FAO EAF-Nansen Project Report No. 2 **EAF-N/PR/2 (En)**

Report of the

EAF REGIONAL TASK GROUP MEETING AND ECOLOGICAL RISK ASSESSMENT METHODOLOGY WORKSHOP (GULF OF GUINEA)

Freetown, Sierra Leone, 20–22 October 2008

NANSEN PROJECT

THE EAF-NANSEN PROJECT

FAO started the implementation of the project "Strengthening the Knowledge Base for and Implementing an Ecosystem Approach to Marine Fisheries in Developing Countries (EAF-Nansen GCP/INT/003/NOR)" in December 2006 with funding from the Norwegian Agency for Development Cooperation (Norad). The EAF-Nansen project is a follow-up to earlier projects/programmes in a partnership involving FAO, Norad and the Institute of Marine Research (IMR), Bergen, Norway on assessment and management of marine fishery resources in developing countries. The project works in partnership with governments and also Global Environment Facility (GEF)-supported Large Marine Ecosystem (LME) projects and other projects that have the potential to contribute to some components of the EAF-Nansen project.

The EAF-Nansen project offers an opportunity to coastal countries in sub-Saharan Africa, working in partnership with the project, to receive technical support from FAO for the development of national and regional frameworks for the implementation of Ecosystem Approach to Fisheries management and to acquire additional knowledge on their marine ecosystems for their use in planning and monitoring. The project contributes to building the capacity of national fisheries management administrations in ecological risk assessment methods to identify critical management issues and in the preparation, operationalization and tracking the progress of implementation of fisheries management plans consistent with the ecosystem approach to fisheries.

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STRENGTHENING THE KNOWLEDGE BASE FOR AND
IMPLEMENTING AN ECOSYSTEM APPROACH TO
MARINE FISHERIES IN DEVELOPING COUNTRIES
(EAF-NANSEN GCP/INT/003/NOR)

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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Rome, 2009

PREPARATION OF THIS DOCUMENT

The first meeting of the Gulf of Guinea Ecosystem Approach to Fisheries (EAF) Regional Task Group (RTG) was held in Freetown, Sierra Leone, from 20 to 22 October 2008. It was held together with an Ecological Risk Assessment Methodology workshop. The meeting was a direct follow up to the Regional Workshop on Ecosystem Approach to fisheries (EAF) Management in the Gulf of Guinea held in Accra, Ghana, from 23 to 26 October 2007.

The main objectives of the meeting and workshop were to discuss and facilitate key processes and activities for the implementation of the ecosystem approach to fisheries management in the Gulf of Guinea region including the modalities for the formation and functioning of the Regional Task Group and National Task Groups (NTGs).

This document gives the record of the meeting including the major outcomes, the decisions taken and the roadmap for the work of the NTG in the implementation of the EAF-Nansen project in the Gulf of Guinea area.

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FAO EAF-Nansen Project/FAO, Projet EAF-Nansen.
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FAO EAF-Nansen Project Report/*FAO, Rapport du Projet EAF-Nansen.* No 2. Rome, FAO. 2009. 59p.

ABSTRACT

The first meeting of the Gulf of Guinea EAF Regional Task Group (RTG) was held in Freetown, Sierra Leone, from 20 to 22 October 2008 together with an Ecological Risk Assessment Methodology Workshop. It was attended by 20 participants from 13 Gulf of Guinea countries, the Subregional Fishery Commission for the Western Central Gulf of Guinea, and FAO. The RTG is an implementation structure under the EAF-Nansen project GCP/INT/003/NOR and serves as the forum for training in ecological risk assessment that is the methodology used for the identification and prioritisation of issues requiring management attention.

The main objectives of the meeting and workshop were to discuss and facilitate key processes and activities for the implementation of the ecosystem approach to fisheries management in the Gulf of Guinea region including the modalities for the formation and functioning of the RTG and National Task Groups (NTGs). It was explained that, to be able to achieve the objectives of implementing an ecosystem approach to fisheries at the national level, certain key structures have to be in place including the NTG with representatives of key stakeholders in a given fishery that would take the lead in the process.

An overview of the key concepts and process of the ecological risk assessment methodology was given. Participants were also introduced to the preparation of EAF baseline reports to be used as initial input for the work on ecosystem approach to fisheries. It was explained that the preparation of the report is to be led by national and regional experts and overseen by the NTG.

For the exercises, the participants worked in three subgroups formed according to the geographical location of their countries as was done in the preceding workshop held in Accra in 2007. The fishery selected by the North and South groups was the shrimp trawl fishery whereas the Central group selected the beach seine fishery.

The participants expressed satisfaction with the development of a communication strategy for the project and especially with the participatory approach used.

CONTENTS

APPENDIXES

1. INTRODUCTION

Within the framework of the FAO project "Strengthening the Knowledge Base for and Implementing an Ecosystem Approach to Marine Fisheries in Developing Countries (EAF-Nansen GCP/INT/003/NOR)" an EAF Regional Task Group Meeting and Ecological Risk Assessment Methodology Workshop (Gulf of Guinea) were organized in Freetown, Sierra Leone, from 20 to 22 October 2008. The main objectives of the meeting and workshop were as follows:

- discuss and facilitate key processes and activities for the implementation of the ecosystem approach to fisheries management in the Gulf of Guinea region;
- introduce participants to concepts and principles relevant to Ecological Risk Assessment Methodology;
- discuss modalities for the formation and functioning of Regional and National EAF Task Groups;
- introduction to the preparation of EAF baseline (also referred to as TROM) reports.

The workshop was attended by 20 participants from 13 Gulf of Guinea countries, the Executive Secretary of the Subregional Fishery Commission for the Western Central Gulf of Guinea, and FAO. The list of participants and agenda are presented in Appendixes 1 and 2 respectively.

1.1 Background

The participants were reminded that the current meeting was a direct follow up to the Regional Workshop on Ecosystem Approaches for Fisheries (EAF) management in the Gulf of Guinea and first steering committee meeting that took place in Accra, Ghana, from 23 to 26 October 2007.

At the Accra meeting the participants undertook a trial identification of EAF issues and priorities in the Gulf of Guinea specific to the selected fisheries. Three groups (North, Central and South) were formed corresponding to three subregions. The North group was made up of participants from Guinea-Bissau, Guinea, Sierra Leone and Liberia; the Central group consisted of Côte d'Ivoire, Ghana, Togo and Benin; and Nigeria, Cameroon, Gabon and Congo made up the South group. Each group selected a specific fishery, defined global objectives for the fisheries sector and specific objectives for the fishery identified. The fishery selected by the North and South groups was the shrimp trawl fishery whereas the Central group selected the beach seine fishery. The issues identified are existing "problems" that hinder achievement of the stated global and specific objectives. The generic component tree was used to structure the analysis and identification of the issues followed by a session on risk analysis to prioritize the issues. The results of this trial assessment can be found in the Workshop report (FAO, 2008).

It was stressed that although the exercise offered a good overview of key issues, it was only an introductory exercise to get the participants familiarized with the methodology. An in depth analysis would therefore have to be carried out with participation of all relevant stakeholders at the national level. It was also pointed out that in order to be able to achieve the objectives of implementing an ecosystem approach to fisheries certain key structures have to be in place to guide the process. A National Task Group (NTG) with representatives of key stakeholders in a given fishery that would take the lead in the process at the national level would have to be formed. One important initial task for the NTG would be to prepare an EAF baseline report (also called the Target Resource Oriented Management, TROM report) to be used as an initial input for the EAF work. Regional Task groups are also to be formed to address issues at regional level and create a forum for training and exchange of experiences. More details of these processes are discussed in subsequent sections of the report.

1.2 Update on the EAF-Nansen Project

The participants were reminded of the main elements (history, objectives, structure and expected outcomes) of the FAO EAF-Nansen project "Strengthening the knowledge base for and implementing an ecosystem approach to marine fisheries in developing countries (GCP/INT/003/NOR)". They were also provided with an update on activities that had taken place under the various components since the meeting in Accra in October 2007.

The Project consists of five components, namely: EAF-Policy and Management, Ecosystem Assessment and Monitoring; Support to regional research vessels; Capacity building; and Dissemination of information. The RTG was informed that the FAO Development Law Service (LEGN) is collaborating with the project to prepare an overview document on available international and instruments relevant to EAF and how these are addressed in national policies and legislations in Africa. The study will guide the development or amendment of national legislation relating to EAF and to assist countries to incorporate the EAF concept in relevant national legislations. Several EAF introductory seminars similar to the Workshop held in Ghana in October 2007 have been organized either under the project or in collaboration with partners in other regions (Durban, South Africa; Casablanca, Morocco; and Mombasa, Kenya).

Ecosystem surveys with the R/V DR. FRIDTJOF NANSEN have been carried out with partners in eastern, southern and western Africa. The participants were also informed of the efforts being made to support the work of the various research vessels in Northwest Africa and on the development of a training programme, including training-of-trainers workshops. Finally the participants were informed that the Steering Committee meeting and Annual Forum would take place in Rome in December 2008.

The project is executed by the Fisheries Management and Conservation Service (FIMF) of the FAO Fisheries and Aquaculture Department. The core project staff is composed of an EAF Coordinator, an IMR liaison officer responsible for the scientific services to the project, a project operations officer and a project assistant. The implementation arrangements include four Regional Advisory Groups (RAGs) representing the four major areas of activities for the early phase of the project, namely Canary Current, Guinea Current, Benguela Current and the Aghulas and Somali current areas and a steering committee consisting of representatives of the RAGs, representatives of the partner projects such as the Large Marine Ecosystems (LME) projects, other relevant fisheries institutions or projects and FAO representatives; and various working groups such as the EAF task groups. The Annual Forum is to be attended by country representatives and partner projects.

1.3 General discussion

After the presentation, there was a lengthy discussion on surveys in the Guinea Current Large Marine Ecosystem (GCLME) region, transmission of the project document to participating countries and assistance to local institutions with research vessels. The Task Group expressed concern about what appears to be a cessation of survey activities in the GCLME area. This was attributed to the decline in activities of the GCLME project since Norad expects co-financing from the LME projects for surveys conducted by the R/V DR. FRIDTJOF NANSEN in their areas of operation. It was agreed that the EAF-Nansen project takes up this issue with the GCLME project management.

The Executive Secretary of FCWC suggested that the secretariats of the subregional fishery bodies be used to transmit the EAF-Nansen project document to participating governments. He offered to secure endorsements of the same by the governments in the Committee's operational area.

On assistance to local institutions that have survey vessels, the Secretariat informed the Task Group that there is a provision in the project for technical assistance.

1.4 Workshop organization

The Workshop was organized as a combination of plenary presentations and group sessions. The FAO team made presentations that became subjects of discussions and subsequently the participants split into subgroups that undertook practical exercises relevant to the topic presented. Three subgroups were formed; North, Central and South. The group compositions are shown in Table 1. Each subgroup selected a chairman, a rapporteur and two presenters (one anglophone and one francophone) for each exercice. Each group was asked to prepare a powerpoint presentation for discussion in the plenary.

Table 1: Composition of subgroups and fishery chosen

Subgroups	Countries	Members	Fishery
1: North	Guinea, Sierra Leone and Liberia	Dieng, Turay, Sei, Jalloh, Jueseah	Shrimp trawl fishery
2: Central	Côte d'Ivoire, Ghana, Togo and Benin	Joanny, Sedzro, Bannerman, Djiman, Dedi	Beach seine fishery
3: South	Nigeria, Cameroon, Gabon, Demcratic Republic of the Congo, Congo and São Tome and Principe	Ojebanji, Edet, Ngoande, Ogandagas, Samba, Dihonga, Costa	Shrimp trawl fishery

2. MAIN STEPS OF THE ECOSYSTEM APPROACH TO FISHERIES (EAF)

2.1 Introduction to EAF

The ecosystem approach to fisheries (EAF) is motivated by the recognition of the broader impacts of fisheries on the marine ecosystem and of the broader uses and users of the marine environment (in addition to fishing) and builds on the experience gained through fishery management in the past 50 years.

Failures of conventional fisheries management are well known. Irresponsible fishing and inadequate management practices have lead to overexploitation of fish stocks, deterioration of the marine environment, loss of livelihoods and development opportunities. While recognizing that EAF builds on existing fisheries management institutions and mechanisms, some key differences between a conventional approach to fisheries management (CFM) and the EAF were summarized as in Table 2 below.

The key steps for planning and implementation of EAF are very similar to those under the conventional approach. A key difference, however is the participation of stakeholders at all levels of planning and decision-making. Furthermore, formal processes and methodologies are utilized to identify the key issues to be dealt with by fisheries management as a matter of priority in order to achieve sustainability goals.

In the discussion that followed the presentation, the RTG members noted the clarification that the presentation has offered them, describing it as informative, clear and interesting. The table that presents a comparison between conventional fisheries management and the ecosystem approach was singled out as key in the discussion. The message that had been clearly delivered was that "EAF builds on conventional fisheries management".

Table 2: Comparison of main features of conventional approach to fisheries management (CFM) and ecosystem approach to fisheries management (EAF)

CFM	EAF
Few fisheries management objectives	Expanded scope of fisheries management objectives
Sectoral (focusing mainly on the fisheries sector issues)	Dealing more explicitly with the interactions of the fishery sector with other sectors (e.g. petroleum industry, tourism, coastal development, etc.)
Deals mainly with target species	Responds to concerns of the broader impacts of fisheries on the marine ecosystem, including impacts of the habitat, on vulnerable species, on biodiversity, etc.
Addresses fisheries management issues at the stock/fishery scale	Addresses the key issues at the appropriate spatial and temporal scales, that are often nested (local, national, subregional, regional, global)
Predictive	Given the uncertainty associated with the expanded range of issues to be dealt with, adaptive strategies are recognized as being more useful
Scientific knowledge is considered the only valid knowledge as a basis for decision-making	Recognizing that it is not possible to obtain scientific knowledge on all the issues to be dealt with, alternative knowledge (e.g. traditional knowledge) can be utilized as a basis for decision-making
CFM has operated through prescriptions	Incentives are recognized as a very valid complement to prescription
Top-down (command and control) approaches typify CFM	Participatory approaches, e.g. various forms of co-management are a key feature of the EAF
Addresses mainly corporate (fisheries sector) interests	Needs to take into account the interests and aspirations of a broader stakeholder community

The place of marine protected areas (MPAs) in EAF was clarified following a question by a participant on the subject. It was pointed out that the principle behind establishment of MPAs is consistent with those of EAF. It was further clarified that because MPAs were in the past misconstrued to mean “no-take” zones, their creation lead to the transfer of fishing pressure from one area to another, over-exploiting resources in the other areas and therefore negating the gains from the creation of an MPA. It was pointed out that current thinking sees MPAs as areas where some exploitation can be allowed as long as this is done responsibly and sustainably.

The participant from Gabon informed the Task Group that her country has initiated programmes on fisheries co-management and wondered whether this may be integrated into EAF. The secretariat clarified that EAF may be seen as providing the theoretical framework for fisheries co-management and that effective links could be established between the two approaches.

2.2 Report on EXERCISE 1: Explain EAF

The subgroups were given the following task:

On your return home, you are expected to initiate action to form the EAF National Task Group. How would you explain EAF to the fisheries administrators and stakeholder?

Table 3: Chairpersons, rapporteurs and presenters for Task 1

Subgroups	Chair	Rapporteur	Presenters
1: North	Turay	Sei	Dieng, Turay
2: Central	Djiman	Bannerman	Bannerman
3: South	Ngoande	Ogandagas	Ojebanji, Ogandagas

Report of Subgroup 1

Communication will be simplified; the group will use the common language or seek interpreters where necessary to make it easy for the stakeholders to understand better what EAF is all about. The group proposed the following approach:

Presentation of current problems affecting the fisheries and the marine environment

State of fish stocks and the marine environment, decline of fish stocks globally and even in our countries: we do not catch much fish today as compared to the past, significant decline of flagship species such as manatees, saw fishes, sea lions, etc.; the issue of endangered species: sea turtles, sharks, dolphins, whales, the issue of pollution, eutrophication and its effect on marine ecosystems, ecosystem effects of fishing, climate change effects, etc. The presentation will include practical examples by showing pictures. The reasons for failure of conventional management methods will be given including failure to address the issue of the marine environment and the human dimension (the involvement of stakeholders in fisheries management). That the ecosystem approach to fisheries will seek to improve on conventional fisheries management approaches.

Explaining the meaning and objectives of EAF to the stakeholders

EAF will be defined in the common languages depending on the audience. It will be pointed out that the approach is not as complicated as perceived to be and that here are tremendous benefits, but this requires that managers and stakeholders work together. That objectives will be given as including enhancement of socio-economic well-being geared towards poverty reduction, enhancement of biodiversity and healthy fisheries environment, restoration of fish stocks that leads to sustainable development and improvement in fisheries governance.

Why EAF, explaining conventional and EAF management methods

The conventional management approach:

- only focused on target species;
- it lacked intersectorial dimensions;
- it did not address the human dimension;
- environmental parameters were not considered by fisheries management models;
- the approach was not participatory (poor stakeholder involvement in planning and implementation);
- management was based mainly on scientific knowledge while ignoring traditional knowledge, norms and values of key stakeholders.

The EAF takes several of these on board and is participatory as a default.

Benefits of EAF

The benefits to be highlighted will include: national economic development, livelihoods enhancement, accountability and transparency, flexibility to changes (e.g. climate change, pollution, flooding, eco-tourism, good governance of fisheries)

Report of Subgroup 2

The group proposed the following approach:

The first thing to do is to invite representatives of the fisheries administration, stakeholders (fishermen involved in various fishing activities), environmental non-governmental organizations (NGOs), etc. after briefing line managers in office and convincing them of the need to adopt the ecosystem approach to fisheries.

Present the current status of fisheries resources which shows overcapitalization, declining fish catches and sizes, decreasing catch per unit efforts (CPUEs), conflicts within the littoral zone, prevalence of poverty due to the use of unorthodox methods of fishing resulting in low financial returns, etc. These trends brought to the fore, the concept of EAF would be introduced. The objectives of EAF would be highlighted (including broadening the scope of fisheries management through the participation of all involved and harmonzation of rules and regulations governing fisheries).

This will be followed by a comparison between the conventional methods of managing fish stocks and the ecosystem approach. These presentations could be in the form of PowerPoint (pictorial diagrams) for all, especially fishers, to understand and to see the interrelationship between their activities and how they impact on the ecosystem.

Fourthly the expected results with involvement of all stakeholders would be explained. It would also be explained that proper management of the resources by involving and applying sound management policies would go a long way to enhance the benefits from the fisheries. The use of illegal and unorthodox methods of fishing will cease or be reduced. Consequently, CPUE will improve, minimum sizes of fish will increase, and benefits will be enhanced.

Because of the positive contributions that stakeholders can make, their views will be considered in the formation of the National Task Group. It is important that the views of all key stakeholders are well understood. After a thorough deliberation of issues and options the EAF National Task Group will then be formed

Report of Subgroup 3

Within the framework of the implementation of EAF, the subgroup proposed the following strategy of work. After having made a report to our respective administrations, the national RTG member will proceed to:

- draft a mission report and present it to the fisheries authorities;
- identify all major actors in the coastal area;
- prioritize target stakeholders;
- choose focal points for the constitution of the NTG.

After the NTG is in place, a workshop to provide information on the EAF will be organized.

The objectives of this workshop will be:

- to define the ecosystem approach, explaining it in simple terms to the stakeholders;

- to underscore the need to take this approach in the management of fishery resources (it is important to make the stakeholders understand the importance of the approach in the protection of habitats and improvement of fisheries taking into account activities of the other actors);
- to present the importance of EAF to ensure sustainable exploitation and management of fisheries, food safety, to ensure a participatory approach in the management of the fisheries resources.

The benefits identified by the subgroup are as follows:

- capacity of the main actors to become aware of the possible benefits that the implementation of the EAF can bring will be built;
- the risks of habitat destruction will be minimized;
- participatory fisheries management will be promoted; and
- adaptation strategies against the effects of climate change will be developed.

2.3 General discussion

Some participants assumed the role of representatives of stakeholders and asked questions with a view to better understanding the EAF, the necessary steps and the strategy to launch/introduce it to administrators and stakeholders. Most of the points raised in the discussions have been captured as recommendations or actions.

Recommendations

The presentations should start with the problems experienced in the conventional approach to fisheries management before introducing, presenting and recommending the EAF. The presentations should end with what the EAF will do. The participants were urged to put an emphasis on the benefits of the changes to be made. It was emphasized that artisanal fishers should participate in the process because they operate near to the shore where there are many problems including pollution. It was stressed that no promises should be made and presentations should emphasize on the participation of all stakeholders in order to increase the chances of success of the EAF.

The language used should be well understood by participants and be as simple and direct as possible. Problems should be illustrated and participatory approach encouraged.

Actions

The project team will develop samples of presentations with professionals in communication. These samples will be adapted by countries project teams according to the situation of their fisheries.

3. EAF BASELINE (TROM) REPORTS

3.1 Introduction to EAF baseline (TROM) reports

A proposed outline of an EAF baseline (EAF-BL) report was presented by FAO (Appendix 3). It was explained that the report gives an agreed baseline for the fishery before introducing EAF in the management of the resource in question. It should be a reference material for EAF planning and should provide reference points for monitoring and evaluation of EAF activities and management

actions. Preparation of the EAF-BL report is to be led by national and regional experts and overseen by the National Task Group (See Section 5.2 below).

The report should contain relevant information on all aspects of the selected fishery and ecosystem, including human dimensions, and must be compiled and analysed to allow for the formulation of more detailed objectives for the fishery. The report should provide an overview/description of the current situation of the fishery and must contain the following basic information:

- policy, institutional and administrative frameworks within which the fishery is operating;
- overview of the fishery and resources exploited;
- available scientific and traditional knowledge on the resources;
- annual catches and assessment of the importance of the fishery in the national economy;
- full set of management measures/primary management tools in use in the fishery;
- assessment the effectiveness of the current management measures in relation to the fishery itself, including effectiveness in ensuring sustainable utilization;
- MCS – availability, compliance and effectiveness;
- existing forums for discussions on management.

Where a major fishery type includes different fleets or sectors (for example the bottom trawl, set nets and handline sectors of a demersal fishery) it will be necessary to provide the relevant information for each sector as well as any pertinent information on the fishery as a whole.

In the discussions following the presentation some concerns on how to complete the tables in the guideline and prepare the reports in groups was expressed. It was noted that although parts of the report could be completed by individuals it would need to be discussed by the NTG in order to get the buy-in and approval of the group. The aim is to develop a document that all key stakeholders are comfortable with, and thus representing the shared view of everybody that can be used as the basis for the development of a management plan. It was further stressed that although the format provided includes the key elements, other special issues to add could emerge during the consultative process.

Problems related to how to communicate and organize meetings with stakeholders were touched upon. The questions posed by the RTG members included the following:

1. Are the broad management objectives not already included in the fisheries law?
2. Could it happen that these EAF objectives would be in conflict with what is in the fisheries law?
3. For one country, should we consider one fishery (e.g. for shrimps) and how do you decide on which one?
4. Is it possible to use other tools and reports available in the country for some other purpose or context for the EAF?

Responding to these, the resource persons noted that national fisheries laws usually contain general goals whereas the EAF approach requires explicit objectives, agreed by the key stakeholders and others whose lives will be affected by the specific management actions.

On the issue of conflicts between existing fisheries laws and the EAF, it was noted that often there is a need for revising some fisheries laws, both in view of issues of policy coherence (e.g. between fisheries and environmental laws), but also in relation to commitments to international instruments such as the FAO Code of Conduct for Responsible Fisheries (CCRF) and to recommendations for the application of EAF in fisheries management. The Task Group was informed that the EAF-Nansen

project is undertaking a study involving examination of consistency of national fisheries legislations with EAF

The Task Group members were unanimous in their agreement that conventional fisheries management has not worked well in the past and that even though the EAF approach is demanding it appears more efficient in terms of participation by stakeholders and hence ownership of the decisions. It was advised that, faced with a multitude of fisheries, it would be better to start with one fishery of importance to the national economy and proceed gradually in a stepwise manner.

The use of already existing tools and information is advisable, but the important step of validation with the stakeholders should not be missed.

Members were again reminded that the National Task Groups (NTGs) will lead the process of preparing the EAF baseline reports and they are free to delegate aspects of the work to other competent bodies or to co-opt experts to contribute to the work of the NTG where necessary.

There was also a question as to the need for periodic check of management performance e.g. every three months. In response, the importance of checking the management performance was underscored, as an essential mechanism for adaptive management. Usually these controls/checks take place on an annual basis for tactical management and every 5 to 10 years for strategic management.

There was concern raised about securing the participation of stakeholders (e.g. artisanal fishers) who are not organized in any recognizable groups. The advice given on this is that one could initially identify and work with a group like a local NGO that represents the interests of small-scale fishers but again the step of involving important stakeholders should not be missed. In extreme cases where poverty, lack of organization and representation in decision-making are the key issues, perhaps these are the areas to be dealt with first. The sustainable livelihood approach addresses specifically these situations.

Some participants felt that it would be more practical to engage consultants who know the fishery well, to prepare background documents to be used at the forums and that more than one fishery at the time could be taken into consideration. The importance of stakeholders' involvement was again emphasized, both to make sure that the baseline review and the priorities identified represent a shared view, but also to strengthen the feeling of ownership.

3.2 Report on EXERCISE 2: Preparation of EAF baseline reports

The subgroups were provided with the following task:

How would you prepare the EAF baseline report for a fishery of your choice, considering the participation of stakeholders and other experts? How different is this report from the reports presented for example to the CECAF assessment Working Groups?

Table 4: Chairpersons, rapporteurs and presenters for Task 2

Subgroups	Chair	Rapporteur	Presenters
Subgroup 1: North	Jalloh	Juseah	Dieng, Jalloh
Subgroup 2: Central	Djiman	Joanny	Joanny, Bannerman
Subgroup 3: South	Samba	Dihonga	Dihonga, Ojebanji

Report of Subgroup 1

Subgroup 1 identified the shrimp fishery as their case study for the purpose of this exercise.

Procedure for the preparation of EAF baseline reports for the shrimp fishery

- All stakeholders including national experts will be invited to a consultation forum.
- Discuss current problems affecting the shrimp fishery and current status of the fishery: fishing gears, fishing areas and user conflicts.
- Identify a task group of stakeholders at national, district and traditional area levels to address key issues affecting the fisheries.
- Establish a monitoring evaluation group at national, district and traditional area level.

Consultants hired for specific issues

The group identified specific issues to be addressed by national consultants in consultation with the NTG:

- Review general status of the fishery, local knowledge on breeding areas, abundance, yields, etc.
- Prepare reports on resource status, exploitation, governance, environment and socio-economics.

Adoption of the final report

Report of Subgroup 2

Subgroup 2 identified the beach seine fishery as their case study given that it is a common fishery in the four countries and its importance in relation to its contribution to the GDP, fish consumptions and general socio-economic importance.

Step 1

- National Task group formed and TORs reviewed
- Experts nominated to deal with various aspects of the fisheries
  - Expert 1: Review the background documents – resources, fishers and status of fisheries
  - Expert 2: Deal with biological and scientific aspects/ implications
  - Expert 3: Deal with socio-economic importance of fisheries
  - Expert 4: Deal with environmental issues
  - Expert 5: Review present management measures

Step 2

- Strategy for involvement of stakeholders
  - Introductory letter from fisheries Authorities (Ministry)
  - Each expert to meet stakeholders and prepare a comprehensive report taking their views into consideration
  - Incorporate views from representatives at a national forum

Step 3

- Draft report written by EAF experts to incorporate all relevant views.

Step 4

- National Task Group and the experts finalize the EAF-BL report.

Report of Subgroup 3

After the discussion, the subgroup proposed the following steps:

1. Choice of the coastal shrimp fisheries.
2. Use of the methodology guide.
3. Putting in place a multidisciplinary group of experts for the preparation of the baseline report.
4. Organization of direct consultations with the various stakeholders.
5. Drafting of the preliminary report by taking into account all available information and the results of the consultations with the stakeholders.
6. Presentation of the report at a workshop where all stakeholders are present for validation and adoption.

3.3 General discussion

The main idea in the discussion was to develop a document that involves the shared views of all the stakeholders and that the task is the process of preparing the baseline report using the guideline and the adoption of the report. Stakeholders should agree on the present status of the resource as the baseline.

There should be a committee comprising the NTG and experts in various fields (e.g. fisheries scientists, village chief, ports authority, etc.).

The issue of having too many meetings (forums) was discussed and it was advised to have one at the initial stage of setting up of the task group and a final one at the adoption of the report. Subsequent meetings will then be follow-ups.

Recommendations

- It was recommended that national experts should first be considered before subregional or international experts.
- The EAF-BL report should not be prescriptive but should be adaptive to the local situation and needs of the communities concerned while respecting the general principles of the EAF-BL report.

4. ECOLOGICAL RISK ASSESSMENT (ERA) METHODOLOGY

4.1 Issue identification, prioritization and risk assessment

The methodology to identify and prioritize issues was presented and explained at the Accra workshop in 2007. However, it was decided to provide an overview of the key concepts and process given that some of the participants did not attend the Accra workshop.

As an introduction, the overall fisheries planning and implementation process was illustrated. It was noted that the steps envisaged under the EAF approach are identical to those taken under conventional fisheries management. However, there are some key differences between the two approaches. These include the participatory nature of each step of the EAF approach, and the adaptive nature of the system with regular checks (typically on an annual basis for tactical management and every 5 to 10 years for more strategic considerations) of management performance. It was noted that in this phase of the work the project would concentrate on the planning phase leading to the formulation of fisheries management plans consistent with the EAF.

The main steps of the planning phase and their key characteristics are presented in Table 5. A more detailed description of the issue identification and risk assessment process can be found in FAO 2003, 2005 and 2008 and highlights are given in the report of the Accra workshop.

In the discussions that followed the presentation, the Task Group members were reassured that even though the approach looked complicated, the process would become clearer with implementation. It was also noted that generic component trees have to be tailored for each specific situation and that they are usually modified as part of the issue identification process.

On the issue of extension and training materials, the secretariat indicated that many of these are under preparation and will be sent to Task Group members as soon as they become available.

There was a question related to the number of classes of impact and likelihood in the risk assessment process and whether these could not be reduced. In response, it was noted that reducing the number of classes would reduce the resolution of the risk assessment. However, it may be appropriate in the case of data/information-poor situations.

On the applicability of the risk assessment methodology to other situations and other fields of endeavour, the Task Group was informed that although this is now gaining popularity in natural resources management, the methodology has long and widely been used in the field of economics and financial analysis. In short the methodology can basically be used in any human activities.

4.2 Performance reports

A performance report has to be prepared for each of the major issues identified through the issue identification and risk analysis process. It is important to document the rationale of why the issue was prioritized, what will be the measures to be introduced to deal with the issue and how progress will be monitored. The performance report gives an example of how this can be reported in a structured way and is a key element for the development of the fisheries management plan.

For each problem identified, the rationale for inclusion has to be spelt out explaining on what information was the decision of inclusion and ranking made. For each problem/issue, the operational objective, indicator, and performance measure have to be identified, including justification. It is necessary to be precise when setting operational objectives and concrete, measurable indicators have to be selected. Performance measures are needed to evaluate how well management is doing in relation to the given issue. The direction of the indicator in relation to the operational objective is an example of measure of performance. In the case the direction of the indicator is not in line with the operational objective, it will be necessary to re-look at measures. Once a suitable indicator has been identified, it is important to consider data requirements and data availability. It is not useful to choose a complicated indicator if adequate information is not available.

Evaluation of performance is done at regular intervals (e.g. annually) to assess how successful the management scheme is (this will not be in the first report, but the type of performance measure will be determined). An example of performance measure is the trend of the indicator in relation to the operational objective. The management response describes what management action is needed to achieve the operational objective. This includes the current management arrangements, what is proposed for the future, and what the plan should be if performance levels are triggered. The types of management actions should take particular note of the level of information available and the reliability of the evaluation.

Also to be considered are external drivers (factors outside the control of the fisheries administration) that may influence performance and the ability to achieve the operational objectives. If these are considered serious, they are usually treated under separate performance report, although the type of action will be related to the need for interacting with the relevant administrations.

Table 5: Main steps for EAF

Step	Comment
1. Scoping/baseline report	It consists in providing a basic description of the fishery/ies under consideration. This step should result in a document providing information on geographic scope, relevant stakeholders, fishing gears and methods, existing and past management measures, etc. (guidance provided on elements to be included). It is important that the result is validated by the stakeholders and that the document truly represents a shared understanding of the history and present situation of the fishery/ies.
2. Setting broad objectives (consistent with overall goals)	Sometimes the broad management objectives for a given fishery/fisheries are not explicitly set. In the context of EAF planning, it is essential that these are clearly identified and agreed upon. They are essential as a reference for determining the key fisheries issues and for the risk analysis process (see below).
3. Identify the issues (e.g. using component trees)	The use of component trees, or of a set of structured categories of issues related to the main three dimensions of a fishery system, i.e. the ecological, human and institutional ones, has many advantages: They can be used as the starting point for all assessments; their use enhances consistency of the approach; minimizes the risk of "missing issues". Issues should be formulated as possible negative outcomes of present management in relation to stated broad objectives.
4. Prioritize the issues using risk assessment technique	Often many issues are identified, their importance varies and not all will require full reports and explicit management. Risk Assessment will help to determine the level of risk and the appropriate level of management response. Semi-quantitative risk assessment can be used and applied also in data poor situations. Risk should be measured in relation to stated broad objectives and present management.
5. Management response identification (including setting operational objectives and indicators)	For priority issues identified so far, appropriate management responses should be identified. Operational objectives, indicators, performance measures and decision rules should be determined.
6. Cost-benefit analyses	The efficiency of possible alternative management strategies can be assessed through cost-benefit analyses.
7. Completing detailed reports on each fishery for each issue (including baseline information, objectives, indicators, performance measures), as a basis for fisheries management plans	This step is the one where all the information, knowledge and decisions are compiled into a fisheries management plan. The plan will focus on the key issues that have been identified as being the source of highest risk of failure in relation to the broad objectives for the fishery.

There was some uncertainty as regards the difference between operational objectives, indicators and performance measures. It was noted that while these are strictly related, they represent different aspects: the indicator is the type of measure selected to monitor progress, the operational objective is the concrete, desirable target to be achieved while the performance measure would be the trend of the given indicator.

Another comment was related to the dilemma of using poor data for decision-making as this would lead most probably to poor decision-making. It is important that all available information is used i.e. complementing data available with other sources of information, including traditional knowledge. What is important is that decision-making should not stop because of lack of accurate data and assessments. The implicit decision of not taking any action in relation to an issue, because of limited data, is equivalent to having taken the decision that the specific issue does not warrant any action i.e. no decision implies that problem is not important. When information is limited, a very high level of precaution is needed. The better the knowledge the better the basis for decision-making, but poor data and poor knowledge should not stop a manager from making a decision needed for an issue considered to be of priority. The Task Group was reminded that it is better to be nearly right than exactly wrong.

4.3 Report on EXERCISE 3: Prioritization and risk analysis

The subgroups were provided with the following task:

In the context of applying the EAF, how would you go about deciding on issues that need to be addressed by management?

Table 6: Chairpersons, rapporteurs and presenters for Task 3

Subgroups	Chair	Rapporteurs	Presenters
Subgroup 1: North	Jueseah	Sei, Dieng	Jueseah, Dieng
Subgroup 2: Central	Sedzro	Bannerman	Bannerman
Subgroup 3: South	Ogandagas	Ngoande, Ojebanji	Ngoande

Report of Subgroup 1

The subgroup highlighted the following procedure for identification of management issues:

They noted that the first step will be to call up a consultative forum, where the EAF principles will be re-introduced and the current state of the fisheries presented. This will be followed by issue identification in relation to broad objectives of EAF. Prioritization of issues will then be based on the risk assessment technique of EAF, taking into consideration the main management objectives, ecosystem well-being, human well-being and socio-economic well-being. They proposed the use of pictorial illustrations and where possible, Geographical Information System (GIS), to elucidate on the level of problems affecting the fisheries: e.g. a picture of an ocean with abundance of fish and another with less or no fish, a sea or landing site full of plastics and domestic waste.

They noted that priorities for management action will be based on consequences of the risk and probability of such risk affecting the fisheries, e.g. illegal fishing gears can have high consequence and probability of risk affecting the fisheries. The last step proposed by the group is the evaluation and presentation of prioritized issues for management actions at a forum.

Report of Subgroup 2

The subgroup proposed the following steps:

Step 1: Identify the problem in a specific fishery. Review of sector policies on fisheries through surveys, research, documentations by a national EAF committee to highlight theoretically the problems.

> (*Indicators of problem could be low catches leading to poverty, environmental degradation due to mangrove cutting, increased levels of pollution and waste disposal)*

Step 2: Meet stakeholders to brainstorm on issues pertaining to the fisheries including technical, social, financial, environmental, economic and biological factors.

> (*Dialogue to confirm issues by stakeholders especially fishermen who are experiencing problems; an expert can be the Chair)*

Step 3: Validation by all stakeholders of the key issues

- Prioritization of key issues using the risk assessment method (all stakeholders), by vote or consensus to classify issues. A 100 percent vote implies issue is of major concern; a 50 percent vote means issue is of medium concern, etc.
- Accordingly we decide on measures to take.

It was envisaged by Group 3 that to hold a stakeholder meeting between technocrats and non-technocrats such as fishermen who may not read, write or understand the cross tabulation procedures of the risk assessment, it may be necessary in some circumstances to vote on the issue. In such cases if all agree that an issue is highly problematic, i.e. 100 percent then the NTG can assign values for the impact and likelihood of occurrence to that problem/issue. This process may not apply to all issues but in all cases the baseline information should be thoroughly used to fully complement the values to be assigned.

Report of Subgroup 3

The subgroup proposed the following steps:

1. Organization of a workshop comprising all the stakeholders earlier identified.
2. Presentation of the baseline report at the workshop for validation and adoption.
3. Identification (make a list) of issues arising from the baseline report.
4. Explanation of methodology of ranking by the EAF-Nansen RTG member.
5. Practicing of the methodology by the participants.
6. Ranking and prioritization of the issues identified above by all the participants at the workshop using the methodology explained earlier.
7. Analyse the risk and the level of management measures to be applied using the risk analysis table suggested.

4.4 General discussion

One main conclusion from the above exercise is that even though guidelines exist which can be useful for the application of EAF, flexibility should be allowed. However, some basic principles should not be compromised with, e.g. participation in decision-making and equity. The presented methodology has to be adapted to the African situation; thus a need to be adaptive. One particular area where participants expressed a need for is the risk analysis methodology and how to explain this process to stakeholders.

Some RTG members felt that it would be preferable that the NTG goes to the fishing community to discuss with the fishers instead of calling them from their different localities. The resource persons responded that this could be done but it is better to undertake the risk analysis at a central location with participants from the local communities. This consideration must be given in the selection of National Task Group members.

On the use of pictures to illustrate the situation of the fisheries it was said that some things cannot be explained this way and one has to be careful as regards the acceptable level of catch

5. PLANNING OF FUTURE WORK AND ALLOCATION OF RESPONSIBILITIES

5.1 Project management

The overall decision structure of the EAF-Nansen Project was presented as well as the main functions and compositions of these various bodies. The bodies are the Steering Committee, the Regional Advisory Groups and the Annual Forum.[1] It was explained that the Advisory Group is an independent body to advise the project management that would look across the regions and bring in experiences from outside the project area. FAO informed the RTG about future activities in the project including survey planning meeting, Advisory Group meeting and the Annual Forum.

In the discussions that followed, the RTG members raised the question of surveys in the future, indicating the interest of the countries in this activity and the further use of the results. As indicated previously surveys in the Gulf of Guinea region are to be carried out in collaboration with the GCLME project. The EAF Coordinator indicated that he will be meeting the officer-in-charge of the GCLME project to discuss future plans. It was pointed out that within the project, the information and data collected are considered the properties of the respective countries and these should make best possible use of the information collected. The donor is interested to see best possible use of the data collected. It was noted that in some regions some of the R/V DR. FRIDTJOF NANSEN data have been used in postgraduate studies.

5.2 EAF Regional Task Groups

An EAF Regional Task Group (RTG) is to be established in each of the four operational regions of the EAF-Nansen project. The regions coincide with the geographical coverage of the Canary, Guinea, Benguela and Agulhas and Somali Currents Large Marine Ecosystem projects. Each RTG will be composed of 1 member and one alternate from each country. The RTGs will also have representatives from major projects and subregional fisheries commissions. The Chair of each RTGs will attend the Annual Forum of the EAF-Nansen project and will serve as resource person for the Steering Committee if and when required. The RTG will be a forum for learning and exchange of ideas and advice in relation to EAF in a given region. The draft terms of reference of the RTG is provided in Appendix 4.

The RTG was informed that in the SWIOFC (South West Indian Ocean Fisheries Commission) region, the EAF Regional Task Group has been recognized as a working group under the Scientific Committee of the Commission.

After the presentation, questions were raised with regards to the size of the RTG. It was noted that this is the group that brings all the countries in the region together, and for that reason 1 participant per country would keep the group to a workable size.

[1] The Steering Committee referred to here was later renamed the Advisory Group and the Regional Advisory Groups became the Regional Steering Committees.

The participation of subregional fisheries commissions in the work of the RTGs was also discussed. It was suggested that the secretariat informs them about all activities of the RTGs and the project. The task group unanimously elected Salvador Ngoande of Cameroon as Chairman of the RTG for the Gulf of Guinea area and Ibrahim Turay of Sierra Leone as the Vice-Chair. It was suggested that TORs be developed for these offices.

5.3 National Task Groups

At the national level a National Task Group (NTG) is to be established in order to ensure that the perspectives and expertise of the stakeholders are taken into account. The NTG will be responsible for overall coordination of the project in each country and will report through the EAF-Nansen project Coordinator to the Steering Committee. The Focal Point of the NTG will be a member of the Regional Task Group. He/she must be confirmed for each country.

The NTG will oversee the implementation of the various steps of EAF within the country and facilitate consultation with different stakeholders to ensure that stakeholder opinions are reflected in the work and results of the project. One important initial task would be to take lead in the preparation of the EAF baseline report. It would take lead in issue identification and prioritzation in consultation with stakeholders.

Each NTG will consist of 10-12 people including representatives of the fisheries management agency and key functional groups, representatives of the national fisheries research agency, representatives of selected stakeholder groups so as to provide coverage of the major fishery types and interests. Also to be included are representatives of national partner projects and experts on specialized issues may be co-opted to particular meetings or activities as necessary.

A draft TOR for the NTGs is provided in Appendix 5.

5.4 Facilitation of Task Groups

The RTG members brought up the issue of how to facilitate the work of the RTG and the NTGs. They were unanimous in their submission that work of the EAF-Nansen project at national level would not be easy if national governments are left to fund the activities. Besides the issue of inadequate financial provisions for fisheries in many African countries, participants noted that even if countries can support the work, the NTGs are unlikely to get any financial support since most countries may have finalized their budgets already. Some participants commented that there could be funding possibilities nationally if the management are appropriately informed.

The RTG was informed that the nature of support to the countries will be communicated to the RTG in due course, but not before the Steering Committee had deliberated on the issue. The EAF Nansen project will facilitate the work of the RTG.

5.5 Development of a Communication Strategy for the EAF-Nansen Project

The RTG was given an update on the development of a communication strategy for the project. The goal of the strategy is to market the EAF-Nansen project as widely as possible to ensure that all intended beneficiaries and stakeholders understand the project, its objectives, expected outcomes and benefits. The EAF-Nansen Coordinator thanked the RTG members who responded to the questionnaires on the subject and gave their views on how best to communicate the principles of EAF, implementation and outcome of the EAF-Nansen project to scientists, decision-makers and stakeholders.

The Task Group members were asked to verify the responses compiled in the table of target audience, products and communication channels (Appendix 6).

5.6 Future work and allocation of responsibilities

To help RTG members initiate actions back in their countries, the group came up with the activities and time-lines shown in Table 7.

Table 7: Suggested Actions to be taken before the next RTG Meeting

Step	Who	When
Establishment of NTGs		
1) Prepare a national report on the outcome of this meeting underlying the need to set up a NTG	RTG member	Oct. 2008
2) Send EAF-Nansen project document to national authorities	FAO	Nov. 2008
3) Nomination of focal point by Fisheries authority	National authority	Nov. 2008
4) Form the national task group	National authority	Dec. 2008
5) Feedback on formation of NTG to FAO	National authority	Dec. 2008
6) CPCO/FCWC to introduce the programme at the December meeting of the Fisheries Directors	CPCO/FCWC	Dec. 2008
EAF planning activities		
6) NTG meets and selects a fisheries	NTG	Jan. 2009
7) Prepare supporting material on sensitizing on the EAF (brochures, videos, documents, etc.)	FAO/NTG	Mar. 2009
8) Sensitization on EAF	NTG	Apr. 2009
9) Prepare baseline report on the selected fishery and validate	NTG	Aug. 2009
10) Identify key issues for that fishery	NTG	Oct. 2009
11) Regional Task Group Meeting		

6. CONCLUSION AND RECOMMENDATIONS

The EAF Regional Task Group Meeting and Ecological Risk Assessment Methodology Workshop (Gulf of Guinea) were successful in providing the participants with the opportunity to discuss key processes for the implementation of the ecosystem approach to fisheries management in the Gulf of Guinea region. For many of the participants, the concepts and principles relevant to Ecological Risk Assessment Methodology were clarified.

The RTG members acknowledged the fact that the ecosystem approach to fisheries is a recommendation at the global level and as such African countries have an obligation to adopt it for implementation. They further acknowledged the assistance that Norad is providing the participating countries in this respect through the EAF-Nansen project and appealed to all countries in the project area to take the opportunity that the project provides them with to achieve the world goals on the implementation of the EAF.

The discussions on the modalities for the formation and functioning of EAF Regional and National Task Groups were very fruitful and things had been made clearer for the RTG members. The issue of facilitation of the NTGs was discussed and FAO promised to look into this and get back to the RTG

members in due course. The perceived difficulty connected with the preparation of the EAF baseline (also known as TROM) reports was addressed. The exercises that the Task Group members were taken through clarified this subject as well as the establishment and *modus operandi* of the NTGs. Participants were advised to guard against raising overambitious hopes on the EAF and to avoid making promises in the conduct of the business of the NTGs. It was recommended, for example, that presentations at national level should start with the problems experienced in the conventional approach to fisheries management before introducing, presenting and recommending the EAF. The participants were urged to put an emphasis on the benefits of the changes to be made.

It was noted that the participation of stakeholders as a prerequisite for success of EAF should be emphasized at all times. In particular the importance of involving the small-scale/artisanal fishers in the EAF process was highlighted. The language used in discussions with stakeholders should be well understood by participants and be as simple and direct as possible. Problems should be illustrated and participatory approach encouraged. The RTG expressed the desire to see the involvement of all subregional fisheries commissions in the various steps of implementation of the EAF in the subregions.

Participants expressed satisfaction with the development of the communication strategy for the project and were particularly happy with the participatory approach used. They, however, impressed upon FAO to move faster on this and provide them with materials and products that will facilitate the work of the NTGs.

In closing the workshop, the Chairman of the Task Group thanked FAO for the opportunity being given to the countries to manage their fisheries through EAF approach and urged all participants to take up the mantle and help make this a success. He also expressed sincere thanks to the Government of Sierra Leone for hosting the workshop.

APPENDIX 1

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APPENDIX 2

AGENDA

Monday 20 October	
Morning *9.00–12.30*	Introduction o Welcome o Agenda o Workshop objectives o Update on the project: Strengthening the Knowledge Base for and Implementing an Ecosystem Approach to Marine Fisheries in Developing Countries General discussion Introduction to Task Groups (National, Regional)
Afternoon *14.00–17.00*	Main steps of EAF Introduction to EAF baseline (TROM) reports
Tuesday 21 October	
Morning *9.00–12.30*	EAF baseline reports (cont.)
Afternoon *14.00–17.00*	Ecological Risk Assessment (ERA) Methodology o The hierarchical tree and identification of EAF issues o Prioritization and risk analysis
Wednesday 22 October	
Morning *9.00–12.30*	Ecological Risk Assessment (ERA) Methodology (cont.) o Performance reports
Afternoon *14.00–17.00*	Formation of Task Groups o Regional Task Groups o National Task Groups Facilitation of Task Groups Discussions o Planning of future work and allocation of responsibilities o Conclusion and recommendations o Workshop report o Closing

APPENDIX 3

OUTLINE OF EAF BASELINE REPORT
Desk study on main fisheries, including their socio-economic significance

FAO: *"The ecosystem approach to fisheries strives to balance diverse societal objectives, by taking account of the knowledge and uncertainties about biotic, abiotic and human components of ecosystems and their interactions and applying an integrated approach to fisheries within meaningful boundaries".*

Marine Stewardship Council: "*Fishing operations should allow for the maintenance of the structure, productivity, function and diversity of the ecosystem (including habitat and associated dependent and ecologically related species) on which the fishery depends.*

Introduction

One of the activities to be undertaken under the EAF-Nansen project is to conduct desk studies on the management of main fisheries, including their socio-economic significance, usually referred to as TROM (Target Resource Oriented Management) review. The TROM review is hereafter referred to as the EAF-baseline (EAF-BL) report. For the areas under the project, a review will be undertaken for every major fishery type in each country and at the regional/sub-regional level. The EAF-BL is an agreed baseline for the fishery before introducing EAF in the management of the resource in question. It should be a reference material for EAF planning and should provide reference points for monitoring and evaluation of EAF activities and management actions.

Preparation of the EAF-BL report is to be led by national and regional experts with guidelines provided by FAO. Provided below are guidelines on how to prepare a EAF-BL report on any fishery type.

EAF-BL Guidelines

Where a major fishery type includes different fleets or sectors (for example the bottom trawl, set nets and handline sectors of a demersal fishery) it will be necessary to provide the relevant information for each sector as well as any pertinent information for the fishery as a whole. Each review should contain information on the following:

1. Is there a Management Plan for the fishery?
2. Where there is no management plan, are there stated or *de facto* objectives for the fishery?
3. What is legal framework within which the fishery is operating?
4. What are the institutional and administrative frameworks for fisheries management in the country?
5. Overview of the fishery and resources exploited
   - 5.1 Details of fishing gear used and areas fished
   - 5.2 Give brief information on the resources exploited.
   - 5.3 Number of fishers and land-based workers by sector. Indicate full-time and part-time.
   - 5.4 Provide information on direct interactions with other fisheries e.g. competing for same target species, target species taken as bycatch in another fishery, bycatch in this fishery
6. Available scientific and traditional knowledge on the resources
   - 6.1 Brief biology of the major fish species
   - 6.2 Geographical distribution of the species
   - 6.3 Estimated status of the stocks (especially over the last five years).
   - 6.4 Provide information on any direct interactions with the ecosystem (impact on sea bottom, pollution caused by the fishery, affects of coastal zone development or land-based pollution, etc.).
   - 6.5 Summarize the traditional knowledge about the fishery and the resources exploited.
7. Annual catches from the earliest time available (by species or lowest available taxonomic group where landings are multispecies).
8. Assessment of the importance of the fishery in the national economy

8.1 Value of the catches from the fishery per year for the last five years (by species or lowest available taxonomic group where landings are multispecies). Also add time series of market prices for the landings.

8.2 Products, markets and quantitative assessment of the value and employment of activities in value-addition and linked to the sector.

9. Full set of management measures/primary management tools currently being used in the fishery/sector including those indicated in table below. *Please indicate use with a "√"* and comment on the status of implement (track record of the management option):

Type of management tool	**Tick**	**Comments** (e.g. when introduced, effectiveness, compliance, etc.)
Spatial (area) restrictions and closures such as:		
o Marine protected areas where fishing is prohibited		
o Nursery area closures		
o No-take zones		
o Marine reserves where fishing is sometimes allowed		
o Other temporary areas closures for specific purpose (e.g. spawning aggregations)		
Temporal restrictions such as:		
o Defined fishing season(s)		
o Defined number of days fishing		
o Defined number of hours per day fishing		
o defined number of hours fishing		
Gear restrictions such as:		
o Engine size restrictions		
o Gear size restrictions		
o Gear type restrictions		
Size/age restrictions (i.e., minimum or maximum sizes)		
Participatory restrictions such as:		
o Licences		
o Limited entry		
Catch restrictions such as:		
o Total allowable catch (TAC) limits		
o Vessel catch limits		
o Individual vessel quotas		
Rights/incentive-adjusting regulations such as:		
o Individual effort quotas		
o Individual fishing quotas		
o Individual transferable quotas		
o Individual transferable share quotas		
o Group fishing rights (including community development quotas)		
o Territorial use rights		
o Stock use rights		

10. From the table above, assess the effectiveness of the current management measures in relation to the fishery itself, including effectiveness in ensuring sustainable utilisation. "Effectiveness" may be in terms of better status of the stocks (increasing CPUE), decreasing conflicts, increasing value, level of compliance, etc. It is important to note that in the State of World Fisheries and Aquaculture (SOFIA) FAO defines fisheries governance as "the sum total of the legal, social, economic and political arrangements used to manage fisheries".

11. Any compliance or enforcement problems being experienced in the fishery, and any complaints or dissatisfaction amongst fishers/rights holders. You need to consider scientific monitoring (e.g. of catches against permitted exploitation) as well as MCS (monitoring, control and surveillance).
12. Is there a national or regional forum for discussions on management of this or other resource? If yes, please give a short description of the forum (nature, frequency, subject of discussions, outcomes, etc.).
13. Any other comments relevant to current management of the fishery and the way forward for the introduction of EAF.

APPENDIX 4

TERMS OF REFERENCE OF THE EAF REGIONAL TASK GROUP

An EAF Regional Task Group (RTG) will be established in each of the four operational regions of the EAF-Nansen project. The regions coincide with the geographical coverage of the Canary, Guinea, Benguela and Agulhas & Somali Current Large Marine Ecosystem projects. The Chair of each the RTGs will attend the Annual Forum of the EAF-Nansen project and will serve as resource to the Project Steering Committee.

There shall be a chair whose function shall be:

- chair the RTG meetings;
- represent the RTG in other fora as it may be required;
- work closely and assist the project coordinator;
- liaise with the chairs of the NTGs.

The Chair would be a member of the Scientific Committee of the relevant RFB. There shall be a Vice-Chair who will assume the functions of the chair in his/her absence. The tenure of office of the Chair (and Vice-Chair) will be for a period of two years.

The responsibilities of the RTG will include:

- coordinate and harmonize the work of National Task Groups, especially as regards technical issues and management recommendations at regional level;
- ensure consistency in the national EAF Baseline reports where necessary;
- provide input, comments and advice to the National Task Group (NTG);
- identify and prioritize the EAF issues requiring attention within the regional marine fisheries sector;
- assist in the development of regional goals and objectives for fisheries within an ecosystem approach, making use of input from the National Task Groups and other sources as appropriate;
- propose regional management measures and rules for the consideration of the scientific committee before proceeding to the Commission;
- propose suitable incentive measures to achieve EAF within the region, the barriers to implementation and appropriate means to overcome these;
- recommend appropriate institutional requirements (including capacity building) for successful implementation of EAF within the region;
- adapt and promote guidelines on EAF;
- respond to requests from the Scientific Committee in relation to EAF.

Each RTG will consist of the following:

- 1 (or 2 depending on size of the region) representative(s) from each country in the region (the country must also designate an Alternate Task Group member who should be a member of the National Task Group);
- representatives of partner projects;
- representatives of regional non-governmental organizations with the required competency, so as to provide coverage of the major fishery types and interests;
- experts on specialized issues (e.g. economics, small-scale fisheries, community based management, legal) may be co-opted for particular meetings or activities as necessary.

The RTGs will meet as necessary but at least once per year. The first meeting of the RTG will familiarise itself with the EAF principles, consider its TORs and those of the national task groups and agree on a workplan and priority issues for implementation.

APPENDIX 5

TERMS OF REFERENCE OF THE EAF NATIONAL TASK GROUP

A National Task Group (NTG) will be established in each country by the relevant Fisheries Management Authority as an advisory group on matters of EAF. The NTG will be responsible for overall coordination of the project in each country and will report to the RTG. The Chair of the NTG will be a member of the Regional Task Group.

There shall be a Chair whose function shall be:

- chair the NTG meetings;
- represent the NTG in other fora as it may be required;
- work closely and assist the project coordinator.

There shall be a Vice-Chair who will assume the functions of the chair in his/her absence. The tenure of office of the Chair (and Vice-Chair) will be for a period of two years.

The responsibilities of the NTG will include:

- oversee the implementation of the project within the country;
- liaise closely with the national fisheries management agency (Fisheries Department, Ministry of Fisheries) and other agencies as required;
- promote the incorporation and implementation of EAF principles and methodologies in national fisheries management;
- facilitate consultation with different stakeholders where required and ensure that stakeholder opinions are reflected in the work and results of the project;
- take lead in the preparation of the EAF baseline report;
- seek input, comments and advice from the Regional Task Group (RTG) and contribute to the work of the RTG;
- identify and prioritize the EAF issues requiring attention within the national marine fisheries sector, in consultation with stakeholders;
- provide input for thedevelopemnt of national goals and objectives for fisheries within an ecosystem approach, making use of existing policy documents (e.g. national Fisheries Act or equivalent), the identified priority issues, input from the fisheries management agency and other sources as appropriate;
- propose national management measures and rules required to achieve the EAF objectives, based on input from the RTG and FAO and other sources as appropriate;
- consider suitable incentive measures to achieve EAF, the barriers to implementation and appropriate means to overcome these;
- recommend appropriate institutional arrangements (including capacity building) for successful implementation of EAF;
- contribute to the formulation of draft national management plans for selected fisheries.

Each NTG will consist of:

- representatives of the fisheries management agency and key functional groups (e.g. MCS, legal, liaison (communication), policy and planning, etc.)
- representatives of the national fisheries research agency and universities;
- representatives of selected stakeholder groups so as to provide coverage of the major fishery types and interests;
- representatives of other relevant sectors outside the fisheries and of NGOs;
- representatives of national partner projects;
- experts on specialized issues (e.g. economics, small-scale fisheries, community based management, legal) may be co-opted for particular meetings or activities as necessary.

The NTGs will meet as necessary but at least twice per year. The first meeting of the NTG will familiarize itself with the EAF principles, consider its TORs and agree on a workplan and priority issues for implementation.

APPENDIX 6

EAF-NANSEN PROJECT COMMUNICATION CHANNELS

Target audience	Documents	Web site/ List server (LS)	Meetings/Workshops	Video	Audio	Theatre
National, regional and local government officials, IGOs	EAF Nansen project activities reports, brochures, flyers	EAF Newsletter Discussion Forum LS	Policy meetings, national workshop on EAF	TVs discussions on EAF	Radio programmes	
Regional fisheries organizations	Brochures, flyers, posters	EAF Newsletter Discussion Forum LS	Policy meetings, regional workshop on EAF	TVs discussions on EAF	Radio programmes	
Fisheries industry, fishing companies	Brochures, flyers	EAF Newsletter Discussion Forum LS	Informative meetings		Radio programmes	
Artisanal fishermen, local communities	Posters		Sensitization meetings	Documentary films, cartoons	Radio programmes, local community leaders	Plays in local languages
Environment and conservation non-governmental organizations (NGOs)	Brochures, flyers, posters	EAF Newsletter Discussion Forum LS	Discussion meetings, policy meetings, national workshops	Documentary films		
Research institutes	EAF Nansen project activities reports, scientific publications, brochures, posters	EAF Newsletter Discussion Forum LS	Collaboration meetings, policy meetings, national workshops	Documentary films, TV discussions		
Teaching and training institutions	Technical manuals, Guidelines	EAF Newsletter Discussion Forum LS	Training workshop on EAF, collaboration meetings	Video training courses in local languages	Audio training courses in local languages	Didactic plays
Funding agencies	Brochures, flyers, posters	EAF Newsletter Discussion Forum LS	Donor meetings	Documentary films on EAF benefits		
Media	Brochures, flyers, posters	EAF Newsletter Discussion Forum LS	Sensitization meetings	Documentary films, cartoons	Radio programmes, sensitization campaign	Sensitization plays
General public	Brochures, flyers, posters	EAF Newsletter Discussion Forum LS		Documentary films, cartoons	Radio programmes, sensitization campaign	Sensitization plays