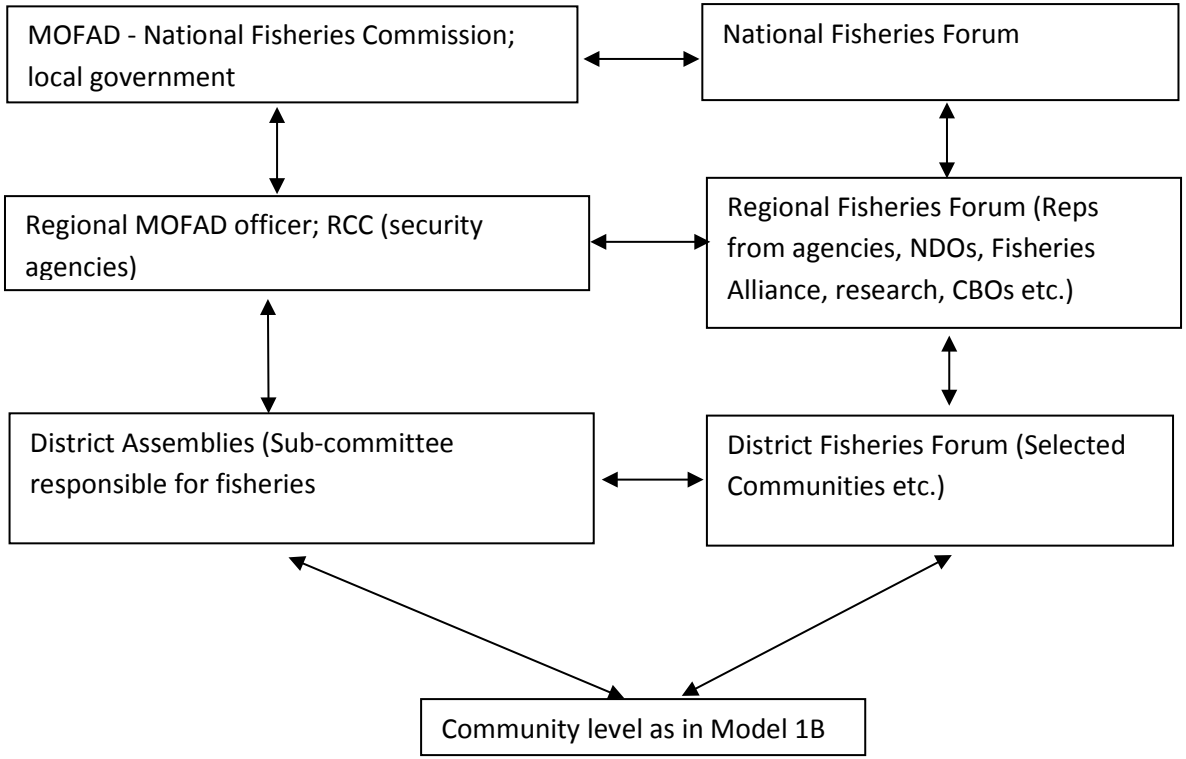
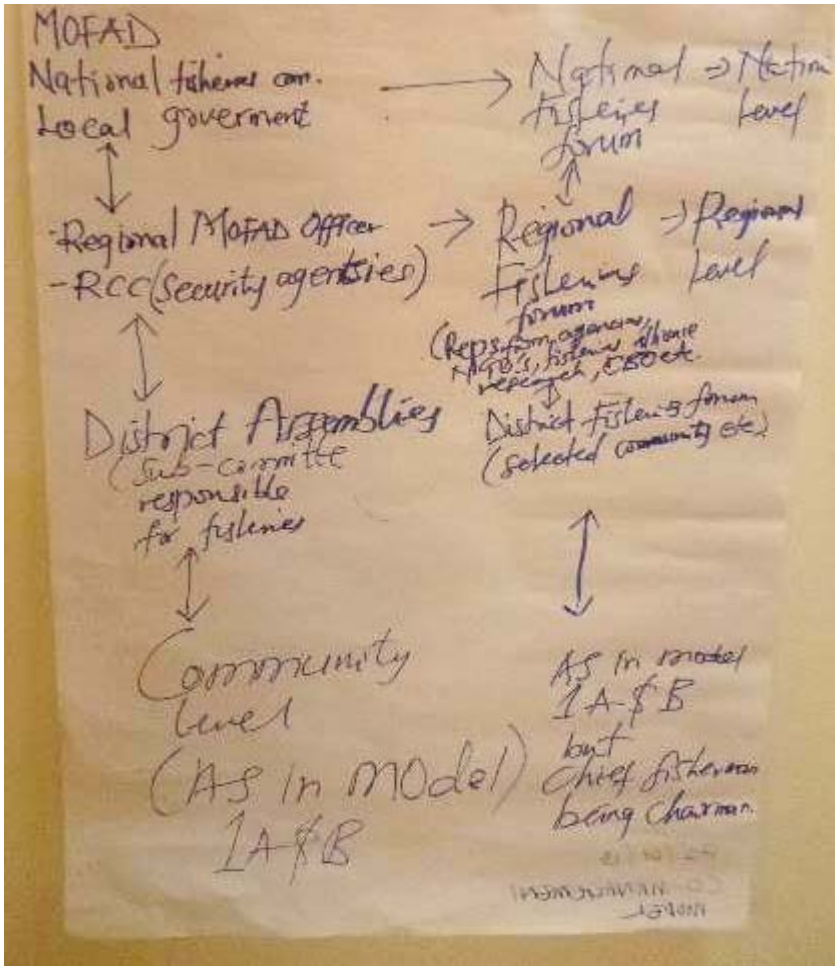




**Figure 7: Developed co-management models**

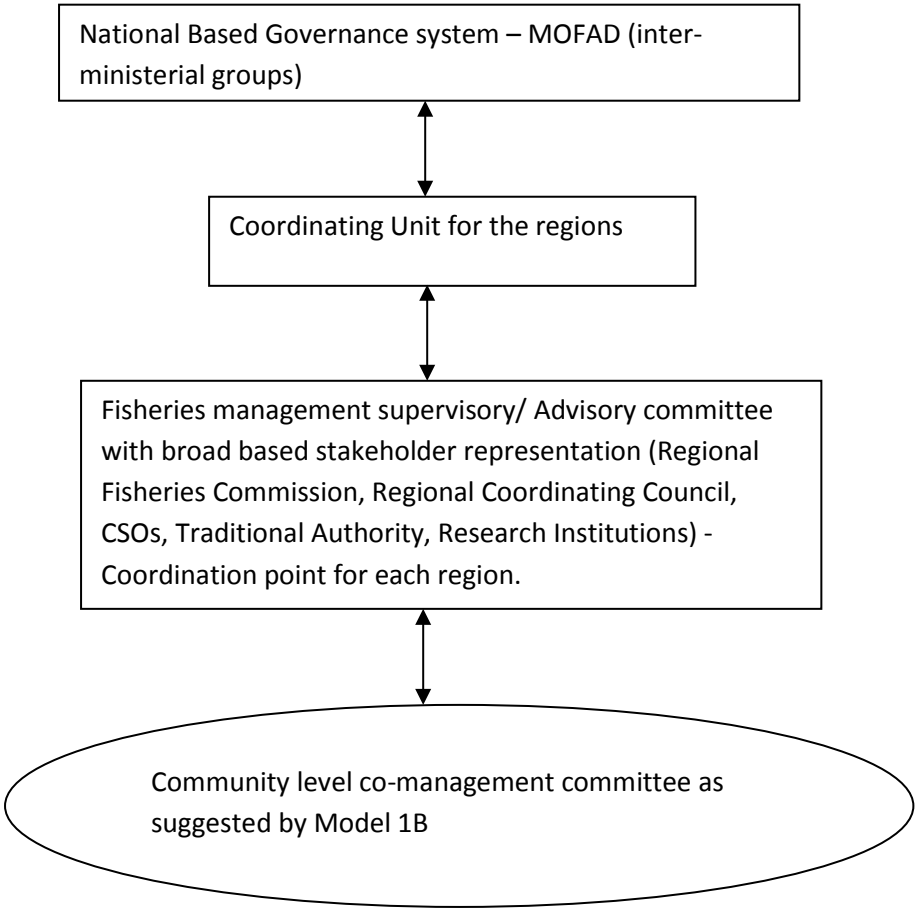
**Group 1**: Nana Solomon, Elizabeth, Timothy, Mr Eshun, Mr Embambey

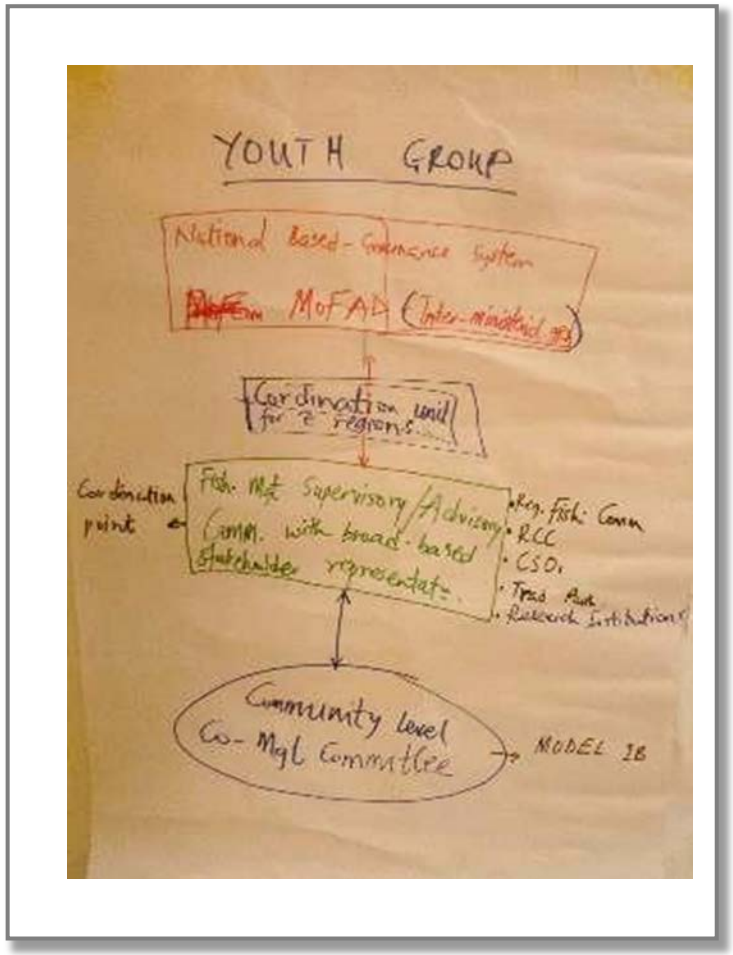



From the groups' presentation, they don't want fisher folks to just start by having discussions with the government officers just like that; they prefer a situation where the fisher folks meet on their own, before coming to discussions with government officers at all the different levels. The main reason being that the fisher folks would like to prepare first, deliberate as a group and come to an agreement on their own before engaging with the government officers. When they finally come to any discussions with government officers, representatives must bring ideas for all and not just want they think themselves.

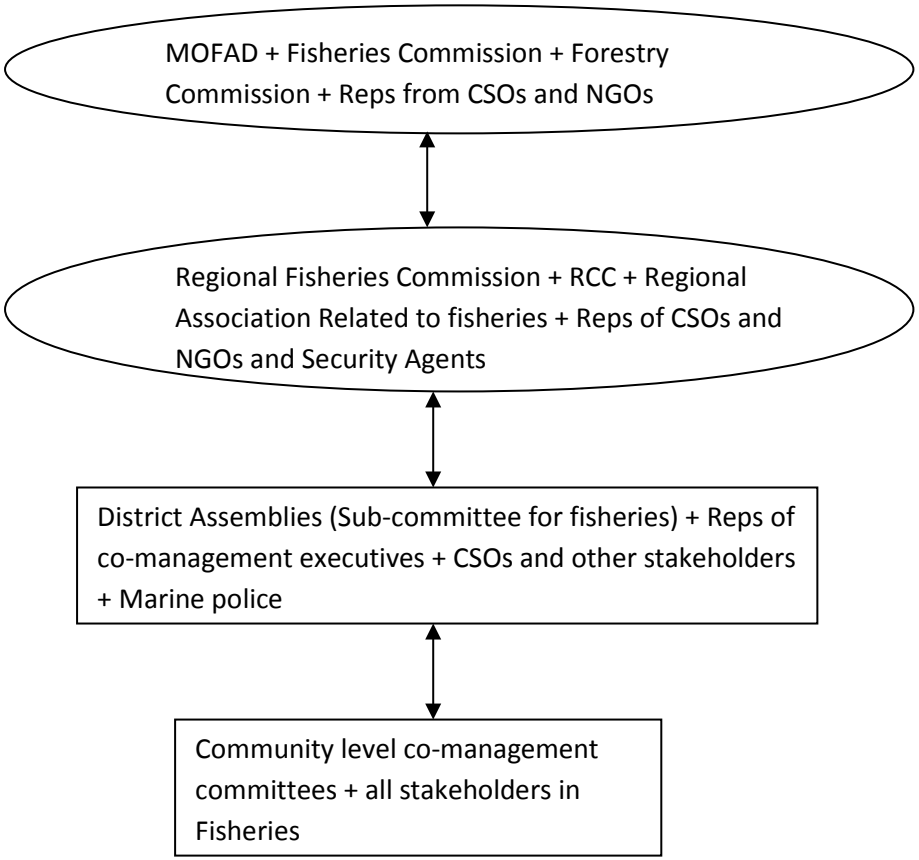
**Group 2**: Group members: Bright; Nate; Theo; Josephine; Bentum; Ndah

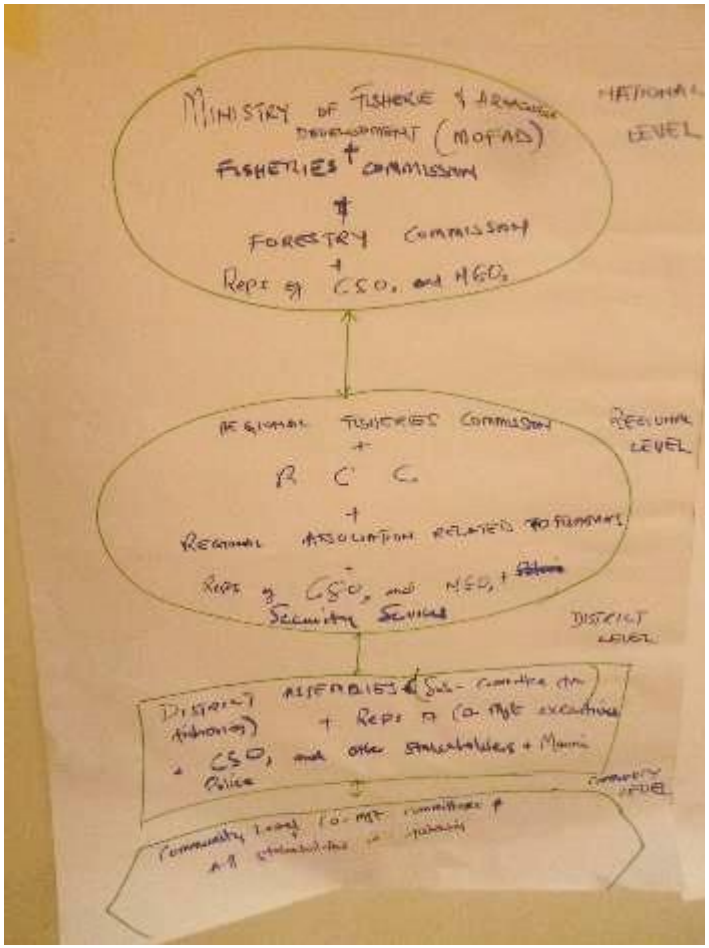



This group preferred a simple structure that is not complicated. For them it is critical for the community to be well structured as proposed in Model 1B with all relevant stakeholders represented. After the community level, they proposed a supervisory structure that monitors implementation at regional level, then a regional coordinating unit that finally links up with the national level

**Group 3**: Members – Josephine Opare Addo, Marfo, Felix, Peter, Mr. Francis
This group also proposed a simple structure that will be easier to implement.



## Action planning

Participants were asked to develop action plans, (either individually or in groups) on what they were planning to do with the knowledge they gained in the workshop. The action plans they came up with are presented below.

| Who? | What activity? | When the activity will be carried out |
|---|---|---|
| Nana Solomon, Accra | Organise a meeting with 10 chief fishermen in Accra to take them through what Adaptive Co-management is | Thursday, 31/01/2013 |
| Mr Francis and Mr Timothy, Shama District | Organise a closed meeting with District Chief Executive (DCE), District Coordinating Director (DCD) and District Planning Officer (DPO) to brief them about the training and adaptive co-management | Monday, 28/01/2013 |
| | Meeting with the Shama District Fisheries Sub-committee (including 3 key members from communities in Shama District) to brief them about adaptive co-management | 11 February 2013 in the District Conference room |
| | Meeting with the general Assembly to brief them about adaptive co-management | To be announced (Will liaise with the Assembly members to agree on a date). |
| | 5 meetings with key stakeholders in 4 fishing communities (including chief fishermen and fishmongers) in Shama District. The communities include Shama, Aboadze, Abuesi | March-April 2013 |
| | Monitoring and evaluation of the implementation of the action plans | |
| Mr. Ebambey | Explain adaptive co-management to fisher folks (including the chief and the assembly man) in Asanta | Tuesday, 29/01/2013 |
| | Explain Adaptive co-management to women (including, fish processors, fishmongers etc.) in Asanta | Tuesday, 5 February 2013 |
| | Explain adaptive co-management to fisher folks in Ankobra community – this will be a mixed group of both men and women | Date to be announced later |
| | Implementation and evaluation of the planned activities | |
| Mr Eshun, Mrs Emelia Abaka Edu | Organise a meeting with fishermen and fishmongers/ processors in two communities (Apewosika and lower Axim) to take them through adaptive co-management | 12 February 2013 |
| | Organise a meeting with fisher folks in Upper Axim and Brawire | 19 February 1013 |
| Mr Bentum, Mr Nate, Ms Josephine, Mr Bright, Mr. Ema Ndah | Organise a meeting for team members to discuss, reflect on the workshop and plan for subsequent activities | 29 January 2013 |
| | Organise a meeting with DCE and DCD to brief them about Adaptive co-management and propose a training workshop for the fisheries Sub-committee on adaptive co-management | 30 January 2013 |
| | Go to Dixcove to follow up on the adaptive co-management training fieldwork activities and find out more details about the co-management committee to see how best they can incorporate ACM | 5 February 2013 |

| Who? | What activity? | When the activity will be carried out |
|---|---|---|
| | Meeting with fish mongers to follow up on the vision they developed during the field work. | 14 February 2013 |
| | Training the fisheries sub-committee on adaptive co-management | Date to be fixed after liaising with the DCE and DCD |
| Mr. Felix Nani, Mr. Emmanuel Marfo, Mr Johnson, Ms Josephine L, and Mr Ndah | Organise a stakeholder meeting in Miamia community in Ahanta West to discuss Adaptive co-management | 19February |
| | In house adaptive co-management training for 10 fisheries staff | 28 February |
| Ms. Elizabeth | Discuss with my supervisor to see how I can incorporate adaptive co-management into my work | 28 February |
| | Organise a lecture/ Seminar for students (MSc and undergraduate) on adaptive co-management | To be decided after the discussion with my supervisor |
| Ms. Nana Efua and Mr. Theo and project team members in Shama District | Organise a meeting with the Shama and STMA communities to explain what adaptive co-management is | February –end of April 2013 |
| | Organise and in-house training for FON staff (1 person) to take them through what Adaptive co-management is | End of January 2013 |

## Workshop Evaluation

Although we had a total of 20 participants, 3 participants were not present when the evaluation was done. Only 17 people participated in the final evaluation on the last day.

Participants were asked to answer the following questions: Rate your knowledge about adaptive co-management on a scale of 1-10 (1 – min, 10-max); The major lessons/ Insights I gained in this workshop is…?; what I liked about the workshop is…?; what I did not like about the workshop is…?; What I found difficult to understand is…?; The major challenge I will face in applying adaptive co-management to my work is…?. From their assessment …. . See Annex 8 for the full responses to these questions:

**Rate your Knowledge of Adaptive co-management from a scale of 1-10 (where 1 is the minimum and 10 is the maximum)**

| Rating | No of people at the beginning of workshop | % | No of people at the end of the workshop | % |
|---|---|---|---|---|
| 9 | 0 | 0.00 | 7 | 41.18 |
| 8 | 4 | 20.00 | 5 | 29.41 |
| 7 | 5 | 25.00 | 1 | 5.88 |
| 6 | 1 | 5.00 | 3 | 17.65 |
| 5 | 2 | 10.00 | 1 | 5.88 |
| 4 | 1 | 5.00 | 0 | 0.00 |
| 3 | 4 | 20.00 | 0 | 0.00 |
| 2 | 2 | 10.00 | 0 | 0.00 |
| 1 | 1 | 5.00 | 0 | 0.00 |
| **Total** | **20** | 100.00 | **17** | 100.00 |

At the beginning of the workshop, 40% of the people rated their knowledge of Adaptive co-management on a scale of less than 5, whilst 0% of the people rated their knowledge as 9. At the end of the workshop, 100% of the participants rated themselves on a scale of 5 and above, whilst about 70% of the participants rated their knowledge of adaptive co-management as 8 and 9. This shows that participants really learnt a lot and understood what co-management is.

## Workshop closing remarks and handing over of certificates

Kofi Agbogah gave some closing remarks and congratulated participants for successfully completing the programme. He told them that in addition to the training, the Hɛn Mpoano Initiative has been putting effort through publishing policy briefs in the daily graphic to kick start discussions on what co-management could look like in Ghana. He encouraged participants to make use of what they had learnt in this workshop.

**Figure 8 and Figure 9: Mr Kofi Agbogah, Program Director, CRC – Ghana, handing over certificates to participants**

# ANNEXES

## Annex 1: Workshop Programme

| Time | Programme |
|---|---|
| **Day 1** | |
| Morning | Participants' registration<br>• Opening Remarks<br>• Introductions<br>• Participants' expectations |
| **Tea Break** | |
| Morning | • Workshop objectives, Road Map/ workshop process<br>• Workshop Rules<br>• Workshop committees<br>• History of Fisheries Management in Ghana and current Status of fisheries Management in Ghana (fisheries ecology, fisheries laws and regulation)<br>• History of natural resource management approaches and evolution of adaptive co-management of fisheries |
| **Lunch Break** | |
| Afternoon | Adaptive Collaborative Management (ACM) Approach to Fisheries<br>• What is it?<br>• Background and history<br>• Key pillars and elements<br>• ACM vs other participatory research approaches<br>• Key challenges in using ACM |
| **Tea Break** | |
| Evening | • Group Exercise to identify key challenges that were faced in implementing co-management in Ghana and how ACM can contribute to addressing these<br>• Plenary Discussion |
| **Day 2** | |
| Morning | • Recap and welfare committees report<br>• Processes/ tools essential for implementing ACM<br>o Facilitation<br>o Process documentation |
| **Tea break** | |
| Morning | • Processes/ tools essential for implementing ACM<br>o Conflict resolution (will include identification of conflicts in the fisheries sector and how they can be dealt with)<br>o Leveling the playing field / building the confidence for marginalized groups/ dealing with passiveness<br>o Other participatory techniques and tools |
| **Lunch Break** | |
| Afternoon | **Key steps in ACM**<br>• Getting started<br>• Team and partnership building<br>• Community entry and mobilization |
| **Tea break** | |
| Evening | Group Exercise to identify key challenges in building teams/ partnerships and challenges for community entry) |
| **Day 3** | |
| Morning | • Recap and welfare committee report<br><br>**Key steps in ACM**<br>• Understanding local context and starting points<br>o Context studies, diagnosis and baselines<br>• Conceptualizing change (developing visions) |
| **Tea break** | |

| Time | Programme |
|---|---|
| Morning | • Participatory Action Planning<br>• Managing Change<br>  o Supporting implementation of planned actions<br>• Participatory monitoring, evaluation and adjustment |
| **Lunch** | |
| Afternoon | • Group exercise to develop a vision for fisheries management in Ghana<br>• Presentation and discussion in plenary |
| **Tea break** | |
| Evening | Planning for field work (Task: Identify the key challenges faced by stakeholders and facilitate an exercise to develop a joint vision for women and men in Dixcove ) |
| **Day 4** | |
| Morning<br>Evening | Field work<br>Preparing field reports |
| **Day 5** | |
| Morning | Recap<br>Presentation and discussion of the field work and results |
| **Tea break** | |
| Morning | Action planning by participants to implement ACM of fisheries in their work/ communities |
| **Lunch break** | |
| Afternoon | Presentation and discussion of action plans |
| **Tea break** | |
| afternoon | Workshop evaluation<br>Workshop closure |
| **Day 6** | |
| Morning and afternoon | Working on the workshop report by the documentation team |

**Annex 2: Participants ratings of their knowledge of participatory approaches at the beginning of the workshop on a scale from 1 – 10:**

| Scale | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **No. of persons** | 3 | 2 | 2 | 0 | 2 | 1 | 4 | 5 | 3 | 0 |

Rating participants' knowledge of adaptive co-management on a scale of 1 – 10:

| Scale | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **No. of persons** | 1 | 2 | 4 | 1 | 2 | 2 | 5 | 5 | 0 | 0 |

**What part of a car are you?**

- Battery
- Tyre x3
- Axle
- Accelerator
- Steering wheel x6
- Rim
- Driver's seat
- Driver
- Headlight x2
- Engine x3
- All seat belts
- Driver's conductor

## Annex 3: Participants' expectations

| Adaptive co-management |
|---|
| • To acquire more knowledge from co-management, how to adopt it in my community; also how to facilitate |
| • I expect to learn to acquire more knowledge in fishing and co-management for sustainable livelihood |
| • To set ourselves as agents of change in order to educate the fishers to do away with unsustainable practices |
| • Discuss how adaptive co-management can be implemented in Ghana |
| • How do you bring and get people to work together? |
| • Share experiences on past co-management in Ghana |
| • Expand my knowledge on adaptive co-management and how to use the approach |
| • Generate common understanding of adaptive co-management |
| • Increase knowledge in co-management |
| • Want to be able to organize effectively adaptive co-management in my community |
| • In-depth knowledge in adaptive co-management |
| • The objectives involved in adaptive co-management |
| • Acquire knowledge to help me educate the fisher folks |
| • How to transfer co-management knowledge to other field other than fisheries |
| • To know how adaptive co-management can be implemented to enhance sustainable fisheries |
| • Better understanding of adaptive co-management |
| • To be able to train other on adaptive co-management |
| • Why adaptive co-management |
| • Facilitation skills |
| • To know much more about adaptive co-management; the best way to apply it to develop fisheries |
| • Without co-management we cannot improve our environment and sanitation programs |
| • Build more skills and expertise in adaptive co-management |
| • Understand the concept of adaptive co-management and how it is going to help with the fishing industry |
| • Conflict resolution |
| • How to improve upon our natural resources and also find ways and means to bring everyone on board to protect our natural resources |
| • Understand the concept of adaptive co-management as a tool for natural resource management and its implementation |
| • Gain an understanding of how adaptive co-management can be |
| • I want to learn from the organizers more about adaptive co-management so that I can also impact the knowledge to the fishers |
| • I expect to improve my knowledge in adaptive co-management and how it relates to my work |
| • Team and partnership building |
| • Co-management should be adopted and implement |
| • Gain more knowledge in adaptive co-management with the 5 day training to improve the living standard within my profession and learn how to manage many group |
| **Fisheries Management** |
| • To acquire a better understanding of fisheries management and also the current state of fisheries in Ghana and how it could impact our community |
| • How to manage access to fisheries resources |
| • To know more about fisheries management in relations to its stakeholders |
| • To be a better fisheries manager to help develop our fisheries resources |
| • After this workshop I want to know more about how fishes live comfortably in water |
| **Status of Fisheries** |
| • To have more knowledge about fishing activities |
| **Participatory approaches** |
| • To know more about participatory approaches |
| • Make informed discussion on the benefit of participatory approaches |
| • Participatory action planning |
| • Monitoring and evaluation |
| • Others |
| • Know about the usage of aquatic produce in fishing industry |
| • Get a certificate at the end |

## Annex 4: Workshop ground rules and committees

| **Workshop rules & sanctions** |
|---|
| • All mobile phones should be put on silent/switched off – GhC 5 |
| • Any question is a good question |
| • Everyone must participate |
| • Let's minimize our movements in and out of the workshop |
| • No repetition of contributions |
| • Use any language you are comfortable with |
| • Respect time – Dance |
| • No meeting within meetings – Tell us what you were talking about |
| • Raise your hand before you speak – Stand up for a minute |
| **Daily Feedback Committee** |
| Responsibilities: |
| • Being alert all day of how people feel, what they think, how things are going and content |
| • Choose a method and prepare feedback |
| • Present feedback in a creative way |
| • Select members for the feedback committee for the next day |
| Members: |
| • Recap for day 1 – Nate, Elizabeth |
| • Recap for day 2 – Ebambey, Francis |
| • Recap for days 3 & 4 – Marfo, Felix |
| **Welfare committee** |
| **RESPONSIBILITIES:** |
| • Report concerns regarding participants' wellbeing (accommodation, food and health) |
| • Help in organizing workshop room and learning materials |
| • Help with time management |
| Members: |
| • Emelia |
| • Josephine Opare Addo |
| • Timothy Ayensu |
| • Godfred Ameyaw |
| **Documentation committee** |
| Responsibilities |
| • On-going documentation of the workshop proceedings: both process and content |
| • Produce draft of proceedings at the end of the workshop |
| • Produce and send final proceedings to participants at an agreed date |
| Members: |
| • Josephine Laryea |
| • Cephas Asare |
| • Francis Biney |

## Annex 5: Participant list

| | | | | |
|---|---|---|---|---|
| **1** | Elizabeth Effah | F | University of Cape Coast | Mphil student |
| **2** | Emmanuel Ohene Marfo | M | Fisheries Commission | Fisheries officer |
| **3** | Josephine Laryea | F | Fisheries Commission | Service personnel |
| **4** | J. F. Ebambey | M | Asanta | Chief fisherman |
| **5** | Felix Nani | M | WD/CRC | Wildlife officer |
| **6** | Nana Adam Eduafo | M | GNCFC, Aboadze | Chief fisherman |
| **7** | Josephine Opare Addo | F | CEWEFIA, Elmina | Project officer |
| **8** | Francis Biney | M | Agric/Coastal management, SDA | Chairman |
| **9** | George Hutchful | M | CRC | National Policy Coordinator |
| **10** | Johnson E. Amiah | M | Fisheries Commission | Chief technician |
| **11** | Emmanuel N. Assilidjoe | M | Fisheries Commission | Technical assistant |
| **12** | Peter King Essuon | M | Fisheries | Secretary of chief fisherman |
| **13** | Timothy Ayensu | M | Shama District Assembly | Assembly man |
| **14** | John D. Eshun | M | GNCFC, Axim | Organizer |
| **15** | Emmanuel Bentum | M | Fisheries Co-management Forum | PRO |
| **16** | Nathan Asamoah | M | Ahanta West District Assembly | District director |
| **17** | Theophilus Boachie-Yiadom | M | FON | Project officer |
| **18** | Emelia Abaka-Edu | F | Fisheries Working Group Western Region | Committee member |
| **19** | Godfred A. Asiedu | M | Worldfish | Fisheries Advisor |
| **20** | Tendayi Mutumukuru-Maravanyika | F | Worldfish | Post Doc |
| **21** | Nana Solomon | M | GNCFC | Chief fisherman |
| **22** | Cephas Asare | M | Worldfish | Research analyst |
| **23** | Nana Efua Ewur | F | FON | Program co-ordinator |
| **24** | Alex Sabah | M | Fisheries Commission | Regional director |

## Annex 6: Presentations by groups on who should facilitate the adaptive co-management process in Ghana

In groups, Tendayi asked the participants to create their own ACM teams, putting on board who they thought best fitted, suggest who takes the lead role in facilitation and spell out their various roles and responsibilities.

**Group 1: (Eshun, Ebembey, Nana Solomon, Nana Adam)**

Those whose capacity have been built as a result of Hɛn Mpoano initiative should take the lead

Members of the ACM should include:

- Fishers
- Fisheries commission (leader)
- Civil society organisation
- CBOs
- Media

**Group 2: (Francis, Timothy, Theo, Josephine)**

ACM Team members:

Reps from:

- Fisheries commission
- GNCFC
- Gear specific fishers group and CBOs
- CSOs (CAFA)
- Women's group
- District assembly and
- the chief fisherman

Lead role: A neutral body (CSO - CAFA) in collaboration with the Fisheries Commission and leaders of local fishermen.

**Group 3: (Elizabeth, Johnson, Emma, Peter)**

ACM Team composition:

There should be agreement between stakeholder and government

Stakeholders:

- Government officials (Fisheries commission and MOFA)
- NGOs
- Community members
- Assembly members
- District assembly
- Institutions (Universities)

Chief fisherman and elders

Lead role: Fisheries commission:

Roles and responsibilities:

- Facilitating training and education
- Welfare of fisheries
- Resolving conflict among members
- Improve sanitation along the beach
- Monitoring

Documentation

**Group 4: (Felix, Marfo, Josephine, Cephas)**

ACM Team:

- MOFAD (minister)
- GNCFC rep
- Fisheries commission rep
- GIFA rep
- NTA rep
- Fishmongers rep
- Security services rep
- GMA rep

| Group 1: (Eshun, Ebembey, Nana Solomon, Nana Adam) |
|---|
| • NGOs/CSOs rep<br>• Media rep<br>• Attorney General Department rep<br>• Forestry commission (Wildlife department)<br>• University/Research institution rep<br>• Regional Coordinating Council rep |
| **Group 5: (Nate, George, Emelia, Godfred)** |
| ACM Team members:<br>• Fisheries commission/ NAFAG<br>• Rep, local government<br>• Fisheries alliance<br>• GNCFC<br>• Ghana maritime authority<br>• Ministry of oil and gas<br>• Ministry of interior<br>• Ministry of defence<br>• Fishmongers, processors association<br>• The lead should be the Fisheries Commission<br><br>**Roles and responsibilities:**<br>• Action planning, implementation, M & E<br>• Police (interior minister) – enforcement<br>• Local government – education, sensitization<br>• Fisheries alliance – advocacy, communication<br>• Chief fisherman – mobilization<br>• Cfc – coordination, technical support<br>• Ministry of oil and gas – financial support, resources<br>• Fishmongers – mobilization<br>• Establishment of fisheries fund with prescribed source of funding and legal backing |

**Annex 7: Visioning exercise with women, youth and men in Dixcove community**

**Fieldwork Tasks**

- Facilitate a process for your group to identify and rank the key challenges they face in their work
- Facilitate a process for your group to develop a vision for their community and fishing industry in the coming 10 years
- Ensure that your group documents and presents the outcome of their discussion during the plenary

**Developing a plan for the fieldwork:**

1. Allocate roles and responsibilities
   - Facilitator
   - Documenter/ note taker
   - Observer
   - Time keeper
2. Discuss and agree on
   - The objectives of the fieldwork
   - The process that you will follow to meet your objectives
   - The actual questions that you will ask to identify the key challenges as well as assist the group to develop their vision

**After the Fieldwork**

1. Discuss the actual process in the field – did this change from your original plan? What finally happened?
2. Discuss the facilitation? Identify positive things and those that need to be improved in future
3. What went well, what did not go well?
4. What challenges did you face and how did you overcome these?
5. What lessons did you learn from this exercise?
6. What are your recommendations for future visioning excersizes?
7. Type and hand over an electronic copy of your fieldwork to workshop facilitators

## Annex 8: Full responses to the evaluation Questions

**The major lesson/insight I gained is…**

- It has broadened my knowledge
- ACM involves all stakeholders in the community
- The success of any project depends on a good stakeholder analysis and involvement
- The lesson is very important
- It is important to monitor activity; to reflect on where you started and where you end
- ACM brings clarification of issues
- Why co-management did not work (fishers account)
- Adaptive co-management
- Adaptive co-management, facilitating, team work, visioning
- Adaptive co-management
- Documentation
- ACM processes and how to propose action plans
- To monitor an action and reflect on it to feed into the next action
- Monitoring is very important
- Learning through implementing in a process is important
- Sustainable fisheries resources
- People are now more enthusiastic to see reforms in Fisheries management in Ghana
- Generally good training by all standards
- People now feel confident that they can do something on their own in efforts to save our declining fish stock after receiving series of capacity building by Hɛn Mpoano Initiative
- People now appreciate the fact that our fisheries is in crisis and that our Sardinella is close to collapse
- People can actually become more interested in adaptive co-management if they really understand it

**What I liked most about the workshop is…**

- Fisheries resource management
- Facilitation and participation
- Partnership presentation
- It has broadened my understanding on how to protect the fishing industry
- The facilitation x2
- It was participatory x2
- The workshop was participatory
- The level of participation
- Organization and facilitation
- The workshop was informative and participatory
- This workshop is good
- The trip to Dixcove
- There was a deeper understanding of the approach
- The practical and participatory approach
- I like to have more
- The elements of adaptive co-management
- The energy and commitment of all participants for 5 good days

**What I did not like about the workshop is …**

- Limited time
- The food x6
- Food was not served on time
- Delay of food services

- Delay of food x3
- Delay in the field trip
- Nothing
- Time management
- Poor quality food provided by the hotel
- The meals were not too good and time management was lacking

### What I found Difficult to understand is…

- Why should I be served breakfast with only hot water and bread?
- Nil
- N/A
- Nil
- No difficulty
- I found nothing difficult
- Nothing
- N/A
- Nothing is difficult
- Contextualisation
- The meaning of contextualisation
- Monitoring and evaluation
- Had a fair understanding of everything
- What adaptive co-management of fisheries in Ghana will look like
- Nothing

**Major challenge I will face in applying ACM in my work is**

- Time limitation
- Organization of stakeholders
- Change from my people
- Level of understanding
- Funding x6
- Funding and ambient policy environment
- Getting my people to adapt to change
- The attitude of people to change
- How to start on facilitation when the people are not contributing
- The individual understanding of the fishermen
- Ambient policy environment
- It will help me to educate others about their livelihood
- How to get community collaborators enthusiastic about processes involved in adaptive co-management

**Suggestions for future workshops**

- When organising the next workshops, arrange to close early on the last day so that people who live far can go back. The man living in Asanta will find it difficult going home or will get home very late.