Final Evaluation of the EAF-Nansen project (Phase I): Strengthening the Knowledge Base for and Implementing an Ecosystem Approach to Marine Fisheries in Developing Countries - (GCP /INT/003/NOR)

Final Evaluation Report

November 2013
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FAO Office of Evaluation

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<th>Description</th>
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<tbody>
<tr>
<td>AfDB</td>
<td>African Development Bank</td>
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<tr>
<td>AMCEN</td>
<td>African Ministerial Conference of Environment (AU, hosted by UNEP/ROA)</td>
</tr>
<tr>
<td>ATLAFCO</td>
<td>Ministerial Conference on Fisheries Cooperation among African States Bordering the Atlantic Ocean (also COMHAFAT)</td>
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<td>AU</td>
<td>African Union</td>
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<tr>
<td>AU-IBAR</td>
<td>African Union Inter-African Bureau for Animal Resources</td>
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<tr>
<td>BH</td>
<td>Budget Holder</td>
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<tr>
<td>CAADP</td>
<td>Comprehensive Africa Agriculture Development Program (NEPAD)</td>
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<tr>
<td>CAFRS</td>
<td>Comprehensive African Fisheries Reform Strategy</td>
</tr>
<tr>
<td>CAMFA</td>
<td>Conference of African Ministers of Fisheries and Aquaculture (NEPAD)</td>
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<tr>
<td>CCA</td>
<td>Climate Change Adaptation</td>
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<td>CCLME</td>
<td>Canary Current Large Marine Ecosystem</td>
</tr>
<tr>
<td>CCRF</td>
<td>Code of Conduct for Responsible Fisheries (FAO)</td>
</tr>
<tr>
<td>CDCF</td>
<td>Center for Development Cooperation in Fisheries at IMR</td>
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<tr>
<td>CECAF</td>
<td>Fishery Committee for the Eastern Central Atlantic</td>
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<td>COFI</td>
<td>Committee on Fisheries, FAO</td>
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<tr>
<td>COMHAFAT</td>
<td>Conférence Ministérielle sur la Coopération Halieutique des Etats riverains de l’Atlantique (also ATLAFCO)</td>
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<tr>
<td>COREP</td>
<td>Commission Régionale des Pêches du Golfe de Guinée</td>
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<tr>
<td>CSO</td>
<td>Civil Society Organizations</td>
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<tr>
<td>CSRP</td>
<td>Commission sous-régionale des pêches (Northwest Africa)</td>
</tr>
<tr>
<td>DAC</td>
<td>OECD’s Development Assistance Committee</td>
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<tr>
<td>DDF</td>
<td>Data Deficient Fisheries (UK)</td>
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<td>DRM</td>
<td>Disaster Risk Management</td>
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<td>EA-FMP</td>
<td>Ecosystem Approach Fisheries Management Plan</td>
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<td>EAF</td>
<td>Ecosystem Approach to Fisheries</td>
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<tr>
<td>EAF-AG</td>
<td>Ecosystem Approach to Fisheries - Advisory Group to PCU</td>
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<tr>
<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
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<td>FCWC</td>
<td>Fishery Committee for the West Central Gulf of Guinea</td>
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<td>FI</td>
<td>FAO Fisheries and Aquaculture Department</td>
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<td>FID</td>
<td>FAO Office of the Fisheries Assistant Director General</td>
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<td>FIR</td>
<td>FAO Resource Use and Conservation Division</td>
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<td>FIRF</td>
<td>FAO Marine and Inland Fisheries Branch</td>
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<tr>
<td>FPMIS</td>
<td>Field Program Management Information System</td>
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<td>FRDC</td>
<td>Fisheries Research and Development Corporation (Australia)</td>
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<tr>
<td>GEF</td>
<td>Global Environment Facility</td>
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<td>IMR</td>
<td>Institute of Marine Research, Norway</td>
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<tr>
<td>IOTC</td>
<td>Indian Ocean Tuna Commission</td>
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<tr>
<td>IUCN</td>
<td>International Union for Conservation of Nature</td>
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<tr>
<td>JDZ</td>
<td>Sao Tomé – Nigeria Joint Development Zone</td>
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<tr>
<td>LEGN</td>
<td>FAO Development Law Service</td>
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<tr>
<td>LME</td>
<td>Large Marine Ecosystem</td>
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<tr>
<td>LoA</td>
<td>Letter of Agreement</td>
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<tr>
<td>LTO</td>
<td>Lead Technical Officer</td>
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<tr>
<td>MCs</td>
<td>Member country/ies (of the FAO)</td>
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<tr>
<td>Acronym</td>
<td>Full Form</td>
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<tr>
<td>MFA</td>
<td>Ministry of Foreign Affairs, Norway</td>
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<td>MoU</td>
<td>Memorandum of Understanding</td>
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<td>MTR</td>
<td>Mid-Term Review</td>
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<td>NEPAD</td>
<td>New Partnership for Africa’s Development</td>
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<td>NFFP</td>
<td>NEPAD-FAO Fish Program</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
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<tr>
<td>NOK</td>
<td>Norwegian Kroner</td>
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<tr>
<td>Norad</td>
<td>Norwegian Agency for Development Cooperation</td>
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<tr>
<td>NP</td>
<td>Nansen Program (pre-2007)</td>
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<td>NPCA</td>
<td>NEPAD Planning and Coordinating Agency</td>
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<td>NTG</td>
<td>National Task Group (EAF-Nansen)</td>
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<tr>
<td>OECD</td>
<td>Organization for Economic Co-operation and Development</td>
</tr>
<tr>
<td>OED</td>
<td>FAO Office of Evaluation</td>
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<tr>
<td>PAF</td>
<td>Partnership for African Fisheries, NEPAD flagship program</td>
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<tr>
<td>PC</td>
<td>FAO Program Committee</td>
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<tr>
<td>RFB</td>
<td>Regional Fisheries Bodies</td>
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<td>RFMO</td>
<td>Regional Fisheries Management Organization</td>
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<tr>
<td>RSC</td>
<td>Regional Steering Committee</td>
</tr>
<tr>
<td>RTG</td>
<td>Regional Task Group (EAF-Nansen)</td>
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<tr>
<td>R/V</td>
<td>Research Vessel</td>
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<tr>
<td>SO</td>
<td>Strategic Objective</td>
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<tr>
<td>SRFC</td>
<td>Sub-regional Fisheries Commission (CSRP - CECAF North)</td>
</tr>
<tr>
<td>SSF</td>
<td>Small-scale fisheries</td>
</tr>
<tr>
<td>SWIOFC</td>
<td>South West Indian Ocean Fisheries Commission</td>
</tr>
<tr>
<td>TPA</td>
<td>Tripartite Agreement between Norad, IMR and FAO for the EAF-Nansen Project</td>
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<tr>
<td>ToR</td>
<td>Terms of Reference</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<tr>
<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Program</td>
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<tr>
<td>UNEP</td>
<td>United Nations Environment Program</td>
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<tr>
<td>US$</td>
<td>US Dollar</td>
</tr>
<tr>
<td>WIOMSA</td>
<td>Western Indian Ocean Marine Science Association</td>
</tr>
<tr>
<td>VOC</td>
<td>Vessel Operating Costs</td>
</tr>
<tr>
<td>WECAFC</td>
<td>Western Central Atlantic Fishery Commission</td>
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<tr>
<td>WWF</td>
<td>World Wide Fund for nature (or World Wildlife Fund)</td>
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Executive Summary

Overview

ES1. The EAF-Nansen Project “Strengthening the Knowledge Base for and implementing an Ecosystem Approach to Marine Fisheries (EAF) in Developing Countries” stems from the Nansen Program (NP) a long-standing partnership between Norad, the Norwegian Agency for Development Cooperation (Norad) owner of the Research Vessel (R/V) Dr. Fridtjof Nansen on behalf of the Norwegian Ministry of Foreign Affairs, the Norwegian Institute of Marine Research (IMR), and the FAO Fisheries and Aquaculture Department (FAO FI).

ES2. Phase I of the EAF-Nansen Project ran for five years to 30 December 2011, with a Transition Phase of annual extensions until Phase II, which is expected to start in 2016 with the delivery of a new R/V Dr. Fridtjof Nansen. The Project has three activity Pillars; Pillar 1 for EAF-specific activities led by the Project Coordination Unit (PCU) based in Rome with FAO FI, Pillar 2 for the R/V surveys and Pillar 3 for the research cruise related scientific services, both organized by IMR.

ES3. The specific and immediate objective of Phase I was twofold:

(i) to provide the fisheries research institutions and management administrations in the participating countries with additional knowledge on their ecosystems for their use in fisheries management planning and monitoring - the core objective of previous Nansen Programs - and

(ii) to further the acceptance of the key principles of the Ecosystem Approach to Marine Fisheries (EAF) – developed by the FAO’s FI to implement the Code of Conduct for Responsible Fisheries (CCRF).

ES4. The Project target beneficiaries were primarily National and local Governments of participating countries; Existing and emerging regional organizations, such as the Benguela Current Commission and the South West Indian Ocean Commission; Officials in research institutions and fisheries management administrations; and other key stakeholders such as commercial and artisanal fishers, academic researchers and NGOs.

ES5. Phase I was designed to operate in partnership with Government institutions, Global Environment Facility (GEF) supported Large Marine Ecosystems (LME) projects in Sub-Saharan Africa, such as the Benguela Current (BCLME), Guinea Current (GCLME), Canary Current (CCLME) and Agulhas and Somali Currents (ASCLME), South Western Indian Ocean Fisheries Project (SWIOFP); other regional projects such as BENEFIT (Benguela Environment Fisheries Interaction and Training Project).

ES6. The final evaluation of Phase I was conducted by a team of three in July and August 2013. The team travelled to six African countries and met with a wide range of stakeholders, project partners and beneficiaries, with specific purpose to:

- Assess the Project achievements in terms of outputs and outcomes, and progress made towards contributing to the long term objective (impact), as well as any other factors affecting performance, positively or negatively; and

- Formulate recommendations on the thrust, scope, duration and approach of the second phase of the Project.
Key findings and conclusions

ES7. The project has delivered groundbreaking progress to the adoption of the CCRF through a participatory process to formulate Fisheries Management Plans. Phase I was found to be in line with the Norwegian Development Policy objectives, with FAO Strategic Objectives and to respond to FAO’s Member Countries demand for support to implement the EAF. Overall, the Project Phase I has been highly relevant and delivered satisfactory outcomes, although not equally across implementation pillars or beneficiaries. Possible reasons behind the variation in the results delivered by the mid-2013 through Pillar 1 (EA-FMPs) and Pillar 2+3 (research cruises and scientific results) were examined in detail leading to five recommendations for Phase II.

Project Concept and Design

ES8. Phase I was conceived as a continuation of the Nansen Program, which provided R/V cruises, scientific services and capacity building for Research institutions and staff to provide scientific underpinning for fisheries management. Phase I introduced EAF activities to be delivered with FAO-FI, but without a strong logical framework to bind it to the previous NP. The Project components and expected outputs were slightly reorganized after the mid-term Review, but it remains that the Project’s design needs clarifications. The immediate objective, that “government staff are provided with additional knowledge” does not naturally link to the development objective, and does not relate to all listed beneficiaries involved through the EAF. The Theory of Change is adequate but only implicit. Activities are not logically or clearly linked between or within components, and their combined impacts are not translated in terms of results against its objectives. The recommendations below aim to contribute to a comprehensive formulation exercise for Phase II, that will take account of changes in the capacity and demands of beneficiaries and partners, and that will establish clear connections between activity pillars.

ES9. The initial budget was too low for both the FAO-EAF PCU and IMR-Scientific services. FAO-EAF activities were delayed by more than a year. IMR also experienced problems from the translation of projected R/V Operating costs (VOCs) incurred in NOK into US$ using a fixed rate, which increased its exposure to currency fluctuations.

ES10. A small PCU and the Research coordinator from IMR based in FAO FI in Rome make up the three-person project management team. Institutional arrangements for Project steering and delivery were adapted over the course of Phase I and found to have performed well overall. Project management of the Tripartite Agreement between Norad, IMR and FAO through annual coordination meetings supplemented with semi-annual meetings most years, provided very effective monitoring arrangements and a very effective coordination between the three parties. The Evaluation found the project management from both FAO and IMR to be highly efficient despite repeated challenges from co-financing partnerships and budgeting arrangements. Although initial budgets for the FAO-PCU and IMR Scientific Services were increased in 2007, the Evaluation found both teams to have been under-staffed during Phase I, limiting the Projects delivery capacity. This was compensated in part FAO FI staff from the EAF program and teams from the IMR CDCF and Vessel Operations in Bergen who provided significant additional support for the project management and implementation.

Partnerships and R/V co-financing

ES11. The Project forged two types of partnerships, co-financing partnerships and Project delivery partnerships. Generally co-financing partnerships with short-term projects have a limited time-span and are found to be unlikely to last beyond Phase I and are therefore of limited sustainability. Partnerships to co-finance the costs for R/V surveys and associated scientific services need to be based on long-term higher-level institutional partnerships. A recommendation is proposed to this effect.

ES12. Phase I introduced a co-financing of survey costs (VOC, and associated services) by the countries, based on partnerships with the Large Marine Ecosystems (LME) projects themselves to be financed by the Global Environment Facility (GEF) around Africa. At the time this was a promising
opportunity to strengthen regional scientific input into the management of regionally shared fisheries resources. In the event however, apart from the BCLME, which evolved into a regional institution - the Benguela Current Commission (BCC) - partnerships with short-term projects weakened the EAF-Nansen Project through delays (CCLME) and discontinuity (project problems for the GCLME and natural termination for ASCLME and SWIOFP). In practice, the project was initiated without firm co-financing commitments for 50% of R/V survey costs. In the event Norad provided additional funds, but the Project’s financial planning was found to be poor and the necessity to secure co-financing imposed additional administrative costs and inefficiencies for IMR and for FAO. Delivery was also affected resulting in a break in the time series of Canary Current small pelagics annual survey data collected steadily for several decades.

ES13. In Phase I and the transition phase, the Project has worked tirelessly and been very effective at developing and strengthening partnerships at pan-African, sub-regional and national levels. Partnerships initiated in Phase I with NEPAD and RFBs are very likely to endure into Phase II and beyond. African Regional Fisheries Bodies (RFBs) are becoming stronger and gaining recognition, in part from the sustained support of the Project’s partners, and a growing pan-African coordination. It will be important for the Project to gain strength from these changes and help strengthen regional partnerships by mobilizing financial partners at that level (Recommendation 1).

ES14. The sustainability of implementation partnerships at the fishery level will have to be judged (and therefore closely monitored) through the NTGs’ implementation of the policy and EA-FMPs initiated during the first Phase of the Project. At this time (August 2013) a detailed study of the EA-FMP under development gives a variable prognostic from a good chance of existing beyond the Project duration to a very limited likelihood to remain functional once the Project’s support stops. The evaluation found the current level of achievement of EA-FMPs to be good and made constructive criticisms on their current potential for implementation and likely positive environmental impact on the fishery.

**Ecosystem Approach Fisheries Management Plans (EA-FMPs)**

ES15. Project delivery and outcomes for the FAO-EAP Pillar were found to be either good or adequate overall, with some variation between countries, components and activities. Arrangement to further the EAF into regional and national policy processes were highly relevant and mostly lead to excellent outcomes, such as the project setting up EAF Regional Task Groups (RTGs) in Regional Fisheries Bodies. Phase I supported 15 countries to prepare EA-FMPs; some of which are already formally adopted and others are to be adopted by the end of 2013. The evaluation found the process based on Ecological Risk Assessment (ERA) to be highly relevant, and its overall effectiveness to be good. The “quality” of EA-FMPs examined in detail by the Evaluation was found to vary widely but to be adequate overall.

ES16. For Phase II the challenge will be for the Project to support the countries’ effort towards EA-FMP implementation and cycle of monitoring, evaluation and revision; and for the Nansen surveys to demonstrate the importance and modalities of connections between marine ecosystem science and EAF. To address these challenges, the capacities of both FAO-PCU and IMR core teams need to be reinforced (Recommendation 2).

**R/V needs assessment and R/V Dr. Fridtjof Nansen cruise plans**

ES17. Planning for the R/V Dr. Fridtjof Nansen surveys and associated services, given the complexities from the co-financing model, has been very adaptive and resilient. However, the combined effectiveness of the R/V surveys and scientific services in Phase I was reduced by two seemingly chronic problems that will be very important for the Project to resolve, the R/V communication with survey countries and Cruise reports that do not address the countries expectations. Therefore overall, the effectiveness of the R/V Dr. Fridtjof Nansen surveys and associated services in Phase I is only rated adequate. These problems have to be addressed through improved planning of research cruises, increased capacity building and more targeted communication (Recommendations 3 to 5).
ES18. The co-financing of VOCs by coastal states of R/V Dr. Dr. Fridtjof Nansen Research Cruises was an important determinant of vessel activities in Phase I. The Evaluation team contends that, prior to Phase II, national and regional needs have to be assessed for fisheries resource assessment and scientific advice to managers and policy makers, as well as for marine ecosystem research and baseline and monitoring research vessel surveys. This will provide a solid basis to establish medium-term scientific cruise programs and clear links with the EAF activities upon which to base future co-financing partnerships (Recommendation 3).

Capacity Development

ES19. Capacity building activities in support of the EAF were found to be generally excellent, despite the very small teams at FAO-PCU. The evaluation commends the variety and high quality of the Project’s capacity building activities at national and regional. The Project IMR team also provided training to nearly 600 participants on board R/V, which has been very highly valued by the participants. This would have been an excellent achievement if the R/V cruises had been more evenly spread over time and between regions and countries. Overall the evaluation found the effectiveness of on-board training reduced by the cruise plans imposed by the co-financing model, which favored countries and fisheries that already had higher capacities, and scored it as inadequate.

ES20. The Project has developed new and highly promising activities to implement the EAF process, which have revealed a very large demand for continuing support. In particular, it will be important to devise capacity development strategy for Phase II that could develop the partnerships with African educational providers (Universities, colleges and schools) initiated in the transition period through new Project activities linked, for example, to Norad’s programs to support higher education and research cooperation (NORHED and NansClim, Recommendation 4), in order to provide additional support and arrangements are to analyze samples and improve reporting for ecosystem surveys.

Communication and Contribution to Normative products

ES21. Despite a delayed start for the development of most EAF communication activities, including publication of EAF-Nansen reports, e-Newsletter and the website development, the Phase I component 5 has produced very good material. Some elements need updating and developing, but given the limited staff and resources available, communication output were found to be good and highly relevant. Already in Phase I, the Project has very significantly contributed to enhance FAO’s normative contributions through its field-testing and input into the development of the EAF toolbox.

ES22. Gender issues are considered explicitly by the Project EA-FMP process, which is based on the ERA approach that allows for gender and social issues to be adequately covered. However, it will be important for the Project to analyze and report on the place and role of women in the Project.

ES23. Recommendation 5 is to devise a Project Communication Strategy. The challenge for Communication activities in Phase II will be to increase the Project visibility, improve its delivery to fisheries managers and Policy makers, and for the Project to demonstrate its dual purpose (EAF and research surveys) as strengths, to develop strong links with African institutional partners and programs at regional and at national levels, and to connect with the communication materials of the EAF Toolbox and of scientific partners.

Gender mainstreaming

ES24. Although the EAF, which is central to the Project Pillar 1, requires attention to social aspects and is an important aspect for Norwegian support (see Norad-Evaluation, 2009), there is no explicit attention to gender mainstreaming in the project document or logframe. Gender issues are considered explicitly by the Project EA-FMP process but there is nevertheless a need for a more systematic inclusion of gender issues in the Project’s programming documents, activities and outputs. This leads to Recommendation 6.
Recommendations

Recommendation 1: For Norad and FAO FI

- Devise co-financing arrangements for the R/V Dr. Fridtjof Nansen cruises directly with institutional financial partners such as GEF in association with the user community of RFBs, RFMOs and environmental protection agencies. This effort could be coordinated and overseen at African Union level recognizing that AU-IBAR and NEPAD are developing the new Pan-African Fisheries policy framework and strategy. Secretariat for the mechanism could be provided by NEPAD, thereby strengthening its mandate from CAMFA and the work of the new Fisheries Policy Think-Tank and Working Groups.

ES25. The MFA/Norad and IMR need to set up a similar working party to establish links with other Norad-funded programs (Oil for development, bilateral, NorHed, continental shelf initiative) that would institutionalize their co-financing support for research vessel deployment over five-year periods.

ES26. Some countries and RFBs are organizing co-financing partnerships to develop and implement policy revisions and EA-FMPs with other donor-funded projects. These examples need to be showcased.

Recommendation 2: For Norad

Increase capacity of the PCU to support the countries’ process of EA-FMP implementation and revision, in particular relating to fisheries governance and management, including policy, legal and institutional aspects; and to continue its support of a marine ecosystem scientist for the Transition Phase into Phase II.

Recommendation 3: for Norad/IMR/FAO Regarding the R/V Dr. Fridtjof Nansen

Commission (possibly through NEPAD PAF) an in-depth assessment of current and forward needs and capacity in R/V surveys, scientific services and skills at country and regional levels; on the basis of which

- Establish a 5-year R/V Dr. Fridtjof Nansen survey and capacity building program, based on the Project’ objectives and a coherent science plan in support of the EAF, with a 2 year rolling R/V cruise plan, and

- Increase the Project’s support to national and regional research vessels, and communicate the importance and synergies between R/V Dr. Fridtjof Nansen and coastal research vessels for EAF; from which

- Convene 6-months forward planning meetings with RFBs including a specific forward communication schedule for Fisheries Ministers, Fisheries Directors and Research Institutions; and finally

- Develop the activities and identify the capacities necessary to i) Produce prompt cruise report summaries for managers, including identification of data collected and planned analyses, training provided, expected land-based activities and inputs to EAF; ii) Provide clear estimate of capacity needed on board, in-country and through collaborations, for countries to obtain full benefits of all cruises and particularly for ecosystem baseline and monitoring biodiversity cruises.

Recommendation 4: for the Project
- Devise, with Norad’s support and in collaboration with PAF, RFBs and MCs, a Capacity Building Strategy that would consider a wider base of Norwegian and African partners. The strategy would also promote exchanges of information, experience and expertise between countries in relation to the promotion of EA-FMP. The Strategy implementation, and its impacts would be monitored through records kept by FAO-PCU and IMR, and published annually through Capacity Building summary reports for EAF on-shore and sea going activities.

**Recommendation 5: to Norad/IMR/FAO:**

- Devise a Communication Strategy and support a full-time Communication staff (possibly based with NPCA or a Regional Fisheries Body) to implement it.

**Recommendation 6: To FAO and the Project Team**

- Consider gender explicitly in Phase II of the project. The logical framework will need to be ‘engendered’, with detailed indicators to illustrate the extent of women’s voice in the project’s local, national and regional activities and fora.

ES27. This could be done also through an additional Project activity, for example delivered in collaboration with experienced Norwegian professionals, and in Partnership with NEPAD-Program for African Fisheries (PAF), to showcase innovation in terms of best practice and planned approach adapted to a variety of fisheries-specific situations in African MCs.
1. **Introduction**

The EAF-Nansen Project “Strengthening the Knowledge Base for and implementing an Ecosystem Approach to Marine Fisheries in Developing Countries” stems from a long-standing partnership agreement between Norad, on behalf of the Norwegian Ministry of Foreign Affairs, the Norwegian Institute of Marine Research (IMR), and FAO. The three partners had first signed an agreement for a Nansen Program (NP) in 1971, leading to the first marine research vessel (R/V) “Dr. Fridtjof Nansen” starting marine scientific surveys in the Indian Ocean and around Africa in February 1975 (Hallenstvedt, Ellis and Watson 1983).

1.1 **Background, scope and purpose of the evaluation**

The first phase of the EAF-Nansen Project ran for five years from 15 December 2006 to 30 December 2011. Initial funding provided by Norad was 150 million NOK. At the end of Phase I and after three addenda to the Tripartite Agreement that brought another 62.4 million NOK directly from Norad, the total budget was 212.4 million NOK. The overall cost of the first phase of the project (up to Dec 2011) is 283.5 million NOK. This includes cost sharing of the R/V operating costs from regional and national partners, but does not include FAO’s own contribution, especially that of the Fisheries Department staff to the development of the EAF normative documents and in country capacity building.

At the Semi-Annual Meeting in October 2010, Norad expressed its willingness to support the continuation of the EAF-Nansen Project beyond 2011, with an expanded research program, to include climate change-related issues and biodiversity. FAO was requested to prepare a Project document for the transition phase (2012-2014) leading to the second phase. For this transition period, the immediate objective was modified to “Staff of the fisheries research and management administrations in the participating countries are sustainably managing their fisheries” and the logframe was revised accordingly. The revision mostly consisted of reorganizing the outputs, including making the link with expected outcomes, while emphasizing the capacity-building of key stakeholders in promoting EAF for improved governance of the fishery sector. In 2012 the Norwegian government and Parliament agreed to the construction of a new research vessel for an estimated NOK440 million, expected to be ready in 2016.

4. The Project Document prescribed an evaluation in the Project’s fourth year (i.e. 2010) “in order to review needs, implementation and operations modalities, for the continuation of the Project”. The mid-term review carried out in 2009 noted initial delays of about a year for some activities, pushing the date back for the Phase I final evaluation, which Norad requested at the October 2012 semi-annual meeting. The findings and the main recommendations of the evaluation are expected to feed into the preparation process of the next phase of the Project.

5. The Phase I evaluation reported in this document was carried out between 1st July and 25 August 2013, its Terms of Reference are given in Annex 1.

6. The specific purposes of this final evaluation of Phase I were to:

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1 Approximately 26, 11 and 48 million USD respectively, using an average conversion rate of 5.75 NOK/USD for the 5 years.
• Assess the Project achievements in terms of outputs and outcomes, and progress made towards contributing to the long term objective (impact), as well as any other factors affecting performance, positively or negatively; and to
• Formulate recommendations on the thrust, scope, duration and approach of the second phase of the Project.

1.2 Evaluation methodology

7. The evaluation was carried out by a team of three experts (see Annex 2) bringing together a diversity of perspectives and experiences independent of the teams responsible for planning and implementing the EAF-Nansen Project. The Evaluation Team travelled between 3rd July and 4th August 2013 and throughout maintained close liaison with the Office of Evaluation (OED) of FAO and with the Project Coordination Unit (PCU) based in Rome. The mission’s timetable is given in Annex 3.

8. The Team analysed a large number of documents used or produced by the Project (Annex 4) and in particular:

• **Project management:** The initial Project Document with addenda, minutes of the annual and semi-annual Tripartite meetings, Steering Committee, Regional and National Task Groups meetings and other progress reports, the mid-term review report (2009) and management response;
• **Reference documents:** Norway’s development policies documents; FAO Past and future Strategic Objectives and relevant normative documents, in particular the Code of Conduct for responsible Fisheries (1995) and the Technical Guidelines for Responsible Fisheries. EAF No. 4, Suppl. 2 (2003) and Human dimensions No. 4, Suppl. 2, Add. 2. (2009), and Report of the Workshop on the Toolbox for applying the Ecosystem Approach to Fisheries (2008);
• **Project output:** R/V full (from IMR) and summary (from Project website) Cruise reports, technical workshop, regional and country training and progress reports, and Fisheries Management Plans (FMP);
• **Project communication:** Project website, newsletter (e-Approach) and other materials and publications available to download;

9. The Evaluation Team adopted a consultative and transparent approach through semi-structured interviews with the Project’s key stakeholders to record and take their perspectives and opinions into account. Stakeholders met include:

• Norad in Norway and its representatives at country level;
• Institute of Marine Research (IMR) in Bergen, Norway;
• FAO staff in HQ, including the Project Coordination Unit (PCU) and the Project Task Force Members based in Rome;
• FAO staff in the Regional, Sub-regional and Country Offices in the visited countries, the National and Regional Task Groups members;
• Senior managers and technical staff in the national institutions in participating
countries;

- Senior managers and technical staff in partner organizations.

10. In addition, the Team had the opportunity to attend two important meetings, namely: i) the 15th Consultative Committee Meeting on Large Marine Ecosystems (LMEs) in IOC-UNESCO, Paris, on 10-11 July 2013, which offered the opportunity to interact with a high number of stakeholders and observe the relevance of the program at international level; and ii) a project Workshop attended by Directors of Fisheries, Project Focal Points and others from fisheries administrations and research institutions of the southern part of the CECAF region (Gulf of Guinea), held in Accra, Ghana on 15-19 July 2013, which brought together all 13 countries from the GCLME region.

11. The Team visited countries from the four LME regions to carry out direct in-depth analyses. Countries were selected for the Team to assess the Project’s work in different conditions including:

- Geographical and ecological context;
- Characteristics of the fisheries sector, including small scale and industrial, the importance of the sector to the national economies and in terms of livelihoods;
- Volume of resources allocated;
- Modality of partnerships with member countries;
- Stages of Project progress; and,
- Security issues and cost considerations for access.

12. On the basis of the criteria above, eight countries were selected as case studies for an analysis of the Fisheries Management Plan developed with the Project (EA-FMP):

- Senegal for the Canary Current area;
- Ghana, Sierra Leone and Gabon from the Gulf of Guinea area;
- Namibia in the Benguela Current area;
- Mozambique, Tanzania and Mauritius for the Indian Ocean.

13. The evaluation was conducted to make systematic and objective assessments of current or completed program activities, their design, execution and outcomes according to the Development Assistance Committee (DAC) guidelines for evaluation (OECD, 1991) and the United Nations Evaluation Group (UNEG) Norms and Standards. In particular, information collected between team members and across sources was triangulated as a way of validation, and analysed to support evidence-based conclusions and recommendations. The context provided by FAO strategic priorities and compliance of the Project with UN Common Country Programming Principles are discussed in section 2.

14. The Project was critically assessed through the internationally accepted evaluation criteria of relevance, efficiency, effectiveness, impact, and sustainability as presented in section 6. Key project descriptors were assessed for relevance and adequacy using a six-point scale system provided by the FAO-OED.\(^4\)

15. The evaluation tools were as follows:

\(^4\) 1. Very Poor/ no relevance at all; 2. Poor/limited relevance; 3. Inadequate/ little relevance; 4. Adequate/ some relevance; 5. Good/ high relevance; 6. Excellent/ very high relevance; and NA. Not Applicable
• Desk review and analysis of administrative, financial and technical reports, applications, strategy documents and past evaluations;
• Individual semi-structured interviews and group meetings with key stakeholders (cf. list above);
• A questionnaire survey to the Focal Points in participating countries;
• Analysis of the Project website content structure, strengths and weaknesses.

16. The evaluation report is structured in a further six sections to provide the Project context and characteristics. The evaluation results are then presented for the Project implementation process, its outputs and outcomes and its results. Recommendations are made for the formulation of the Project’s Phase II planned to start in 2016.

1.3 Limitations

17. In the short time available, the Evaluation Team was not able to contact directly all 31 sub-Saharan African countries participating in the Project or to meet all resource persons in the five countries visited. Two of the eight case study countries selected could not be visited due to circumstances beyond the team’s control (in both cases key stakeholders in the countries were travelling) – but this limitation was addressed by meeting stakeholders in Cape Town (Namibia) and in Accra, Ghana (Gabon). Thus different approaches and tools were used to reach out to as many key stakeholders as possible in the time available.

18. The Evaluation Team noted important changes currently taking place in FAO, in particular on taking office in 2012, the new Director-General launched a wide-ranging initiative to modernize and transform the Organization and progress the review of its Strategic Framework (C 2013/7 38th Session FAO Conference 15-22 June 2013 - FAO 2013). However, the extent of future Departments and Services reorganization and the nature and pace of increased decentralization were not clear by the time the evaluation report was due.
2 Context of the Project

19. Norway’s development cooperation is based on its own history as a maritime nation, its current policies and expertise in fisheries and marine environmental management, and directly involves its own ministries, research and education institutions. Norway’s support of the EAF-Nansen Program is guided by its Foreign Development policy, which fully integrates its environment, social and sector development policies and considers the sustainability of the natural resource as a key contributor to food security, employment and regional development.

20. The breadth of Norway’s support is also a feature of the EAF-Nansen Project, which includes cooperation ranging from policy formulation, fisheries management, ecosystem assessment and monitoring, research vessel cruise planning and capacity building. In addition to the activities planned in the EAF-Nansen Project, developing countries may express demands for support to Norwegian embassies that will involve the Ministry of Foreign Affairs (MFA), Norad and the Ministry of Fisheries and Coastal Affairs and other ministries and their agencies, such as IMR, the national Fisheries Research Institute, in an integrated manner.

21. In FAO, the 25th session of the Committee on Fisheries (COFI) in 2003 provides the initial context for the Project, when developing countries expressed their concern that, without technical assistance, the capacity required to make the EAF operational would contribute to broaden the gap between developing and developed countries.

22. Mandated by COFI, FAO has developed technical guidelines on the Ecosystem Approach to Fisheries (EAF) based on the Code of Conduct for Responsible Fisheries (CCRF, see FAO-OED 2012), in total coherence with its Global Goals and Strategic Objective C “Sustainable management and use of fisheries and aquaculture resources”.

23. In order to address FAO member countries’ (MC) concerns, Norad extended the scope of the NP to support FAO’s specific mandate in 2006 to operationalise the Ecosystem Approach to Fisheries (EAF) and renamed it “Strengthening the Knowledge Base for and Implementing an Ecosystem Approach to Marine Fisheries in Developing Countries” shortened to “EAF-Nansen”, with an initial focus on sub-Saharan Africa (Norad EAF-Nansen, 2006).

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5 English translation provided by Norad, see http://www.regjeringen.no/nb/dep/fkd/dok/regpubl/stmeld/2012-2013/meld-st-22-20122013/12/2.html?id=718732
3 Project concept and design

3.1 Concept

24. The EAF-Nansen Project is a follow-up to earlier projects/programs in a partnership involving FAO, Norwegian Agency for Development Cooperation (Norad) and the Institute of Marine Research (IMR), Bergen, Norway on assessment and management of marine fishery resources in developing countries. The EAF-Nansen Project offers an opportunity for 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. IMR is providing ship-based research and training through R/V Dr. Fridtjof Nansen to build technical capacity and acquire scientific knowledge on these countries’ marine ecosystems for their use in planning and monitoring of marine resources. The Project contributes to building the capacity of national fisheries management administrations in ecological risk assessment (ERA) methods to identify critical management issues and in the preparation, operationalization and tracking the progress, and implementation of fisheries management plans consistent with the ecosystem approach to fisheries.

25. A Tripartite Agreement, between Norad, IMR and FAO governs the Project (EAF-NANSEN, 2006). Norad (also the R/V owner) provides the core financing and FAO executes the Project with the support of IMR for the operation of the R/V Dr. Fridtjof Nansen and scientific services.

26. There was no formal identification or formulation mission for the Phase I of the EAF-Nansen Project. The R/V is an important tool in the Project, carrying out marine resources surveys in cooperation with FAO. Just as the NP before it, the EAF-Nansen Project has a global outreach with an initial focus on Sub-Saharan countries in Africa. The R/V is Norwegian-registered but uses the UN flag as a house flag to facilitate movement across jurisdictional boundaries.

27. The Tripartite Agreement fitted within FAO’s Framework Agreement on Cooperation with the Norwegian Ministry of Foreign Affairs (MFA) dated 30 December 2003. The Project simply added to the previous Nansen Program (NP) a specific support for a team based at FAO to help developing countries to fulfill their commitment towards the implementation of the Ecosystem Approach to Fisheries.

3.2 Design

28. In the logical framework annexed to the Tripartite agreement, the long-term development objective of the Project was to “strengthen regional and country specific efforts to reduce poverty and create conditions to assist in the achievement of food security through development of sustainable fisheries management regimes and specifically through the application of the EAF in a number of developing countries at global level, with an early emphasis on Sub-Saharan Africa”.

29. In Phase I (2006-2011), the immediate objective was:“(i) to provide the fisheries research institutions and management administrations in the participating countries with additional knowledge on their ecosystems for their use in planning and monitoring, and (ii) to further the acceptance of the key principles of the EAF that
• Fisheries should be managed to limit their impact on the ecosystem to an acceptable level;
• Ecological relationships between species should be maintained;
• Management measures should be compatible across the entire distribution of the resource;
• Precaution in decision-making and action is needed because the knowledge on ecosystems is incomplete; and
• Governance should ensure both human and ecosystem well-being and equity”.

30. The target beneficiaries were:

• National and local Governments of participating countries;
• Existing and emerging regional organizations, such as the Benguela Current Commission and the South West Indian Ocean Commission;
• Officials in research institutions and management administrations; and
• Other key stakeholders such as commercial and artisanal fishers, academic researchers and NGOs.

31. The EAF-Nansen Project partners have included:

• Government institutions;
• Global Environment Facility (GEF) supported Large Marine Ecosystems (LME) projects in Sub-Saharan Africa and globally, such as the Benguela Current (BCLME), Guinea Current (GCLME), Canary Current (CCLME) and Agulhas and Somali Currents (ASCLME), South Western Indian Ocean Fisheries Project (SWIOFP); and
• Other regional projects such as BENEFIT (Benguela Environment Fisheries Interaction and Training Project); as well as
• Other projects and programs interested in collaborating on and/or contributing to one or more of the EAF Project components.

32. The immediate objective, that “government staff are provided with additional knowledge” does not naturally link to the development objective, and does not relate to all listed beneficiaries, fishers in particular, who are involved in the EAF. The Theory of change underpinning the project, which is clear from the Norwegian Foreign Development Policy, and prevails in the EAF, is only mentioned in the development objective. It is adequate but only implicit (score 4).

33. The current programming logic is weak in several respects. It does not link activities within and between components clearly, and indeed the majority of stakeholders met by the evaluation could not establish a link between the R/V and the FAO EAF activities. Without a result-based framework, the logframe does not translate the activities’ combined impacts in terms of development or immediate objectives.

34. The logical framework of Phase II will need to follow the new FAO project cycle guidelines (FAO, 2013, in particular the Right to Food6, to Decent Work7 and five programming principles - human rights-based approach, Gender equality8, environmental

6 See http://www.fao.org/righttofood/
7 See http://www.fao-ilo.org/
sustainability, results-based management, and Capacity Development\(^9\)), and its activities and indicators will need to be ‘engendered’\(^{10}\). It will need to organize the diversity of program components and activities to follow the logic that has been developed and proven in Phase I, and to translate the combinations into results and expected development impacts and indicators that can be assessed and monitored.

35. Consistent with the Internal Mid-term Review (FAO-EAF Nansen, 2009), the activities were organized into five components and six outputs corresponding to different types or stages of intervention (Table 1). They were slightly reorganized further at the end of Phase I for the transition phase and are now grouped into three Outcomes that are more result-oriented, but the lack of structure still gives the impression of a “shopping list” of activities (Annex 5). Four activities (1.6.1, 1.10.1, 2.1.4 and 3.2.1) were also added that refer explicitly to marine ecosystem research with a view of developing early warning systems of environmental change and to the communication of climate change effects on fisheries.

### Table 1. Phase I Components and outputs

<table>
<thead>
<tr>
<th>Component 1: EAF Policy &amp; FMPs</th>
<th>Output 1: Policies formulated consistent with EAF principles at national and regional levels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Output 2: Revised Fisheries Management Plans (FMP) that include EAF considerations developed</td>
</tr>
<tr>
<td>Component 2: Surveys - Ecosystem Assessment &amp; Monitoring</td>
<td>Output 3: Procedures and methods for assessment and monitoring of key ecosystem properties established, including the development of standardized data collections, sampling methods and appropriate sets of scientific indicators</td>
</tr>
<tr>
<td>Component 3: Capacity Building</td>
<td>Output 4: Increased capacity at scientific and management level in partner countries on EAF approaches</td>
</tr>
<tr>
<td>Component 4: Support to Regional Research Vessels</td>
<td>Output 5: Advice on use of national or regional vessels for EAF related research including coordinated regional coverage by local or other vessels</td>
</tr>
<tr>
<td>Component 5: Planning &amp; Dissemination</td>
<td>Output 6: Project planning and dissemination of information</td>
</tr>
</tbody>
</table>

36. The logical links between the five components, six outputs and the operational EAF approach are given in Figure 1, from the Project Document annexed to the Tripartite Agreement (2006). The EAF is the process that leads to improved (if they exist) Fisheries Management Plans (FMPs), and the FAO-EAF activities were designed to support the process’ every step and support all stages of fisheries management development, in order to accommodate the variety of needs found in the 31 beneficiary countries.

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\(^{9}\) See http://www.fao.org/fileadmin/user_upload/capacity_building/Summary_Strategy_PR_E_01.doc

37. For the purpose of analyzing budgets and delivery the original five components may be grouped into project management (output 6) and three intervention pillars each with different budgets, characteristics and constraints as follows:

- **Pillar 1** - Activities in support of the EAF led by the EAF-PCU and FAO correspond to outputs 1 and 2, part of output 3, and output 4,
- **Pillar 2** - R/V Dr. Fridtjof Nansen surveys by IMR (part of output 3), and
- **Pillar 3** - Scientific services provided by IMR (output 3 and output 5).

38. An important shortcoming of the components/output groupings in the initial document, and in the version rearranged into outcomes for the transition phase (Annex 5), is the absence of strong links between activities to ensure that elements are brought together in time and place between the three intervention pillars.

39. The rearrangement of activities into outcomes for the transition has addressed some of the initial weaknesses of the logical framework. Capacity building, which has been at the core of the EAF-Nansen Project, is no longer presented as a separate component but is crosscutting (as it was presented in Figure 1). However, the details of activities within outputs and within outcomes weaken the logic of the transition program document. It gives an impression of micro-managing activities, and does not clarify how delivery is coordinated between pillars, which is crucial for some crosscutting capacity-building activities to come together. Overall, the project design is not sufficiently clear (score 3).

![Figure 1. Phase I components to operationalise the EAF (FAO 2006 Project document)](image-url)
3.3 Finance planning and budgets

Cost-sharing arrangements

40. The total budget foreseen for Phase I over the five years was US$46 million, the same as that of the previous NP, with some allowance for natural costs increase. But Phase I introduced an important change from previous NP for its financial model, with more than half of the Project budget to be sourced from co-financing partners. Foreseen cost-sharing arrangements are given in Table 2. The Government of Norway pledged to contribute NOK150 million (approx. US$26 million) over the five years through the Tripartite Agreement with FAO and IMR. A share of NOK75 million (approx. US$13 million) was given to FAO for the capacity building activities, including IMR scientific services, and the same amount directly to IMR towards the R/V costs.

41. Apart from a Project proposal from FAO to the GEF, potential co-financing partners included the Norwegian-funded science project within the BCLME (including the BENEFIT project through the Norwegian embassy in Pretoria, co-funded with Germany for the environment part), three other LME projects (CCLME, GCLME and ASCLME), the SWIOFP (all GEF funded) and projects with beneficiary countries directly (also mostly supported through Norwegian bilateral programs, see Section 5.5 Partnerships).

42. In total less than half of the overall budget of US$46 million was assured in the Project Tripartite Agreement (2006). The original plan was to attract co-funding for “any of the components” but the most costly activities (Pillars 2-surveys VOC with 3-scientific services) were also those in need of greatest forward planning. The FAO budget from Norad covered half of the IMR Scientific services, with the provision that allocations between budget lines [of Pillars 1 FAO-EAF and 3 Scientific services] could be flexible to reflect agreed work plans.

43. Annual budgets were split between FAO and IMR. IMR is in charge of the R/V Dr. Fridtjof Nansen maintenance and operations. Half of the vessel operations costs (VOC) was funded by Norad (Tripartite Agreement Art.3 Vessel Services Payment, initially estimated at NOK75 million including IMR operations management fees) to be disbursed directly by Norad to IMR. The other half of the surveys VOC (Pillar 2) was to be sourced by FAO as executing agency, to “obtain commitments for the financing of the balance from other donors and partners”. Co-financed VOCs would normally be invoiced by IMR directly to the partners, but as the arrangement stipulates that for each survey a Memorandum of Understanding (MoU) stating the technical and legal responsibilities of each of the parties is to be signed by FAO and the partners, it is therefore up to FAO to submit to the partners the invoices along with the final survey report of the survey. In addition if the partner VOC portion were paid through FAO, administration would be charged to Partners at cost. Compared with the previous NP, co-financing introduced additional financial administrative costs and transaction inefficiencies for IMR and for FAO, with payment delays and large exchange rate contingencies. However, co-financing contributed to the establishment of partnerships and created stronger commitments and involvements from some countries and partners.

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11 Norad owns the R/V Dr. Fridtjof Nansen
12 Some payment delays were also attributed to delays in the submission of final survey reports by IMR.
44. Foreseen co-financing partners are reviewed in the annex to the Tripartite Agreement (Annex II). Cost sharing was envisaged for the surveys (Pillars 2 and 3) on the basis of several meetings held with the LME projects in 2004 and 2005. A request for GEF support of US$6 million was also submitted by FAO in February 2006 to “contribute to the two components relating to EAF Policy and Management and Capacity building [Pillar 1], but also to the component on Ecosystem Assessment and Monitoring, sub-component other EAF Research. [Pillar 3]”.

Table 2. Cost sharing contributions foreseen in 2006 and by end of 2011

<table>
<thead>
<tr>
<th>Potential donors</th>
<th>US$ (million)</th>
<th>end 2011*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The Government of Norway through FAO (towards Pillar 1, 2 and 3)</td>
<td>11</td>
<td>12.29</td>
</tr>
<tr>
<td>1. The Government of Norway through IMR (towards Pillar 2)</td>
<td>11</td>
<td>20.55</td>
</tr>
<tr>
<td>1. The Government of Norway through MCs (Pillars 2 and 3)</td>
<td>-</td>
<td>7.24</td>
</tr>
<tr>
<td>2. UNDP/FAO GEF Proposal (Pillars 1 and 3)</td>
<td>6</td>
<td>-</td>
</tr>
<tr>
<td>3. Partners (BENEFIT and LME’s - Pillars 2 and 3)</td>
<td>17</td>
<td>7.66</td>
</tr>
<tr>
<td>4. FAO (in kind)</td>
<td>1</td>
<td>&gt;1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>46</strong></td>
<td><strong>&gt;49.3</strong></td>
</tr>
</tbody>
</table>

* Using a rate of NOK5.75/US$, figures from IMR with final 2011 updates from FAO- EAF Nansen PCU.

45. There had been one instance in the NP in 1975-76 when the R/V had been assigned to the UNDP/FAO Indian Ocean Program on a cost-sharing basis, but a systematic co-financing of vessel activities through regional and national projects was new. At the time of the Tripartite Agreement “implementation on a cost sharing basis in relation to the operation of the R/V Dr. Fridtjof Nansen [was made] with the assumption that signed in EAF Project partners such as the GEF projects associated with the Large Marine Ecosystems [LME] around Africa would make use of the vessel under joint programs with the EAF Project”. The co-financing model was based on a high-level on-going process to secure partnerships. In May 2005 the leaders of the LME projects signed a letter of intent to use the Dr. Fridtjof Nansen in the 5-year period 2007-2011, and the LME (Africa) project documents from this period included co-funding budget lines for vessel use with a nominated day rate of US$ 10 000 and with co-funding from Norway.

46. The risk attached to possible difficulties in securing co-financing is mentioned in the Tripartite Agreement (Article 2 - section 2.2 Financing from other donors and partner; Annex I – Project Summary) and in the project document annexed to it (Part II: Project design). The main text refers to the time it may take to set up arrangements with donors and partners, and the project document refers to an uncertain “degree of support given by the various individual officers involved”. The risk of work plan revisions by foreseen partners was also recognized, and associated adjustments of foreseen survey requirements and lesser need for the use of the R/V Dr. Fridtjof Nansen, and ensuing possible shortfall in funding under cost-sharing arrangements.

47. In response to a possible co-financing shortfall, par. 72 of the Agreement makes it a “major prerequisite” that the R/V Dr. Fridtjof Nansen and its crew are made available to the

13 T. Stromme, personal communication.
project with “sufficient funding in advance to cover such costs for at least the two first years of the project”. Programming flexibility in the early years and larger disbursements from Norad are also mentioned. In the event, Norad provided additional funds to FAO (Pillar 1), to IMR for the VOC (Pillar 2), through FAO to IMR for surveys co-financing (Pillars 2 and 3) to complement the planned surveys, and through FAO to IMR from other programs at country-level (Oil for Development, bilateral country assistance, including for surveys in Pakistan). Altogether, 42.5% of the VOC were sourced as co-financing, which is close to the initial target; However, when Norad’s support at country level is excluded, only 16% could be sourced from “projects and partners” instead of the planned 50% (Table 2).

48. The project was initiated without firm commitments for half of its budget, and even though Norad had foreseen some of the risks and repeatedly provided additional funds, the evaluation concludes that the project’s initial financial planning for the co-funding of VOC was unsatisfactory (score 2).
4 Implementation process

4.1 Project Management

49. FAO is the Executing Agency and has the overall responsibility for the EAF-Nansen project implementation (Tripartite Agreement 2006). The project is jointly delivered by the FAO Project Coordination Unit (PCU) housed by the Fisheries and Aquaculture Resource Use and Conservation Division (FIR) at FAO Headquarters in Rome, and by the IMR in Bergen.

50. Within FAO, the Marine and Inland Fisheries Branch (FIRF) is the Lead Technical Unit responsible for all programs and activities related to management and conservation of fishery resources, including mainstreaming biodiversity and ecosystem concerns in fisheries management through an ecosystem approach to fisheries. Two of its staff are the EAF-Nansen Project lead technical officer (LTO) and budget holder (BH), and spend most of their time on EAF activities. The BH chairs the EAF-Nansen Project Task Force (PTF), which consists of representatives of FAO units in areas of specialization covered by the Project (e.g. legal office, donor liaison, Fisheries officers based in FAO Africa regional offices). The PTF meets once a year and plays a small but important role in facilitating coordination within FAO.

51. The PCU was conceived as a very small team, with a full-time Project Analyst-Operations Officer and a Project Assistant. This greatly underestimated the resource needed to start the FAO-EAF Nansen specific activities and the Project had to be revised. As a result, the Project Officer appointed in July 2007 had to devote a significant amount of time in the Project’ first year to put together an addendum to the project documents to justify additional support from Norad. This delayed an effective project start by about more than a year, while other staff in the then FIMF (now FIRF) carried out some of the planned EAF-Nansen Project activities. A position for an Associate Professional Officer (socio-economist) was also foreseen in 2007, funded by other donors, but funding could not be raised and it was never filled. At full capacity, the PCU has currently three full-time staff – the Project Coordinator/EAF Advisor, the Project Analyst-Operations Officer, and the Project Assistant. A young professional provides support for general technical and communication activities and FIRF provides a secretary on a part-time basis. The PCU is a very small team and should be commended for its very high efficiency given the amount of activities delivered and output produced, the geographical spread of the Project, the high demand and small capacity of beneficiary countries, and the time consuming nature of EAF implementation activities.

52. At IMR, the Center for Development Cooperation in Fisheries (CDCF) is responsible for the management and delivery of R/V surveys (Pillar 2) and associated Scientific Services (Pillar 3). The CDCF is an umbrella organization within IMR that mobilizes expertise from Norwegian government Fisheries and Aquaculture institutions in support of projects and activities mainly funded by Norad and the MFA. A Letter of Agreement (LoA) between FAO and IMR describes the extent of the “Scientific services”. These include the support for a Cruise leader and a technician on board the R/V full-time (which mobilizes six IMR staff part of their time) and their travels, 2 additional person-months each for reporting and staff to maintain and upgrade the NANSIS database. The initial LoA was amended twice over during Phase I, in 2008 in particular to cover the joint development of a GIS system by IMR and

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14 The FAO does not keep analytical accounts of staff time spent per project.
FAO, and in 2010 to increase funding for survey time in Africa. The last amendment to the LoA was made only to facilitate the disbursement of the FAO funds for the survey time. The Project also supports a full-time Research Coordinator from IMR based with the PCU in Rome (ToR in Annex II) and who is primarily responsible for the R/V surveys. The Research coordinator is in effect the only person from IMR employed full-time by the project. The uncertainties brought by the co-financing model affected IMR most, and demanded great adaptability to ensure an efficient use of the R/V Dr. Fridtjof Nansen and provision of scientific services within relatively last minute cruise plans.

53. Altogether the FAO-EAF-Nansen PCU and IMR Research Coordinator based in Rome make up a small four-person project management team. For the project management and implementation, they are supported by the FAO FI staff from the EAF program, and by IMR scientific and Vessel Operations teams in Bergen. The Evaluation finds that the project management, which was repeatedly challenged by weak Project co-financing partnership and budgeting arrangements, has been highly efficient (score 6).

54. The Tripartite Agreement -Title IV stipulates Norad, IMR and FAO’s obligations, and responsibilities, with annual reports and Project meetings to discuss and as necessary approve:

- Progress, including results and fulfillment of agreed obligations;
- Provisional annual report and annual work plans for the following year;
- Provisional Financial Statements, EAF FAO and IMR annual budgets and
- Any issues of concern for implementation, e.g. risk management.

55. The Norad/FAO/IMR Annual meetings were supplemented with semi-annual meetings in most years, which provided very effective monitoring arrangements and structured a very effective coordination between the three parties (score 6). A review of the annual/biannual meeting minutes shows frank and detailed discussions involving all partners. The FAO-IMR LoA also had an annual meeting planned. It took place only twice (November 2009 and 2011), and bilateral FAO-IMR matters were otherwise catered for through the bi-annual tripartite meetings. There was no other monitoring and evaluation arrangement for Phase I, besides the mid-term review, which took place in June-July 2009, and the final evaluation presented here.

56. Management arrangements that existed for the preceding Nansen Program between Norad, FAO and IMR most probably helped to design Phase I arrangements, which were realistic and seamless for activities that existed before, essentially the R/V surveys and their coordination. However, with only a project analyst and an assistant, staffing for the PCU foreseen in the Tripartite Agreement was unrealistic. The problem was promptly identified in 2007 and the EAF advisor/Project Coordinator was recruited to remedy this. However, few EAF-related activities could be delivered in 2007, the Project first year. Understaffing of the PCU and delay until the coordinator was recruited (May 2008) led to delay of FAO-EAF activities by about a year and a half. Despite the delay in delivery identified in the mid-term review, it did not have further impacts on the five-year Project.

57. IMR scientific services were also programmed as a bare minimum. Compared with the NP, IMR had to cut back the research staff on surveys to a basic absolute minimum: one cruise leader and one senior technician due to financial constraints. Both FAO and IMR were able to make up for the initial budget restrictions to some extent, by mobilizing resources from other programs, funded by Norad (IMR) or otherwise (FAO), which is important to
note. However, the evaluation impression is that shortcomings in the initial financial arrangements have limited an otherwise very efficient management of the EAF-Nansen Phase I, and that they were never fully remedied. In order to make management easier and to improve delivery of the Project, realistic budgets must be established for Phase II, and co-financing for the VOCs must be channeled through more permanent institutional arrangements and a diverse portfolio of partners.

4.2 Financial resources management

58. Financial management arrangements for the EAF-Nansen Project are set out in the Tripartite Agreement (Title II). The initial budget estimate was US$46 million for the first five years (2006-2011), with an initial contribution from Norway of NOK150 million (equivalent to approximately US$26 million). By December 2011 (FAO EAF-Nansen PCU, 2013) the final expenditures were NOK 283,476,529 (equivalent to US$49.3 million), exceeding the initial estimate by 7%, a relatively small difference given large fluctuations in exchange rates (between 5.37 and 6.43 NOK/US$), increasing VOC as the vessel aged (Figure 2), and increasing world fuel prices.

Initial budget under-estimations

59. The remaining budget, to be managed by FAO covered both FAO-EAF activities (Pillar 1) and IMR scientific services (Pillar 3). However, it amounted to no more than the budget previously allocated to IMR scientific services (Figure 2) for the NP to 2006. With regard to the work planned, the evaluation found no explanation regarding what scientific services previously provided by IMR were supposed to be left out. Both FAO-EAF and IMR scientific services budgets were seriously under-estimated, given what could be considered as scientific fixed costs for research survey staff and scientific coordination, and the planned PCU in Rome, new and numerous EAF activities and the out posting of the IMR scientific coordinator in Rome.

60. In addition to the challenges posed by the co-financing model, some items in the project’s budget were not estimated in detail to correspond to the work plan proposed. It would seem that the budget planned for FAO-EAF activities was simply equal to half the budget that had been allocated to IMR-Scientific Services in the previous NP. As a result both FAO-EAF (Pillar 1) and the IMR-Scientific Services (Pillar 3) budgets were insufficient and had to be increased as soon as the project’s first year (2007). Budget planning was inadequate (score 3).

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15 Including partners part of the VOC
The initial budget for Phase I (NOK 150 million) was under-estimated, which was rapidly corrected by additional contributions from Norad (on behalf of MFA) through a series of addenda to the Tripartite Agreement. These concerned FAO-EAF activities, IMR scientific services and VOC in 2007 (NOK4 million) to enable IMR to purchase a multi-frequency echo sounder, VOC in 2010 (NOK 7.34 million) to cover the expenses for the vessel breakdown and higher fuel cost and VOC and IMR scientific services in 2011 (NOK 25.1 million). The changes were reflected accordingly in amended budgets of the FAO-IMR LoA, in 2008 for IMR to develop the Marine GIS system, in 2010 for additional vessel survey time, and in 2011 for IMR to strengthen its scientific team by adding an environment scientist on board the vessel to collect and analyze environmental and biodiversity data during the ecosystem surveys. Registered costs at the end of each year are given in Figure 2 (from IMR and PCU). They show a steady increase of VOCs reflecting increased fuel costs and maintenance costs from the R/V ageing (NFDS, 2010) and the budget adjustment for EAF activities allowing the recruitment of the EAF Advisor from mid-2008 and making up for the unsuccessful bid for GEF funding.

**FAO-EAF activities (Pillar I)**

Under-staffing during the first year – the project assistant post was only filled in September 2008) made the Project rely heavily on FIRF FAO staff and resources, probably much more than originally planned at least for the first two years. However, in the absence of an analytical accounting system to allocate FAO staff time to specific projects, it is not possible to estimate exactly how large the FAO-FI contribution has been. In any case it is estimated to be much more than the US$1 million written into the Tripartite Agreement budget.

The initial budget problem for the FAO-PCU could not be rectified by the flexibility allowed between FAO and IMR budget lines, given that both were under-estimated. The IMR
budget allowed only the bare minimum for scientific staff on the vessel and to coordinate the delivery of the surveys.

**IMR (Pillars 2 and 3)**

64. In addition to difficulties created by the new financing model, the VOC budget was under-estimated in different ways. First, independently from the new project arrangements, increased fuel costs directly inflated VOCs. Second, a depreciation of the NOK against the US$ had an even larger impact because of the co-financing arrangements. Co-financing contributions had been fixed at half the VOC costs to IMR estimated initially at US$20 000 per survey day, and negotiated on that basis with LME project partners. However, as early as 2008 (EAF-Nansen Report N°3), actual VOC costs to IMR were much increased and closer to US$30 000 per survey day (2013 VOC costs), but project partners did not have the resource to meet a 50% increase in their expected contribution.

65. The final budget split was very close to the initial plan, with 71% for VOC and the remaining 29% split nearly equally between FAO-EAF activities and IMR scientific services. Percentage differences are of course dominated by the VOC budget, which has been precisely and efficiently controlled. Financial management for all implementation pillars has obviously been very adaptive and efficiently coordinated between the partners.

### 4.3 Institutional arrangements

66. The Project operates from the FAO HQ in Rome in close cooperation with IMR in Norway. Project management arrangements are organized through the tripartite semi-annual meetings (see section 4.1). The excellent support provided by FAO-FI for the delivery of EAF activities (Pillar 1) has already been noted above. Fisheries technical support by FAO regional, sub-regional and country offices has been very valuable to the Project. Technical capacity seems to vary between national offices but it could not be evaluated in detail during the time available.

67. FAO in-country support ranges from administrative and logistic support in organizing meetings and workshops, to technical participation. Benefits are often linked to activities of other projects and therefore difficult to evaluate.

68. One aspect that needs improvement, although the problem is not specific to the Project, concerns PCU payments for activities delivered in country. Phase II is expected to continue support the work of EAF National Task Groups, and procedures need improving The Evaluation believes the delays and complications experienced during Phase I need to stop. Possibly because the sums of money are small, feedback obtained from beneficiaries met by the Evaluation Team ranges from half a working day, to a whole week-long workshop for per diems to be paid out, and the “whole FAO bureaucracy” is seen as “highly inefficient”. Clearly, there is a need for an FAO-wide initiative that would systematically task FAO country offices to devise or facilitate a simple, tried and tested and standard mechanism to make funds available for the Project to run its activities smoothly in country, however small the budgets concerned. The recent rollout of the new Global Resource Management System may help in this regard.

**Project steering**

69. Project arrangements with regional and national partners and stakeholders to advise and steer the Project implementation were proposed initially on the premise of fully functional
LME projects. They were adapted during Phase I to rely on an Advisory Group, Regional Steering Committees and Project Forum.

70. There is also an annual consultative meeting between FAO and the Institute of Marine Research (IMR) hosted either by FAO in Rome, or IMR in Bergen, which consolidates recommendations presented at each Steering Committee in a unified set of endorsed work-plans and budgets.

71. The Advisory Group to PCU (EAF-AG), not originally planned, brings together scientists and managers versed in the development of the EAF. One important reason behind the Advisory Group (EAF-AG) was to bring in EAF expertise from outside the project. The EAF-AG met twice during Phase I (2008 and 2011\textsuperscript{16}), on the occasion of the two Project Forums. The evaluation did not enquire if the Group would be convened again, but given the Project’s ground breaking activities in support of the EAF, it would seem to be a very good idea, especially as most of the EAF pioneer promoters at FAO-FI have retired and some of them could be called upon to advise on the challenges of its implementation.

72. Four Project Regional Steering Committees comprising representatives of national fisheries research and fisheries management institutions as well as IMR, FAO and representatives from relevant LME or other partner programs/projects have been established and these have convened several meetings during the implementation of the project. The RSCs are in charge of assessing the Project’s progress, and formulating requirements and recommending work-plans priorities.

73. A Project Forum to report progress and discuss strategies with projects and countries involved in EAF-related projects, to share experiences, best practice and strategies as well as proposals for collaborative activities. Originally scheduled to be annual, the Forum has met twice (2008 in Rome, 2011 in Accra\textsuperscript{16}). It is scheduled to meet in Dar es Salaam in October 2013, which would provide a good opportunity to set up a Phase II formulation Task Group. It is worth noting that the Forums have been very efficiently organized back to back with Joint RSC, EAF-AG and Norad/FAO/IMR and Forum meetings.

\textit{Project delivery}

74. Project delivery was arranged through EAF National Task Groups (NTGs) that were supported (US$5 000) initially to form and submit project concept notes. On the basis of these, 10 EAF NTGs received additional support (US$25 000) to prepare EA-based Fisheries Management Plans (EA-FMPs). The Project signed a MoU with the SWIOFP in 2011 to support the development of five additional EA-FMPs in SWIO countries in 2011 and 2012.

75. The Project also set up EAF Regional Task Groups (RTGs) to coordinate and harmonize the work of NTGs and assist in the development of regional goals and objectives. The CECAF North, CECAF South and SWIOFC designated the Project’s RTG as a specific RFB-WG. The Fishery Committee of the West Central Gulf of Guinea (FCWC) and the Commission Régionale des Pêches du Golfe de Guinée (COREP) were also involved. The Ecosystem Advisory Committee of the Benguela Current Commission (BCC) served as the RTG for the BCC area. The evaluation finds this process an important outcome of the Project and very positive indicator of the Project relevance and role in strengthening regional fisheries management institutions.

\textsuperscript{16} The 2011 Forum meeting report could not be found.
76. The process of the EAF involves better-informed and cautious fisheries management decision-making, and improved governance (cf. EAF-Nansen Project Immediate Objectives). Therefore, the Project’s support and capacity building activities were initially targeted at officials in management administrations and research institutions who, after selecting a candidate fishery to develop an EA-FMP, designated representatives to make up the NTG.
5  Results and contribution to objectives

5.1  Outputs and outcomes

77. The Project’s Phase I six planned outputs are given in Table 1. Leaving aside Output 4-Capacity building and 6-Planning that are discussed in other sections of this report, the main indicators foreseen were “for cooperating countries to have developed”:

- Strategies and revised policy documents for incorporating ecosystem considerations in fisheries management;
- Revised management plans;
- Capability in assessment methodologies and procedures of key ecosystem properties, and ability to monitor management performance;
- Ability to plan for and carry out surveys at national and, possibly, sub-regional level;
- Ability to monitor and interpret trends in key ecosystem features;
- Databases, field guidelines, and information network.

Component 1. EAF Policies and Fisheries Management Plans (FMP)

78. Outputs from this component aimed to include EA principles in Fisheries Policies at national and regional levels policy level (Output 1) and to support the revision of Fisheries Management Plans (FMP) to include EAF considerations (Output 2).

Output 1. EA Fisheries Policies

79. The Project produced a valuable review of international, regional and national legislation relevant to EAF for 16 countries around Africa, led by the FAO Development Law Service (LEGN)17. The review was launched in 2007, and its work discussed at a number of workshops and meetings, including at the 2008 and 2011 Annual Forums. It is published as EAF-Nansen report N°10 (2011) but warrants a much higher visibility, for example, as one in a “special” report series separate from the project meeting reports and working papers, that would be peer reviewed and given a specific web page and e-dissemination.

80. From the diagnostic phase, the process of policy analysis and revision has progressed well through the development of each FMP, with their individual challenges, particularly for those concerning shared sub-regional resources. The process is ongoing and the positive engagement of RFBs is very promising. At present, the Project is contributing to:

- Development of a sub-regional policy for the small pelagic fisheries in North West Africa taking into account the EAF principles, led by the North West African Sub-Regional Fisheries Commission (SRFC, Commission Sous-Régionale des Pêches, CSRP), and
- Elaboration of a regional management plan for the small pelagic species using EAF, led by the FAO CCLME and EAF-Nansen projects.

Output 2. FMPs

17 From FAO’s legal database FAOLEX (http://faolex.fao.org/faolex)
81. Fisheries Management Plans (FMPs), when they are implemented, can be very effective tools to promote and guide policy, legal and institutional reforms. The Project has successfully developed a methodology that facilitates the inclusion of key principles for the preparation of FMP consistent with an EAF. The methodology has proved to be very effective in conducting participatory fisheries diagnostic analyses to identify major issues that should be addressed in the FMP.

82. Based on a brief review of normative and technical documents produced by FAO in relation to EAF, including documents recently produced by the Project, the following key EAF principles and concepts of relevance for the analysis of FMP under an EAF can be mentioned:

- **Management units** (for fisheries management) may need to be redefined geographically or, at the very least, coordinated within a large-scale planning process (FAO Technical guidelines on EAF, 2003, art. 1.4.5) in a context where “to be effective, fisheries management should be concerned with the whole stock unit over its entire area of distribution” (CCRF, 1995, art. 7.3.1).
- **Objectives** of FMP that are consistent with an EAF should also consider both human and ecosystem well-being and equity.
- **Challenges** for the policy-makers include: allocating resources through appropriate systems of rights; identifying the proper set of stakeholders and resolving the thorny issue of exclusion in an equitable manner; maintaining capture fisheries production while reducing environmental impact; and lobbying to reduce coastal pollution and degradation. (Garcia and Cochrane, 2005).
- **Information required for FMP** is the same as those for conventional management with additional requirements on critical habitats that may be affected and the potential direct and indirect impacts of the fishery on these habitats (FAO EAF-Nansen Project Report No 6, 2011).
- **Complexity of EAF and cost-efficiency**: A significant challenge is dealing with the complexity of the approach and issues, including the difficulty of prioritizing and balancing seemingly opposing objectives. Furthermore, in most cases there are limited resources and capacity for fisheries management and thus the aim should not be to add an extra burden to already limited resources, but rather provide the most efficient way forward, by prioritizing resources and action in a comprehensive manner. (FAO EAF-Nansen Project Report No 11, 2012).
- **EAF depends on good institutional coordination** between all the ministries and agencies involved in coastal zone management. In order to fully implement the EAF, a more holistic coastal zone management regime is required, which would require the adoption of coastal zone plans for all activities that have an influence on the marine environment (FAO EAF-Nansen Project Report No 10, 2011).
- **EAF needs broadening stakeholder participation**.
- **Legal backing of FMP**: formulating an FMP is an important element of the management process and is therefore crucial for EAF implementation. An FMP provides details on how the fisheries are to be managed, and the legal framework should require such plans to be adopted and reviewed at regular intervals (FAO EAF-Nansen Project Report No 10, 2011).

83. Some of the key principles and concepts listed above are used to appreciate progress made by the Project towards the promotion of FMP that are consistent with EAF (EA-FMP) and identify possible entry points in view of the second phase of the Project.
84. EAF management planning involves a series of steps and activities consistent with a risk management approach in four steps:

- Initiation and scope (including definition of fishery societal values, high level objectives and finalizing an EAF Baseline report);
- Identification of assets, issues and prioritization of main issues - To assist with this process, the issues can be separated into three EAF component groups: Ecosystem Wellbeing, Human Wellbeing, and Ability to Achieve (governance);
- Development of EAF management plan (including developing a set of operational objectives, identifying indicators to monitor the performance of each operational objective, and selecting the most cost effective set of management arrangements to reach the operational objectives);
- FMP Implementation and review.

85. The Project organized training workshops, Regional Task Group (RTG) and National Task Group (NTG) meetings (Accra, Ghana in 2007; Durban, South Africa, Casablanca, Morocco and Freetown, Sierra Leone in 2008; Mombasa, Kenya, Casablanca, Morocco in 2009, Dar es Salaam, Tanzania Mainland in 2011) to introduce the FMP development process and assist National Task Groups to prepare Concept Notes for “baby projects” to take forward the development of EA-FMP each following a number of standard steps (Box 1).

| Box 1. Format for an FMP under EAF (source: EAF-Nansen Project) |
|---|---|
| 1. Objective of the FMP |
| 2. Scope of the FMP |
| 3. Description of the fishery concerned by the FMP (including technical, environmental, social and economic aspects) |
| 4. Rationale for the FMP |
| 5. Institutional arrangements for the implementation of the FMP (including management options, operational objectives, monitoring and evaluation, and revision) |
| 6. Cost-benefit analysis in relation to the FMP |
| 7. Logical framework for the FMP |

86. At the time of the evaluation, 15 countries were engaged in the preparation of at least one national EA-FMP (Table 3), of which several were expected to be formally adopted before the end of 2013. Output effectiveness is good (score 5), especially if one considers that these are the first FMPs for most countries and that they have been prepared as promoted by the Project. However, the methodology needs improving to be more efficient. In particular, more inputs will be needed for the countries to better identify and address key legal and MCS needs and improve synergies between their EAF activities and other projects, and for the PCU to establish clearer links with the Nansen research activities and provide further technical backstopping. Efforts to promote EA-FMP should be continued and strengthened during the second phase of the Project. This would notably include support to the implementation and continuous improvement of national FMPs in the course of their revision.

87. The RTGs provided the Ecological Risk Assessment (ERA) training and information exchange between countries organized in clusters. It is important to note that the familiarization and ERA workshops have contributed significantly to improving in-country skills and knowledge on the EAF. Activities to promote FMPs have also generated appreciable institutional dynamics among stakeholders, which the evaluation believes will
contribute to improved management of the fisheries through incorporating key EAF principles in decision-making. The Project’s activities have also generated unexpected outcomes. For example, the methodology developed by the Project in Gabon, Mauritius and in Togo was extended to produce FMPs for other fisheries, including in freshwaters. The COREP has also made use of the ERA tool to support the diagnosis-analysis of its shared small pelagics fishery with a view to developing a concerted management plan. Another outcome from the process has been for some countries, such as Sierra Leone, to decide to institutionalize the National Task Group as a Fisheries Management Advisory body, extending it to the Coordinator of the World Bank project that will help coordinate implementation. Finally, the Project demonstrated that the EAF methodology, notably the ERA meetings, has proved its robustness to support holistic planning exercises (FMP and other planning documents).

88. Furthermore, the methodology based on ERA stressed important aspects that were mostly ignored previously:

- Information required for the EAF (notably impacts of the fishery on the ecosystem and proposed mitigating measures and impacts of coastal and marine pollution on the fishery);
- Institutional coordination through the NTG to create collaborative linkages with other institutions involved in integrated coastal zone management by bringing together representatives from different ministries;
- Stakeholder participation in meetings and workshops bringing together representatives from the private sector (fishers, boat-owners, fish mongers, etc.).

89. Another very important outcome concerns the Project’s use of FAO’s normative and knowledge products, including the Technical guidelines on EAF, 2003 and its contribution to further develop, through expert inputs and field testing, the methodology to promote EAF based on the ecological risk assessment (ERA). The evaluation believes that, already in Phase I, the Project has very significantly contributed to enhance FAO’s normative contributions and development of the EAF toolbox 18.

<table>
<thead>
<tr>
<th>Table 3. Development status for the EA – FMPs (July 2013)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Country</strong></td>
</tr>
<tr>
<td>Canary Current LME (CECAF North)</td>
</tr>
<tr>
<td>Morocco, Mauritania, Senegal, The Gambia</td>
</tr>
<tr>
<td>Gulf of Guinea and Central Africa (CECAF South)</td>
</tr>
<tr>
<td>Sierra Leone</td>
</tr>
<tr>
<td>Liberia</td>
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<tr>
<td>Cote d’Ivoire</td>
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<tr>
<td>Ghana</td>
</tr>
<tr>
<td>Togo</td>
</tr>
<tr>
<td>Benin</td>
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<tr>
<td>Nigeria</td>
</tr>
</tbody>
</table>

However, ongoing development of several FMPs will need to address current shortcomings, in particular:

- An insufficient level of incorporation of key EAF principles in many draft FMPs. This relates in particular to inadequate definitions of the FMPs management units, with insufficient attention given to some crucial issues of fisheries management including access to resources, fishing capacity management or compliance with existing regulations; weaknesses observed in some management options as regards to the objective of maintaining production while reducing environmental impact, and the questionable cost-efficiency of some draft FMP.

- The complexity of fisheries that countries selected. The evaluation believes this will, in addition to the ‘classical’ difficulties associated with implementation, add to the risk of lowering the expected impact of this new system of governance, and consequently reduce the countries buy-in.

- The limitations of many draft FMPs. Many documents do not give sufficient importance on to the process that will allow the achievement of identified objectives, including improving key fisheries management services and functions such as statistics, information systems, boat registration, MCS, enforcement mechanisms, collaborative linkages between administration-research-fishers, etc. Such gaps have proved to be detrimental in the past with regards to the effectiveness of FMPs in some African countries.

- A lack of understanding of concepts related to FMP. The examples of Cameroon and Ghana highlight the need for deepening normative and operational concepts in relation to FMP. In these countries, the FMP remit appears very narrow. Experience shown that a FMP should also be considered as a major policy tool to promote institutional reforms including notably improved legislation, improved responsibility and accountability of public institutions, improved management services, improved transparency and participation, etc.

- Also, some documents can hardly be considered as FMP but rather as sectoral policy and planning documents (e.g. small-scale fisheries in Sierra Leone). Yet the rationale of an FMP as promoted by CCRF is to shift from a sectoral approach, which has proved to be ineffective in the past to a fishery-based approach where the

19 Access to resources is a key issue as emphasized in the FAO Code of Conduct for Responsible Fisheries and its Technical Guidelines including in particular Technical Guidelines on fisheries management and Technical Guidelines on EAF. The FAO’s Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security also makes reference to this key issue, and should be further taken into consideration during the second phase of the project.
management unit should give particular attention to coherency in terms of the targeted species or group of species.

- Finally, some challenges of political and institutional nature that are associated with the promotion of the regional FMP on small pelagics in the CCLME may be difficult to adequately address before the end of the transition period.

**Component 2. Surveys and scientific indicators**

90. The R/V Dr. Fridtjof Nansen undertook 56 separate research cruises during Phase I between December 2006 and December 2011, with an average of 272 (266 to 294, Table 5) cruise days per year, which must be close to the maximum that can be achieved by a vessel of that size, age and survey range. The projected figure for Phase I was 290 days reduced to 270 days/year to account for additional maintenance in account of the vessel’s age. As noted before for the VOC budget, the vessel operations are also obviously very efficiently ran.

91. The lower number of survey days in 2008 was due in part to continued delays in the start of co-financing projects (CCLME, SWIOFP) as well technical problems with the vessel. The co-financing model for the VOCs, in the absence of secure funding carries a very significant risk and puts undue pressure on the entire planning exercise. To go back to the Australian example, the normal programming lead for R/V survey sea time is for applications to be made (by countries and project users) two years in advance of a financial year voyage, and to be confirmed 12 months in advance of the voyage schedule, which is the standard practice. Therefore, faced with adverse financial and budget planning circumstances (see section 3.3) and the need for systematic last minute planning and additional constraints such as the cancellation of sailings in Kenyan, western Seychellois, Somali and Tanzanian waters due to piracy, the evaluation finds the R/V survey planning has been very adaptive and resilient (score 6).

92. In addition to the pressure that short-term cruise planning may put on Vessel Operations, the evaluation believes that the disruption to the cruise planning created a number of problems for participating countries that may be minor but very irritating. Most importantly, nearly all countries visited by the Evaluation Team members complained about:

- The lack of sufficient forward notice prior to the vessel’s arrival in national waters – given that several weeks may be needed for the Fisheries Ministry to obtain the necessary permissions from other ministries and agencies. The current process relies on the regional project partners (ASCLME, BCC, CCLME, GCLME, SWIOFP) to make the necessary arrangements, but either the lack of staff or lack of familiarity with the importance and process of international vessel movement authorizations has put Fisheries administration in some countries in awkward positions. There may be some emergency last minute changes, such as caused by the threat of piracy in the Indian Ocean, but these also need to be clear communicated to all concerned as exceptional circumstances, possibly by both the central cruise coordinator and the regional R/V cruise coordinator partner. Ultimately it brings a bad name to the R/V and to the FAO. It may therefore be important to ensure a systematic double-check in the future; and
- Lack of sufficient forward planning for cruises that has occasionally prevented some scientists and technicians to participate as planned.

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20 see, for Australian R/V http://www.marine.csiro.au/nationalfacility/about/index.htm
The Evaluation believes the co-financing model introduced in Phase I caused the problems of apparent poor forward planning, therefore **recommendation 1** also applies here.

### Table 4. Number of Research Cruises and persons trained in each LME region

*(From Cruise reports, between Dec. 2006 and Dec. 2011)*

<table>
<thead>
<tr>
<th>LME</th>
<th>Nb. R/V Dr. Fridtjof Nansen Cruises</th>
<th>Nb. persons trained on board R/V</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCLME</td>
<td>6</td>
<td>45</td>
</tr>
<tr>
<td>GCLME</td>
<td>14</td>
<td>92</td>
</tr>
<tr>
<td>BCLME</td>
<td>27</td>
<td>326</td>
</tr>
<tr>
<td>ASCLME</td>
<td>9</td>
<td>126</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>56</strong></td>
<td><strong>589</strong></td>
</tr>
</tbody>
</table>

### Table 5. Number of survey days and co-funding partners

<table>
<thead>
<tr>
<th>Year</th>
<th>Survey days</th>
<th>Partners*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>289</td>
<td>GCLME, BENEFIT, Mozambique</td>
</tr>
<tr>
<td>2008</td>
<td>266</td>
<td>BCC, Angola, ASCLME,</td>
</tr>
<tr>
<td>2009</td>
<td>294</td>
<td>BCC, Angola, ASCLME, SWIOFP, IUCN + ZSL</td>
</tr>
<tr>
<td>2010</td>
<td>244</td>
<td>GCLME, BCC, Angola, SWIOFP, Mauritius (Pakistan)</td>
</tr>
<tr>
<td>2011</td>
<td>268</td>
<td>CCLME, JDZ, BCC, Angola</td>
</tr>
</tbody>
</table>

* Partners in addition to Norad/MFA/Oil for Development (adapted from FAO-PCU)

93. The R/V Dr. Fridtjof Nansen surveys have produced several outputs and outcomes:

- Expanded knowledge base and understanding from the collection of scientifically collected data (information) and scientific reference samples, according to pre-defined research protocols to determine marine ecosystem status, fisheries resource production potential and biodiversity;
- Capacity building for hundreds of African scientists and fisheries management research institutions, at sea and onshore;
- In some instances sea cadets (mainly Namibians) have also been trained on board, which has been highly valued by beneficiaries. Given the need of many African countries for sea going experience and qualifications, the possibility for the Dr FN to employ African crew, which is currently prevented by Norwegian regulations for Norwegian registered vessels and would need the R/V to be on the international register, seems to be worth exploring for Phase II.

94. There is no unique way for a research vessel to perform ecosystem surveys to inform EA-FMPs. However, each survey must have one or several specific objectives that dictate specific survey plans, including areas, time, depth, survey parameters and gear. Surveys to inform sustainable fisheries exploitation have precisely prescribed protocols, which remain fixed over years and require detailed calibration to allow changes. In Phase I, the R/V Dr. Fridtjof Nansen conducted a combination of physical and biological oceanographic surveys, ecosystem and environmental baseline and monitoring surveys during oil and gas exploration or exploitation, pelagic and demersal fish stock surveys and biodiversity assessments. Most
surveys achieved their objectives except for some incidence of bad weather and cancellations due to security concerns in the Indian Ocean, in which latter case alternative surveys was planned and executed.

95. During Phase I, the Project provided training to participants on board all R/V surveys, ranging from sampling techniques, sample handling including treatment, species identification, survey data handling with NAN-SIS and data analysis to the functions of cruise leader and team leader of individuals. The evaluation recorded a total of 589 scientists trained on board the R/V Dr. Fridtjof Nansen between 2007 and 2011, from 29 of the 31 beneficiary countries only Tanzania and Somalia did not send scientists on board (see Annex 9). Overall, the highest participation was from Angola (195) and the BCLME Region (326). In the GCLME (126) Region, Ghana (41) had the highest participation (Table 4). The evaluation met some of the scientists who had been on board, and they value the opportunity and training they have received highly.

96. All surveys produced technical summary reports (see "Dr. Fridtjof Nansen" cruise reports summaries in Annex 4), which once validated by the country survey partners, are available on the Project website. IMR and FAO have a clear policy in terms of the countries’ ownership of the information, and the policy for scientific services funded by Norad to IMR is also clear. IMR are custodian of the data, some samples, and the NANSIS database and do not release or use data without the countries’ request. Each country, through the scientists on board, has a copy of the cruise report and raw data collected during the R/V Dr. Fridtjof Nansen survey in its waters. The data are validated, and some data are analysed on board during the cruise, and copies of these are also immediately taken back to the country.

97. Even though the policy in terms of data ownership is clear for IMR and is in clear agreement with Norway’s cooperation policy, it would benefit from being clearly visible on the IMR and EAF-Nansen websites and persistently explained to all stakeholders. In response to the concern expressed by some countries, the ASCLME put together a short document on the Principles and Guidelines for Data and Information Management (“The Survey Data Sharing Agreement”) to clarify and protect the interests of scientists and countries. The Agreement was appended to the ToRs for all the scientists who were working on the R/V Dr. Fridtjof Nansen from the 2008 ASCLME Cruise. In short it stipulates the need for all data to be documented and referenced, and the maximum length of time for the Draft Final Cruise report, raw and processed data and samples to be submitted (three months). The Data Sharing Agreement corresponds to current best practice and openness of scientific research. It is annexed to the evaluation report for reference (Annex 10).

98. Most surveys in Phase I made important milestone findings, in particular:

- Recruitment paradox resolved for transboundary Hake stocks between Namibia and South Africa
- Biomass estimates of transboundary Pelagic stocks of Angola-Congo/Gabon and Angola-Namibia
- Baseline environmental conditions in oil and gas potential areas in Ghana and in the Nigeria-Sao Tome & Principe Joint Development Zone
- Eddies of the Mozambique Channel
- Mascarene Plateau current system
- Biodiversity of Southern Indian Ocean Seamounts.
99. However, research surveys and biodiversity cruises in particular, collect a large number of samples/specimens that have to be analysed back in the laboratory, and countries have generally found themselves overwhelmed by the additional work. In-depth analyses of the samples and data are not finished. Work pending, for example, includes validation of fish species identification, identification of zooplankton, phytoplankton and benthic fauna and chemical analysis of sediment samples. Some samples collected are sent to different laboratories in each region and participating countries abroad (Norway IMR, the University of Lisbon or others) to be analysed and/or archived, and some scientists and fisheries managers met by the Team insist they have no idea how long they will have to wait to obtain a final Cruise report.

100. The matter of Cruise reports is a very important one. The EAF-Nansen Project research cruises are expected to generate a significant part of the knowledge base required to inform and advise the planning for an ecosystem approach to fisheries management. Many judge Cruise Reports published by the Project for the “Dr. Fridtjof Nansen” to be inadequate. The Evaluation contends that these are perfectly adequate for Cruise Reports, but they are not meant to inform policy makers or fisheries managers and they do not provide advice for the development of EA-FMPs.

101. Therefore the evaluation recommends the PCU and IMR partners to devise (in cooperation with beneficiaries) and program (and for Norad to support) a new activity in Phase II to develop clearer links between the research and management activities, which would aim to produce Fisheries Management information and EA-FMP advice from the R/V cruise results. As for all key Project activities, they should be fully integrated into the capacity building program.

**Component 4. Advice on use of national or regional R/V**

102. Three types of activities were planned under this component (output 5), to provide technical support and training\(^{21}\) for the running of acoustic instruments on local vessels, to assist and train local institutions in carrying out coordinated regional surveys, and to organize research surveys planning groups, including inter-calibration of national vessels with R/V Dr. FN.

103. FAO FI relayed demands made by MCs through RFBs. These were mostly for the assessments of regionally shared resources in the Canary Current (Morocco R/V Al-Amir Moullay Abdallah, Mauritania R/V Al-Awam, Senegal R/V Itaf Deme), and in the Benguela Current (South Africa R/V Blue Sea and R/V Algoa) systems and in the Aghulas and Somali Currents (French vessels). The project also provided specialists from IMR and Morocco INRH to Guinea, to advise on equipment to enable the national R/V General Lansana Conté carry out acoustic surveys.

104. The evaluation notes that Component 4 was initially budgeted to be small, reflecting past activities during the NP and the pace at which MCs have been gradually developing their own R/V fleet and survey capacities. For instance, it is likely that the BCC countries, after decades of sustained support from the NP, will soon have enough R/V capacity among them to take over the regional stock assessment surveys from the R/V Dr. Fridtjof Nansen entirely. Similarly, the South African R/V Algoa has been used by the ASCLME for some resources

\(^{21}\) see 5.2 Capacity development
surveys in the Indian Ocean thereby increasing regional cooperation and capacity building. Surely, this must be the natural and ultimate indicator of success for the NP and its successor through the EAF-Nansen pillars 2 and 3 activities, that ultimately countries around Africa have the national and/or regional R/V capacity to assess the production potential of their marine fisheries resources.

105. However, nearly all remaining 25 countries in the project are a long way from having the operational R/V and technical capacities needed to conduct the regular stock assessment surveys conducted by the Dr FN during the NP, at national or even combined at regional levels. Therefore, when the co-financing model for the R/V Dr. Fridtjof Nansen combined with the delays or limited needs of LME projects suddenly revealed the reality of an enormous and immediate cost to MCs, a number of unintended consequences followed, mostly consisting of countries hastily claiming (including to the evaluation team) they could do it either themselves or could use other - cheaper - R/Vs than the Dr. FN. The evaluation did not have all the information (or the time) to assess the problem in detail, but it would appear that, as a result, at least for one country (Senegal) the long-standing time series of biomass estimates for shared small pelagic species has been broken. From the point of view of the Dr Nansen’s components in the EAF-Nansen project, this must be a worrisome development.

106. The evaluation also believes that, although the consequences may not be as visible, the situation is widespread, with a large number of countries at a loss as to how to justify the costs faced without a transition period when needs and capacities could have been assessed, and understanding could have been shared. Several countries have also organized to acquire R/Vs, which may or may not be related, but which will need to be considered by the project in Phase II. To conclude, the evaluation strongly recommends that in Phase II, activities to support national and regional R/Vs are linked to those of the R/V Dr. Fridtjof Nansen surveys, and are programmed – and adequately resourced – to support national and regional capacity development without jeopardizing long-term data times series that are one of the most valuable legacy of the NP for Africa.

Component 5. Communication, publications and dissemination

107. After initial delays from lack of staff, the Project developed a diverse communication strategy from 2010, which incorporated recommendations from the mid-term review (2009) such as the e-Newsletter and collaboration with an international NGO (Mundus maris) to produce a Teaching kit for schoolchildren. Communication activities included meetings with direct beneficiaries, through the Annual Forum, Steering Committee meetings and participatory workshops, reports, brochure, leaflets, posters, the website and e-Newsletter. In its pioneering role as a field implementation of the EAF, the Project is contributing to the development of FAO’s normative documents, first through its own report series (Annex 4) and brochures.

108. As EAF policy and FMPs are being developed, the Project is providing opportunities to test and develop further the FAO EAF-Toolbox. To date, the EAF-Nansen Project report series has published 15 volumes. Most EAF Project reports concern meetings and workshops.

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22 See http://www.eaf-nansen.org/nansen/topic/18010/en
but some provide important contributions to the development of EAF methods, and should be singled out in a separate series together with the EAF Toolbox documents24 (No. 7 Expert Workshop on the development and use of indicators for an EAF; No. 10 Legislating for an ecosystem approach to fisheries. A review of trends and options in Africa; No. 11 Baseline report - EAF Implementation in the South West Indian Ocean area; No. 14 Expert workshop on indicators for ecosystem surveys).

109. The Project website25 is reviewed in Annex 7. It is well presented and structured, in both English and French, generally very easy to navigate and obtain information from. It is comprehensive in following the Project documents and activities. Its structure is clear and its format is engaging.

110. *e-APPROACH – EAF-Nansen Project Newsletter* Nine Newsletters were published between 2009 (1 in October), 2010 (3), 2011 and 2012 (2 per year) and 2013 (one). The Newsletter is bilingual, in English and French, presented on two columns for the two languages alongside. Apart from the first issue, which was 6 pages long, the others contain between 10 and 16 pages of text with some illustrations relating to the Project’s many activities and stakeholders. The information presented is a mixture of Project news about meetings, partners, products, results, discussion about methods, stakeholders’ testimonies and announcements. The evaluation found the Newsletter very well produced, full of interesting facts and easy to read. Of the 28 responses from 18 different countries to questions regarding communications, 26 found the Newsletter very useful (18) or useful (8), and two did not know about it.

111. The Project e-Newsletter N°12-13 (October 2012) describes a forthcoming brochure and DVD that will document activities on the R/V and highlight the use of the data and information collected during the surveys. This could be developed for all African regions.

112. To conclude, despite delayed start for the development of most communication activities, including publication of the report, Newsletter and the website development, the Phase I component 5 (output 6) has produced very good material. Some elements need updating and developing, but given the limited resources dedicated, communication outputs are evaluated as good/highly relevant (a score of 5). The challenge for Phase II will be for the Project to showcase its dual purpose as strengths, to develop strong links with African institutional partners and programs, and to connect with the communication materials of the EAF Toolbox, IMR (R/V Dr. Fridtjof Nansen and scientific services) and other partners.

### 5.2 Capacity development

113. Stakeholder identification was addressed through the planning/consultative meetings (Annual Forum, Regional Task Groups and National task Groups), which were held before the activities were implemented. Capacity building is central to the EAF-Nansen Project. It concerns all activities and services (Tripartite Agreement 2006). The five components of the original logframe were reorganized for the transitional Phase in recognition that capacity building is effectively cutting across all components as planned and delivered through both FAO-EAF activities and IMR R/V surveys and scientific services.

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24 such as http://www.fao.org/docrep/012/i0946e/i0946e00.htm and the new ring bound Toolbox book.
25 http://www.eaf-nansen.org
Development of EA-FMPs

114. Capacity building for EA-FMP development has been delivered mostly through national and regional familiarization and training workshops, which seem to have been very effective. A Trainers’ Workshop in Rome in 2009, initiated capacity building of NTGs in EAF planning. Participants attended from all operational regions of the Project, namely CECAF North, CECAF South, the BCC and SWIOFC sub-regions. Training covered fundamentals of the EAF management, ERA methodology, development and review of FMPs and workshop facilitation. The Project achieved tangible results as key stakeholders in almost every country were then engaged in the preparation of an EA-FMP.

115. The Project systematically targeted scientific and management levels for its meetings and training workshops in order to strengthen both institutional collaborations and individual capacities to achieve country and regional level sustainability for an EAF. On the basis of the assessment done at the 2009 trainers’ Workshop, the PCU supported the NTGs to submit a concept note. From the concept notes submitted, the PCU supported further the 10 NTGs that were most likely to develop an EA-FMP. This two-step strategy appears to have been effective in selecting the countries that were at the same time most motivated and most articulate about the EAF process out of the 31 possible beneficiary countries. Given the limited resources of the PCU available for Pillar I activities in Phase I, the selection of a limited number of countries (10 initially) to take forward a “baby project”, and to support them through the process of analyses and development of their FMP providing them with additional support as demanded along the way is original and appears well adapted. Countries involved in the Project, individually and in clusters, have been able to develop their own EA-FMP process, with regular support and to some extent at their own pace.

116. Another original and powerful Project mechanism is the “cluster” approach to national ERA workshops, which invited 1 or 2 representatives from neighboring countries to attend (e.g. beach seine in the central zone of CECAF South, industrial shrimp in the southern zone of CECAF South) each other’s national meetings. Participants have found it very positive and it proved very useful to increase capacity building further. The EAF was indeed considered to be a complex approach at the beginning of the Project, and it is believed that the inclusion of a regional dimension and related ‘emulation /competition’ played a catalytic role for a buy-in of the approach in the different countries. The initiatives in relation to the development of EAF tracking tools based on the comparison of the situation in a given country with the situation in any given sub-region confirm the relevance of using a regional /cluster approach to boost EAF in countries.

IMR R/V Surveys and scientific services

117. During Phase I, the Project provided training to several hundred participants to R/V surveys, which has been very highly valued by the participants themselves. In terms of capacity building at sea, this would be an excellent achievement if the R/V cruises had been more evenly spread over time and between regions and countries. As it is, apart from three BCC countries and Ghana (through the Oil for Development program), countries have mostly seen the vessel twice for the LME cruises. Therefore, the evaluation finds that the R/V schedule does not appear to be regular enough to provide an adequate level of sustained capacity building that many countries would need (score of 3). Given the importance of the R/V outputs to the Project, the evaluation recommends to the three partners that a careful assessment of R/V surveys and training needs and capacity be conducted at country and regional levels, and that its results are then used to program R/V surveys in Phase II.
Other capacity building activities

118. Capacity building activities have been varied and efficient in their adaptability and persistence, and very effective to motivate and accompany the NTGs and RTGs in their use of the EAF. Generally capacity building activities have been reviewed with the different project components, and are found to be of good quality. The Evaluation mentions below the University-level initiative, and two initiatives funded by Norad (NORHED and NansClim) that would greatly benefit the EAF-Nansen as complementary projects in Phase II.

119. The Project has been developing university-level (Diploma or MSc) training modules on the EAF, in coordination with African Universities (Ghana, Dar es Salaam, Namibia, Cape Town, Rhodes, Bunda College in Malawi). The first course was held at the University of Ghana in 2010 with 30 participants. Two courses were held in 2011, at Rhodes University in South Africa and Université Ibn Zohr in Morocco, which involved a further 55 participants from research institutions, fisheries administrations, universities and non-governmental organizations from 26 countries in Africa. Importantly, Ibn Zohr University is part of a network of francophone Universities and could be a major vector to spread EAF. Some course participants went on to lead the EA-FMP projects. The PCU has found that this has contributed to the EAF becoming much more widely used in fisheries management discussions in Africa, including by NEPAD.

120. NORHED is a Norwegian Program that supports the development of higher education (PhD and MSc), research and institutional/administrative capacity building activities through flexible and long term cooperation between Norway and lower and middle-income countries (LMIC). The NORHED program would be very well adapted to further current efforts in EAF training modules development and delivery, could mobilize and train technical and education specialists. Rhodes University is currently leading an application for support from NORHED for the "Development of a Centre of Excellence for Higher Education and Research in Aquatic Animal Health for Southern Africa" and could perhaps provide mentoring support to other African Universities that want to start EAF-related research and training Centers of Excellence.

121. NansClim is a Norad-funded partnership between IMR and BCC fisheries and environment scientists that supports working group for scientists from the three countries (Angola, Namibia, South Africa) convened by principal investigators from the region, in order to analyze links between fisheries and climate and publish in academic journals. The program has been highly appreciated from the start (FAO-IMR meeting November 2009). The evaluation sees the NansClim project as a model to emulate and replicate by the scientists who participated. The addition of similar programs to complement the EAF-Nansen in Phase II, for scientists to analyze information collected by the R/V, and for scientists in each sub-region to work collaboratively on translating research into EAF management advice is highly recommended.

5.3 Gender mainstreaming

122. The evaluation of FAO’s activities in support of the CCRF (FAO-OED, 2012) found some (although limited) improvements of gender mainstreaming and inclusion of social aspects over time in FAO’s FI normative products. Certainly the EAF, which is central to the Project Pillar 1, requires attention to social aspects, but the Project programming documents do not mention gender or gender mainstreaming, even though this is an important aspect for Norwegian support (see Norad-Evaluation, 2009). The need for a more structured and visible
attention to gender issues has also been noted in Norway’s other programs (Norad-Evaluation Oil for Development 2013; Tanzania 2012).

123. Gender issues are considered explicitly by the Project EA-FMP process, which is based on the ERA approach that allows for gender and social issues to be adequately covered. The composition of NTGs, which includes representatives of women in fishing and related activities, is also believed to have played a significant role to this end.

124. Some draft FMPs, such as for the beach seine fisheries in Togo, Benin and Côte d’Ivoire, address gender issues by considering that management measures would impact the livelihoods of women fishmongers that are involved in the processing and marketing of undersized fish. The draft plans are inclusive of measures aimed at facilitating access for women to alternative economic activities. Another example comes from the small-scale fishery FMP in Sierra Leone. Key policy drivers for the plan refer to several policy objectives including enhancing livelihoods in fishing communities with emphasis on women and youth, and the plan includes measures that should benefit to women in fisheries.

125. There is nevertheless a need for a more systematic inclusion of gender issues in the Project’s programming documents, activities and outputs, and the EAF-Nansen Project could provide a perfect opportunity to develop innovative approaches to mainstreaming gender and social aspects in both the development of fisheries management systems (Pillar 1) and the promotion of marine ecosystem research and scientific advice training (Pillars 1 and 2). In Phase II, this could be done through an additional Project component, for example delivered in collaboration with experienced Norwegian professionals, to showcase in Partnership with the NEPAD Partnership for African Fisheries (PAF), innovation in terms of best practice and planned approaches adapted to a variety of fisheries-specific situations in African MCs.

5.4 Environmental Impact

126. The Project puts environmental sustainability, specifically the sustainable use and management of fisheries resources, at its core, to contribute to food security and fight poverty. Its activities contribute to a more widespread understanding and use of the ecosystem approach to fisheries (EAF) and, in doing so, the Project supports countries to adhere to the CCRF, a recognized criterion of positive impact (see26). Pillar 1 (EAF) and Pillars 2 and 3 (R/V Dr. Fridtjof Nansen and scientific services) contribute on different levels.

127. The suite of activities under Pillar 1 aim for the fisheries management process to be more inclusive and more effective. The PCU-FAO team has worked tirelessly to involve as many MCs as possible, and for each of them to develop an EAF-based Fisheries Management Plan. The long-term impact of the EAF-FMP process introduced by the Project is difficult to judge at various stages of development, but the Team made a qualitative judgment as to the likelihood of the FMP to “maintain capture fisheries production while reducing environmental impact” (Garcia and Cochrane, 2005).

128. The evaluation found the current level of achievement of EA-FMPs to be good (score 5), but has some reservations about their potential implementation. The likelihood of environmental impact on the target fishery from the draft EA-FMPs is discussed in detail in

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Annex 8, and summarized in Box 2 below. A four point scale (to avoid confusion with the overall evaluation scoring) shows that out of five fisheries, two are considered moderately unlikely to have an environmental impact on the fisheries, and only one EA-FMP – the Bank fishery in Mauritius is likely to make a difference. As the Project moves to support EA-FMP implementation, it will be important to use the ERA in more detail and devise indicators that identify specific risks and can be used to track progress.

<table>
<thead>
<tr>
<th>Box 2. Likely environmental impact of EA-FMP in case study fisheries</th>
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<tbody>
<tr>
<td>Likely (L); Moderately Likely (ML); Moderately Unlikely (MUL); Unlikely (UL)</td>
</tr>
<tr>
<td><strong>Beach Seine (BS) Fishery in Ghana - MUL</strong></td>
</tr>
<tr>
<td>The minimum mesh size for the use of BS is 25mm according to the fishing regulations (based on biological considerations). Today, most BSs operate with a mesh size of 10mm, which is illegal. One of the operational objectives of the draft FMP would be to encourage a change in mesh-size so as to be ‘close’ to the legal minimum size. Consequently, the draft FMP is believed to contribute to maintaining production while reducing environmental impact. However, unless access to resource and reduction of fishing capacity is adequately addressed, the impact of the draft FMP may not to be so decisive.</td>
</tr>
<tr>
<td><strong>Industrial Shrimp Fishery in Gabon - ML</strong></td>
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<tr>
<td>The management option proposed for the industrial segment (concession/TAC) is believed to be in very good coherence with this objective. In a context where artisanal fishers mostly target the juvenile fraction of the stock in estuarine areas, it is doubtful that maintaining production can be achieved if the artisanal segment is not considered in the FMP.</td>
</tr>
<tr>
<td><strong>Sofala Bank Industrial Shrimp Fishery and Line Fishery in Mozambique - ML</strong></td>
</tr>
<tr>
<td>The measures proposed by the FMP should contribute to the objective of maintaining production. However, a system based on fishing effort control as proposed in the draft FMP, has not been the most adequate option to control fishing mortality in other countries.</td>
</tr>
<tr>
<td><strong>Small Pelagics Fishery in Tanzania - MUL</strong></td>
</tr>
<tr>
<td>Lack of coherence between the management unit and the bio-ecological dynamics of small pelagics stocks, means that an FMP that only considers mainland territorial waters is moderately unlikely to maintain fish production. Furthermore, negative environmental impacts are not adequately addressed in absence of measures to also regulate the beach seine fishery.</td>
</tr>
<tr>
<td><strong>Bank Fisheries in Mauritius - L</strong></td>
</tr>
<tr>
<td>The Plan includes measures to strengthen MCS, which should contribute to reach the biological objective. The Plan also gives the possibility to establish MPAs in spawning areas and to introduce measures aimed at limiting discard of non-target species, which should contribute to both biological and ecological objectives. Note that the line fishery is a selective fishing technique with little negative impact on the environment, with exception of the discards.</td>
</tr>
</tbody>
</table>

129. In terms of the R/V surveys and associated scientific services (Pillars 2 and 3), improved knowledge on marine ecosystems obviously contributes to improve EA-FMPs and sustainable resource use. Certainly, it will be important for the Project to demonstrate the link between improved ecosystem knowledge from the R/V and EAF management.

### 5.5 Partnerships

130. The EAF-Nansen Phase I Project was conceived as a multi-donor initiative, with implementation and co-financing partnerships developed at Pan African, sub-regional (LMEs, RFBs, RFMOs) and country levels.

*Pan African level*
131. Phase I has been a truly pan-African project, from the point of view of FAO FI EAF activities that supported the EAF-Nansen Project to pioneer implementation of the EAF in the field, and for the R/V surveys, which nearly exclusively took place in the marine waters of the African continent.

132. The NEPAD Partnership for African Fisheries (DFID-funded PAF\textsuperscript{27}), multi-donor NEPAD-FAO Fish Program (NFFP) and African sub-regional fisheries bodies have provided the Project with opportunities for institutional partnerships that did not exist in 2006. NEPAD is very keen for EA-FMPs to be implemented on a large-scale, and the Project provided technical inputs to the First Conference of African Ministers of Fisheries and Aquaculture (CAMFA) in September 2010 and supported a series of stakeholder meetings to develop the NEPAD- Partnership for African Fisheries (PAF) flagship program. It has also collaborated with the NEPAD - FAO Fish Program (NFFP), which is addressing the need to develop and integrate disaster risk management (DRM) and climate change adaptation (CCA) plans into fisheries and aquaculture strategies.

133. In October 2012, the NFFP, EAF-Nansen Project and Sweden-Netherlands Multi-donor Fund jointly organized a Workshop on the Ecosystem Approach to Fisheries and to Aquaculture (EAF/EAA) - Status, Lessons learned and Future Opportunities. The overall objective of the Workshop was to create a common platform of understanding of EAF/EAA concepts in Africa. The evaluation did not see the workshop report, but there is ample evidence that pan-African institutions are becoming stronger, and that the Project is both providing them support, and in turn gaining in relevance and effectiveness in the process. The NEPAD-FAO Fish Program (NFFP) also supported economic analyses that were used in the process of elaborating FMP in the CECAF South area.

Regional level

134. During Phase I the PCU worked hard to establish collaborations and partnership with institutions (RFBs, RFMOs) and with regional projects. Regarding EAF-based FMPs, several partnerships were developed, which enabled the Project to consolidate and sometimes extend FMP-related activities. FAO signed partnership agreements for the Project with three GEF-funded LME and associated projects, with the SWIOFP in December 2008; UNDP for the ASCLME in June 2009 (Aide Mémoire), and with the GCLME in April 2010. Partnership with the FAO-run CCLME agreed on a program of work, and the importance of collaboration on EAF joint activities was stressed at its first PSC meeting (November 2010), and a partnership with the newly formed Benguela Current Commission (BCC) was formalized through a MoU signed in May 2011. A partnership with the World Bank GEF-funded SWIOFP co-financed the process of elaborating FMP in five countries from the SWIOFC area.

135. The four Project Regional Task Groups (RTGs) were very judicially embedded within the RFBs and some have already been made into dedicated Working Groups to facilitate the use of EAF by the RFB members in fisheries that are either shared or of regional importance. As regards to regional FMP in CECAF North area, partnership with the SRFC and the CCLME was also highly appreciated.

Country level

\textsuperscript{27}http://www.nepad.org/foodsecurity/fisheries/about
136. Country participation in FAO-EAF activities has reflected both demand and opportunities made possible by partnerships from other projects. A wide range of beneficiaries, from government officials, to researchers, fishers and NGOs across the 31 sub-Saharan African countries, has been involved in the first and transition phases.

137. The extent and type of benefit from R/V surveys to the countries depended on the type of survey (stock assessment, biodiversity baseline or monitoring) and whether funds could be raised from partnerships or countries, leaving aside countries where the R/V Dr. Fridtjof Nansen could not go because of the piracy risks in the Indian Ocean. The initial impression of the evaluation was that the necessity of co-financing the R/V deployment was introduced in Phase I without sufficient needs assessment and capacity assessment, discussion and preparation with beneficiary countries and regional fisheries bodies (RFBs).

138. The Oil for Development (OfD) program is demand-driven Norwegian assistance program aiming to support developing countries to achieve “economically, environmentally and socially responsible management of petroleum resources which safeguards the needs of future generations”. It has provided very significant co-financing to the Project by using the R/V Dr. Fridtjof Nansen to establish marine ecosystem baselines and monitoring programs in a number of countries. However there is no formal arrangement to date between the OfD program and the Project to develop this into a permanent opportunity that would benefit the Project, but also all coastal states in Africa that are embarking in oil and gas exploration and exploitation development programs in their marine waters. A recommendation is put forward to this effect.

**UN Agencies**

139. The PCU report on Phase I (2013) notes the need to identify possible synergies with relevant programs of other UN Agencies, and the FAO FI and PCU teams have been working to this effect at a number of international meetings, such as the IOC-UNESCO meeting on a UN-wide platform for the monitoring of climate-related changes in the marine ecosystems bordering developing countries, in particular those in Africa in September 2012, which also involved UNEP; the LME caucus and the 15th Consultative Committee Meeting on Large Marine Ecosystems (LMEs) hosted by IOC-UNESCO 2013. Just as for the previous phase, common interests and potential synergies are evident. However, the strength of these partnerships has come with a number of weaknesses that are structural and very likely to persist. The Evaluation notes, with regards to co-financing, that:

a. Partnerships need to be with institutional funding partners, not with projects that have no control over gaps between GEF funding cycles;

b. LME and other projects have scientific objectives that only partially coincide with the EAF-Nansen project, in terms of fisheries resources and biodiversity monitoring; some LME projects need different types of R/V such as for servicing buoys;

c. Most importantly, the objectives of LME projects and others may not be directly linked to poverty alleviation or food security for coastal states and fishing communities.

140. To conclude, the EAF-Nansen in its Phase I and transition phase, has worked tirelessly and been very effective (score 6) at developing and strengthening partnerships at pan-

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28 cf. Mike Roberts presentation to WIO-4 4th In-Region Western Indian Ocean Capacity Building Workshop of the WMO/IOC Data Buoy Cooperation Panel and Partners, 29 April - 3 May 2013, Zanzibar, Tanzania
African, sub-regional and national levels. At national level, the clusters organized for EA-FMP development process, the Project has contributed to build and increase capacity at national and sub-regional, individual and institutional levels.
Analysis by evaluation criteria

6.1 Relevance of Concept and Design

141. The EAF-Nansen Project has been an integral part of Norway’s international development policy. The theory of change mentioned in the Project documents, is that “the development of sustainable fisheries management regimes and specifically through the application of the ecosystem approach to fisheries in developing countries” will strengthen “regional and country specific efforts to reduce poverty and create conditions to assist in the achievement of food security”. Norway’s support of the Nansen Program (NP) and research vessel Dr. Fridtjof Nansen (R/V Dr. Fridtjof Nansen) has been based on the same premise since 1971, when Norway signed an agreement with the FAO and the UNDP to build and operate a fisheries research vessel. The original premise in 1975 was that “knowledge of living marine resources (species composition, abundance, distribution, seasonality, etc.) is a prerequisite for a rational exploitation and protection [, and that] without such knowledge, fisheries potentials will not be realized either to the individual fishermen, or to the countries concerned.”

142. Norway aims to dedicate 1% of the estimated gross national income to its aid budget. Norwegian aid programs have been guided by four criteria (Box 3). The Fisheries sector was and remains a priority focus of Norway’s international aid program, with its support focused on fisheries research, stock assessment, education, small-scale fisheries (SFF), resource management and institutional capacity building. An evaluation of Norwegian Development Cooperation in the Fisheries sector to 2008 excluding the R/V FN (Norad-Evaluation 2009) also led Norad to conclude that its support should be “more targeted towards poverty reduction (economic growth, equitable distribution of wealth, food security)” as well as good governance and gender. Certainly, food security is FAO’s top strategic priority and it would be important to include specific indicators in Phase II that could, for example, relate the success of EA-based Fisheries Management Plans (FMPs) to indicators of impact on the fisheries and communities concerned.

Box 3. Norway’s key criteria for successful fisheries development support

<table>
<thead>
<tr>
<th><strong>Breadth</strong></th>
<th>It is important to develop the full range of fisheries management - from research to fisheries management and control. Research and knowledge have an intrinsic but limited value if it is not used in practical fisheries management.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length</strong></td>
<td>Projects must have a duration, which ensures that knowledge is rooted and that local counterparts are able to continue good research and management practices after the project ends. This time frame may vary according to needs/context.</td>
</tr>
<tr>
<td><strong>Practice</strong></td>
<td>Theory must always be the foundation, but all experience shows that combining theory with practical design allows faster and more lasting results.</td>
</tr>
<tr>
<td><strong>Recipient Ownership</strong></td>
<td>Development projects can only succeed as long as they comply with the partner country’s own plans and priorities.</td>
</tr>
</tbody>
</table>

31 http://www.regjeringen.no/en/dep/ud/selected-topics/development_cooperation/area_03.html?id=714710
32 B. Fisknes and R. Castberg, Norad. PowerPoint Presentation to EU Parliament, Brussels 22 June 2010
143. Phase I of the EAF-Nansen was designed to provide support to FAO’s Strategic Objective C “Sustainable management and use of fisheries and aquaculture resources” and thus to strengthen FAO’s Core Functions, through its Pillar 1 – EAF activities and Pillars 2 and 3, provision of the R/V Dr. Fridtjof Nansen, for its support in fisheries stock assessment and application of the Code of Conduct for Responsible Fisheries (CCRF), notably Article 12 on the importance of fisheries research.

144. Looking forward to Phase II, the EAF-Nansen Project comes under FAO’s new Strategic Objective 2: “Increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner.” The Ecosystem Approach to Fisheries management activities initiated in Phase I have paved the way to make significant contributions to “a holistic approach across sectors” by promoting in particular: 1) more sustainable practices; 2) more viable governance arrangements; 3) more effective mechanisms at the international level; and 4) evidence-based decision-making” (FAO, 2013).

145. The project is directly relevant to Fisheries Department development and field-testing of EAF normative products. A recent evaluation of FAO’s work in support of the CCRF (FAO-OED 2012) identified the EAF guideline (Technical Guideline No. 4 Suppl. 2 on EAF) as one of the most highly used Code (CCRF) instruments by MCs and similarly for RFB/RFMOs. The EAF was rated one of the highest three areas for which respondents most wanted future assistance for MCs and the regional bodies. It is the opinion of the Team therefore that the project was and remains very highly relevant to the Countries’ as well as to the Regional Fisheries Bodies needs.

146. Partners identified for Phase I were government institutions at country level and projects at sub-regional level. Delays of the regional partner projects, affected the Project’s, but the relevance of partnerships at regional level remains very high. However, partnerships will be more sustainable as they are developed with more permanent regional bodies, such as the BCC or the SWIOFP, which can take ownership and secure co-financing on behalf of their member countries. The formulation of Phase II will greatly benefit from the possibility of institutional partnerships offered by policy and capacity developments of the African Union that have been taking place since the 2010 Conference of African Ministers of Fisheries and Aquaculture (CAMFA) meeting in Banjul, The Gambia (see section 5.5).

6.2 Efficiency and Effectiveness of the project implementation process

Institutional organization

147. The project implementation by was found to be efficient overall. Given the wide geographical scope and diversity of components and activities, and given the challenges of multiple partners and various delays, and resistance the project could easily have been an endless suite of meetings with little achieved. Instead, the adaptive and rapid response of the PCU, and Tripartite Project partners (Norad/FAO/IMR) has already been noted regarding the Project implementation (section 4).

148. The PCU and Tripartite partners also showed great adaptability and resilience in dealing with institutional arrangements with partners, at regional and national levels. By necessity initially, as the project started late, some meetings were postponed, but generally meetings frequency was reduced and most were held back to back to save on organization and travel costs and make obvious efficiency gains. The project demonstrated clearly and
repeatedly the complementarities between policy, management and science by establishing links, building capacity and providing support to national (NTGs) and regional (RTGs) Task Groups. In the evaluation’s opinion, the flexibility and dedication of both FAO and IMR implementation teams, to adapt to delays and last minute changes, and of Norad to step in and adjust the project’s finances have been essential to the Project’s overall high to very high relevance, effectiveness and impact in country.

**Pillar I FAO-EAF activities**

149. For EAF activities, the Project’s efficiency can be appreciated through the strengths and weaknesses of the EA-FMP preparation process.

**Strengths**

150. A major strength of the methodology promoted by the Project is that the institutional costs associated with the preparation of a national EA-FMP are rather modest when compared to many initiatives undertaken in Africa in the last decade. A rough estimate of the total cost per EA-FMP ranges between US$50,000 and 60,000 including costs of the baby project, lump sum for the NTG, international consultants, stakeholders participation in regional meetings, and indirect contribution provided by other projects such as the NFPP to undertake bio-economic analyses. Given the complexity of such a planning exercise, the cost is very modest.

151. Other strengths for the process include:

- Various activities, including notably the holding of ERA workshops, have led to significant improvements in governance, in terms of participation, capacity building and development of collaborative linkages between public and private institutions;
- ERA workshops were particularly appreciated for the robust methodology used to identify and discuss issues affecting the fishery in a holistic and participatory manner;
- The meetings served as a forum to engage discussions between institutions concerned by integrated coastal zone management, which is one of the key EAF principles.

**Weaknesses**

152. In countries with relatively strong fisheries institutions (e.g. Senegal) and/or that have had significant external assistance in the past (e.g. Ghana with the World Bank), NTGs have found it difficult to influence decision-making and promote EA-FMPs.

153. Due to the rather limited means allocated to EA-FMP preparation, it may not be possible to analyze key issues, such as legal and MCS issues, in-depth to the detriment of the efficiency of the EA-FMP preparation process and effectiveness of the end product.

154. The main criteria that served to select the fishery subject to the elaboration of an EA-FMP relate to the complexity (multi-species and/or multi-gear species) and poor governance of the fishery in terms of conflicts, low compliance with regulations and important socio-political interference. This implies that costs associated with the implementation of the EA-FMP will be relatively high when compared to expected returns, and carries a risk to discourage policy-makers of replicating the approach for other fisheries.

155. Links between research activities promoted by the Project including in particular cruises by the R/V Nansen and EA-FMP initiatives have been very weak, which has obviously limited the effectiveness of the project as a whole. This can be explained by the
fact that most of selected FMP refer to inshore resources (i.e. less than 20m depth) whereas stock assessment and ecosystem surveys conducted by R/V Dr. Fridtjof Nansen are conducted on bottom over 20m. This apparent disconnect should be addressed in the second Phase of the Project.

156. In some countries like Gabon and Cameroon, the process used to establish the baby project made it difficult for the NTG to mobilize additional funding from their administration. This is believed to have hampered potential co-financing of the activities to the detriment of the efficiency of the Project.

157. The existence of some divergence between the approach developed by the EAF Nansen and CCLME projects and the approach developed by the SRFC to promote the elaboration of harmonized small pelagics FMP in the CCLME region is believed to hamper the overall process. Improved synergy between the two complementary initiatives would obviously result in higher efficiency of the Project for the delivery of the regional FMP and related harmonized national FMP on small pelagics. Also, it is believed that unless the countries find a consensus on a satisfactory institutional framework, the process for the adoption of both the policy document and the regional FMP may be postponed to the detriment once again of the efficiency of the Project.

Pillars 2 and 3 R/V surveys and scientific services

158. The Project is ambitious, with 31 beneficiary countries in four regional grouping around the entire coast of Africa. Evidently, the R/V cannot hop over the continent to always be available at the time and season across two hemispheres and four regional seas. In Phase I the timing of R/V surveys was complicated by difficulties with partnership funding, but the importance of the R/V being present regularly (seasonally or annually) was not mentioned in the Project document. Availability of assured co-financing will enhance the R/V’s image of an effective and efficient research instrument, and the lack of visible programming logic linking activities in components 1 (EAF), 2 (R/V surveys) and 4 (support to regional R/V) has decreased the Project coherence in the eye of many beneficiaries

159. Most importantly, the Evaluation finds that the importance of the R/V Dr. Fridtjof Nansen surveys was not clearly established or communicated in Phase I. In the absence of a R/V survey Strategy for Africa, the countries most surveyed in Phase I appear to be those that also benefitted from Norwegian bilateral support, as opposed to those that needed to be surveyed, although the need for surveys had been established through the LME projects. In the absence of a recent needs and Research Vessel capacity assessment, the effectiveness of survey planning in term of national and regional R/V survey capacity building was not apparent. There is a need also to improve communication on scientific results and their possible implications on fisheries policy and planning.

160. The Communication process with survey countries needs improving. Fisheries administrators and managers in countries visited by the Evaluation have complained of a lack of information regarding the vessel movements and survey program, giving too little time to organize the processing of necessary administrative authorizations from other government departments. The Evaluation notes that the PCU has a procedure in place, by which an official note is sent 1 or 2 months ahead to the Government through the FAO Representation

33 Thirty-two countries, including Oman, were considered initially.
country offices. In addition the Project Focal points and DoF are aware of the survey and are following the matter with the relevant national authorities. It is therefore not clear where the problems lie, and if more lead-time is needed at country or regional level. Some researchers have also complained of the same problem making it difficult for them to contribute to survey plans or to organize participation. Somehow this problem was also noted in the early days of the NP (Hallenstvedt, Ellis and Watson 1983), but it may have been aggravated by the added uncertainty brought in by the co-financing model. In 1989, an evaluation of the NP recommended that “adequate lead-time be systematically budgeted for the planning and prior consultations concerning R/V activities in countries EEZ “, and to “involve FAO” (MFA 1989). The Evaluation suggests that this may be best resolved through regular communication from the FAO-based IMR Survey coordinator directly to the sub-regional Fisheries Commissions (as opposed to projects) and with a specific EAF Project person or dedicated Working Group with NEPAD, if one was created.

161. The Evaluation found that the R/V cruise planning was very efficient (score 6) but that in Phase I, its current effectiveness was only adequate (score 4).

6.3 Effectiveness of the Project outputs and outcomes

FAO-EAF activities - Pillar 1

162. In the course of Phase I to date, the EAF-Nansen Project has made significant contributions of good quality to the analysis of national policy development needs for EAF in Africa. It has also contributed to the development of a draft policy and EA-management plan of regional importance for transboundary small pelagics in the CCLME area.

163. Regarding the development of EA-FMPs, the evaluation found that the Project has made significant and highly relevant contributions through:

- A system of distributed EA Regional and National Task Groups that provided a focus for institutional strengthening and capacity building workshops;
- Training of trainers (EAF-Nansen Report N°6) to support NTGs in their implementation of the EAF;
- Successful implementation of an ERA-based process that has greatly contributed to raising awareness of the EAF;
- Capacity building for FMP planning in MCs countries, and
- Support for the preparation of EA-FMPs.

164. With the Project’s support, 15 countries are now engaged in the preparation of a national EA-FMP, most having reached the technical validation stage. The methodology promoted by the Project has been efficient with good results in comparison with similar planning exercises conducted in the region. The Project has developed an EA-based process, notably to identify major issues affecting fisheries sustainability, which can now be replicated.

165. An in-depth analysis of draft FMPs (Annex 8) showed an insufficient level of incorporation of key EAF principles with particular reference to the coherence of management units, complexity of the fisheries selected, and a need for difficulties to adequately address some challenges of political, legal and institutional nature need to be clarified and discussed.
166. The institutional dynamics and improved fisheries governance resulting from the use of key EAF principles are important indicators of the Project’s effectiveness. Most FMPs are expected to be officially adopted before the end of the transition period, which is a highly significant achievement. This confirms the Project relevance and the willingness and commitment of the MCs decision-makers to implement the EAF. It also confirms that FMP processes are relevant entry points to improve fisheries governance through improved incorporation of key EAF principles. Furthermore, considering that almost all the countries in the region covered by the Project are in a learning process as regards to FMP and that the methodology that is promoted by the Project is still experimental, a major challenge in the future towards the promotion of FMP that are fully consistent with EAF should be to adapt and improve the overall methodology.

167. Overall, EA-FMP outputs and outcomes have been effective (score 4). Capacity-building of countries for the EAF planning and management process and the production of draft EA-FMP in terms of output has been good (score 5), but actual and potential outcomes are only adequate due to the insufficient level of incorporation of key EAF principles in draft FMPs. Therefore the Project will partially meet its specific objectives in relation to furthering the acceptance of the key principles of the EAF in the countries (Phase 1) and to enabling countries to sustainably manage their fisheries (Transition period).

168. This appreciation is in relation to the phrasing of the specific objectives, which are quiet ambitious and somewhat unrealistic considering the complexity of fisheries planning and management in general, the relative youth of EAF concept, geographical coverage of the Project and limited human capacity of the PCU in Rome. The Evaluation agrees with the mid-term review (2009) finding that “limited human resources of the PCU in Rome which means limited contact and follow-up to workshops and seminars hampers the incorporation of key EAF principles in fisheries planning and management”.

169. The effectiveness of the Project as regards to EA-FMP also needs to be appreciated in terms of the institutional dynamics and processes for improved fisheries governance including furthering key principles of EAF that have been launched in the Region, which should be considered as a major achievement of the Project (score 6).

IMR R/V surveys and scientific services - Pillars 2 and 3

170. The Evaluation noted the large number of R/V surveys that have been very successfully conducted, and therefore with regards to (mostly output and activity) indicators in the logical framework, the Project has delivered excellent results under Pillars 2 and 3. However, survey results have mostly been used for management advice in the BCC sub-region, which has not developed EA-FMPs, and in the CECAF North Area where the Project started at the end of Phase I.

171. The Evaluation has noted two important complaints about R/V surveys output and outcomes from beneficiary countries. They concern i) the lack of inshore waters coverage, and ii) delays in ecosystem plankton and benthos sample analyses and lack of detailed and final survey reports (including these samples).

172. R/V coverage of inshore waters is crucial for the provision of scientific advice for a number of the fisheries selected to develop EA-FMPs, and were to be addressed by a combination of R/V Dr. Fridtjof Nansen cruises and advice to national and regional R/Vs. Even though pelagic and demersal survey conducted by the R/V Dr. Fridtjof Nansen surveys
may be potentially very important to devise recruitment or biomass indicators for the EA-FMP of small-scale fisheries, such as Artisanal (Sierra Leone), or from Beach Seines (Gulf of Guinea cluster), this is not well understood. Furthermore, FMP development for inshore fisheries are usually very poorly financed, and it seems very unlikely that they could muster the political will at national or regional level necessary to organize some co-financing.

173. Finally, although delays in analyzing ecosystem samples may be due to a lack of capacity at country level more than to IMR’s number of technical staff joining the R/V Dr. Fridtjof Nansen, the current backlog of samples to be analyzed needs to be addressed in order to provide timely information on the marine ecosystems surveyed.

174. The matter of Cruise reports is an important one. The EAF-Nansen Project research cruises are expected to contribute a significant part of the knowledge base required to inform and advise the planning for an ecosystem approach to fisheries management. However, most cruise reports are preliminary and can only cautiously be quoted as scientific documents. Many judge the final Cruise Reports published by the Project to be inadequate. The Evaluation contends that these may be perfectly adequate Cruise Reports, but on their own, they do not respond to the countries expectations for fisheries management advice. Scientists feel they need to show the result of their participation to R/V cruises to national policy makers and fisheries managers, and need to produce a different kind of document – specifically aimed at the national level - in order to provide scientific advice for the development of EA-FMPs and to further understanding an management of marine biodiversity and climate change. Collaborative linkages need improving between research and decision-makers in support of the EA-FMP processes, particularly in the case of national FMPs for inshore resources.

175. In Phase I, the Project has worked to strengthen the role of regional fisheries/management bodies (CECAF region (CCLME and GCLME), SWIOFC and BCC), with some significant success. Results from the regional Nansen surveys were provided to regional management bodies for them to provide advice on the status of shared stocks and on sustainable harvest levels, and by 2013, the Project had set up a regional stock assessment group in SWIOFC, organized several training sessions and funded WG sessions. Similarly for the BCC, the Project has been instrumental in the setting up of a stock assessment working group in 2013, which is due to recruit a top level advisory post on the management of shared stocks.

176. The Evaluation fully agrees with a conclusion of the 1982 evaluation of the NP that the program effectiveness, in a development context, could be significantly higher through an “extensive follow-up on the cruise results” and recommended that “the success of the renewed ‘R/V Dr. Fridtjof Nansen’ program should be measured by the extent to which the data are used by the industry and governments for fisheries development and for the protection of the environment and resources.” (Norad Evaluation 1989).

6.4 Impact

177. The EAF-Nansen Project was nominated a “FAO Success Story” in 2011. Selection was based on the Project’s measurable and positive impacts at both regional and local levels, a wide participatory and consultative process that it is sustainable and replicable, the best practices/guidelines established and the capacity building and interagency collaboration it provided. The Project “in particular the contribution of the research vessel to implementation of the ecosystem approach to fisheries” is also featured in a new FAO Knowledge
Management publication, which showcases FAO’s works to the public and external stakeholders and “what it does well towards the achievement of the Organization’s mandate.”

178. Despite some shortcomings identified by the team, the Evaluation finds the combination of EAF activities with the NP in the project ground-breaking. Phase I has made significant contributions to demonstrate the relevance of EA-FMPs, and very importantly, the Project has provided the countries with necessary EAF skills, knowledge and systems. African stakeholders of the EAF Nansen Project have increased their understanding on the Ecosystem Approach to Fisheries, and appreciated the contribution made by the project in providing knowledge on marine ecosystems and the capacity that has been built. The R.V. Dr. Fridtjof Nansen has collected highly significant information on marine ecosystems and provided experience to hundreds of African marine scientists on ship-based research.

179. The levels of actual and of potential impacts of EA-FMP developed in Phase I are variable. Some EA-FMPs are unlikely to help to manage fisheries sustainably as they stand, and some will need corrective measures. In countries with little experience in fisheries management or weak institutions, the Project has had considerable impacts in terms of the capacity building of public and private stakeholders in EAF, the promotion of FMP under EAF (using the format promoted by the Project) as well as in terms of influence on the policy and planning frameworks. In countries where FMP is not a new concept and/or where external assistance relating to institutional support has been important, the impact is less evident. In Senegal or Ghana, for example, fisheries administration appear reluctant to change their ways in order to support the EA-FMP development process, even though they value the methodology based on ERA to conduct participative and holistic analysis-diagnosis. In such countries, the impact of the Project on FMP processes can therefore be considered negligible. This is not however a systematic occurrence and the project could make significant contributions in Mauritius and Mozambique, as well as in Gabon where the Project could adapt its approach and be flexible in terms of the format proposed for the EA-FMP.

180. Based on the above, it is recommended that during its second phase, the Project be less prescriptive and more adaptive depending on the institutional context in promoting EA-FMP under EAF. This would only be possible if the PCU resources are increased in order to be able to organize and facilitate the provision of advice in fisheries governance and management including policy, legal and institutional related aspects.

6.5 Sustainability of Partnerships and alliances

181. The EAF-Nansen Phase I Project was conceived as a multi-donor initiative, with partnerships at global (GEF, UNDP), regional (LMEs, RFBs, RFMOs) and country levels. It was probably premature to hope to move from the 100% Norway-funded to NP to a 50% multi donor-project, and it may still be over-optimistic for Phase II. Several co-financing partnerships developed in Phase I are unlikely to remain operational into Phase II and are therefore of limited sustainability (score 2), due to the uncertain and temporary nature of short-term projects.

182. By contrast, the Evaluation believes that the collaborative partnerships initiated in Phase I with NEPAD and RFBs are very likely to endure into Phase II and beyond (score 5). They are built on mutual benefits and also help coordinate EAF activities at national level. They will also be reinforced by the wider focus of the EAF-Nansen activities to include
ecosystem and climate change, which is a focus of the NFFP and at the core of the Norwegian development cooperation policy in fisheries and aquaculture.

183. Strong partnerships between the Project and RFBs, to which RTGs are integrated as one of their working groups, are thought to be highly sustainable (score 5).

184. The sustainability of implementation partnerships at national fishery level will have to be judged through the NTG’s continued role and the fisheries administration’s implementation EA-FMP initiated during the first Phase of the Project. Some countries have used funding from other Projects to finance or co-finance the EAF process and implementation of the EA-FMP, or have adopted the NTGs set up by the Project as permanent institutions for the purpose of EAF management, which gives them a good chance of existing beyond the Project duration (score 5). However others have been in need of repeated support and slow to make much progress. For these, the likelihood to remain functional once the Project’s support stops is very limited (score 1).
7 Conclusions and Recommendations

7.1 Conclusions

Relevance of Project Concept and Design

185. Phase I of the EAF-Nansen Project was a continuation of the Nansen Program initiated in 1975, with additional activities to support Member Countries to adopt and implement an Ecosystem Approach to Fisheries management. From the onset to the end of 2006, the project was timely and highly relevant (score 5, Table 6) to Norway’s foreign cooperation policy, to FAO’s strategic objectives, to FAO’s Fisheries Department ongoing EAF program and was responding to MC demands. This remains true in 2013 and is very likely to be the case for Phase II from 2016.

186. There was no dedicated formulation for Phase I and the logical framework has several weaknesses. The immediate objective, that “government staff are provided with additional knowledge” does not naturally link to the development objective, and does not relate to all listed beneficiaries involved through the EAF. The Theory of Change is adequate but only implicit (score 4). Phase I Activities were organized into five components and six outputs corresponding to different types or stages of intervention around three delivery pillars (FAO-EAF, IMR-VOC and IMR-Scientific services). Activities are not logically or clearly linked between or within components, and their combined impacts are not translated in terms of results against its objectives. Components and outputs were slightly re-organized for the Project Transition Phase in 2012, but it remains that the Project’s design is not sufficiently clear (score 3).

187. The Project design included a new co-financing model, by which partner projects, mainly the four African GEF-funded LME projects, were foreseen to co-finance 50% of R/V survey costs. The project was initiated without firm co-financing commitments. In the event Norad provided additional funds, but the Project’s financial planning was found to be poor (score 2). Throughout the Project’s Phase I to date, the necessity to secure co-financing has imposed additional administrative costs and inefficiencies for IMR and for FAO. Delivery was also affected, creating some MCs misunderstanding or mistrust of the R/V purpose (including spying or oil exploration) and a break in the time series of Canary Current small pelagics annual survey data collected steadily for several decades.

188. The initial budget was inadequate for both the FAO-EAF PCU and IMR-Scientific services. The evaluation believes this was mostly due to the lack of project formulation for the new FAO-EAF project component. FAO-EAF activities were delayed by more than a year. IMR also experienced problems with its budget as VOCs incurred in NOK had been agreed on the basis of a fixed US$ rate per survey day, which increased its exposure to fluctuating NOK/USD foreign exchange rates.

189. Project management of the Tripartite Agreement between Norad, IMR and FAO through annual coordination meetings supplemented with semi-annual meetings most years, has provided very effective monitoring arrangements and structured a very effective coordination between the three parties (score 6). A small PCU and the Research coordinator from IMR based in FAO FI in Rome make up the three-person project management team. A number of FAO FI staff from the EAF program and teams from the IMR CDCF and Vessel Operations in Bergen provide significant additional support for the project management and implementation. The Evaluation has found the project management from both FAO and IMR,
repeatedly challenged by weaknesses in the Project co-financing partnerships and budgeting arrangements, to be highly efficient (score 6).

190. Although initial budgets for the FAO-PCU and IMR Scientific Services were increased in 2007, the Evaluation found both teams to have been under-staffed during Phase I (score 4), limiting the Projects delivery capacity. Financial Resources management for the FAO-PCU (Pillar 1), IMR-VOCs (Pillar 2) and IMR-Scientific Services (Pillar 3) has been very adaptive to rectify initial budget under-estimates and numerous shortfall in co-financing and have been very efficiently coordinated between the partners (score 6).

191. Institutional arrangements for Project steering and delivery were adapted over the course of the Phase and found to have performed well overall (score 5).

Efficiency and effectiveness of Project outputs and outcomes

192. For the FAO-EAF Pillar, Project delivery and outcomes were found to be either good or adequate overall, with some variation between countries, components and activities. Arrangement to further the EAF into regional and national policy processes were highly relevant (score 5) and mostly lead to excellent outcomes, such as the project setting up EAF Regional Task Groups (RTGs) in Regional Fisheries Bodies (score 6). Phase I supported 15 countries to prepare EA-FMPs, some of which are already formally adopted and others are to be adopted by the end of 2013. The evaluation found the process based on ERA to be highly relevant, and its overall effectiveness to be good (score 5). The “quality” of EA-FMPs examined in detail by the Evaluation was found to vary widely but to be adequate overall (score 4).

193. Planning for the R/V Dr. Fridtjof Nansen surveys and associated service, given the complexities from the co-financing model, has been very adaptive and resilient (score 6). However, the combined effectiveness of the R/V surveys and scientific services in Phase I was reduced by two seemingly chronic problems that will be very important for the Project to resolve:

- R/V communication with survey countries needs improving. Fisheries administrators and managers in several countries visited by the Evaluation have complained of inadequacy of information regarding the vessel movements and survey program, giving too little time to organize the processing of necessary administrative authorizations from other government departments.

- Cruise reports do not address the countries expectations and need to be complemented by a summary for Fisheries managers and policy makers that are made immediately available. Additional support and arrangements are needed to analyze samples and improve reporting for ecosystem surveys.

194. Therefore overall, the effectiveness of the R/V Dr. Fridtjof Nansen surveys and associated services in Phase I is rated adequate (score 4), and a strong recommendation is put forward to Norad, IMR and FAO to address the problems.

Cross cutting aspects

195. Capacity building activities were found to be generally excellent, despite the very small teams at FAO-PCU and IMR. In terms of outcome, the evaluation believes that the effectiveness of on-board training has been reduced because of the cruise plans imposed by
the co-financing model, which have favored countries and fisheries that already had higher capacities, it’s effectiveness for the Project as a whole is scored as inadequate (score 3).

196. To conclude, the evaluation commends the variety and high quality of the Project’s capacity building activities. The recommendation made to the PCU and IMR is to keep records and publish short annual Capacity Building summary reports, with records of attendance numbers by type of meeting/training, country, institution type and gender in order to provide indicators that be linked to training plans, needs and capacity. An important indicator would be to also follow the change in capacity building needs of the NTGs over years.

197. During Phase I, the Project provided training to nearly 600 participants on board R/V surveys, which has been very highly valued by the participants. In terms of capacity building at sea, this would be an excellent achievement if the R/V cruises had been more evenly spread over time and between regions and countries. As it is, apart from three BCC countries and Ghana (through the Oil for Development program), countries have mostly seen the vessel twice for the LME cruises. Greater contribution of R/V activities to the building of national Research Centers’ capacity is needed, which would involve national researchers in data processing and preparation of scientific publication in a systematic manner. The evaluation finds that the R/V schedule does not appear to be regular enough to provide an adequate level of sustained capacity building that many countries need (score of 3).

198. Despite a delayed start for the development of most EAF communication activities, including publication of EAF-Nansen reports, e-Newsletter and the website development, the Phase I component 5 (output 6) has produced very good material. Some elements need updating and developing, but given the limited staff and resources available, communication output were found to be as good and highly relevant (a score of 5). Already in Phase I, the Project has very significantly contributed to enhance FAO’s normative contributions through its field-testing and input into the development of the EAF toolbox.

199. Gender issues are considered explicitly by the Project EA-FMP process, which is based on the ERA approach that allows for gender and social issues to be adequately covered. They are also implicit in the Project’s programming documents and both FAO and IMR teams are to be mindful of gender balance when organizing capacity building activities, workshops, meetings and the NTG/RTGs meetings. However, it will be important for the Project to analyze and report on the place and role of women in the Project.

Sustainability of Partnerships and alliances

200. The Project forged two types of partnerships, co-financing partnerships and Project delivery partnerships. Generally co-financing partnerships with short-term projects have a limited time-span and are found to be unlikely to last beyond Phase I and therefore of limited sustainability (score 2). Partnerships to co-finance the costs for R/V surveys and associated scientific services need to be based on long-term higher-level institutional partnerships. A recommendation is proposed to this effect.

201. In Phase I and the transition phase, the Project has worked tirelessly and been very effective (score 6) at developing and strengthening partnerships at pan-African, sub-regional and national levels. Partnerships initiated in Phase I with NEPAD and RFBs are very likely to endure into Phase II and beyond (score 5).
202. The sustainability of implementation partnerships at the fishery level will have to be judged (and therefore closely monitored) through the NTGs’ implementation of the policy and EA-FMPs initiated during the first Phase of the Project. At this time (August 2013) a detailed study of the EA-FMP under development gives a variable prognostic from a good chance of existing beyond the Project duration (Score 5) to a very limited likelihood to remain functional once the Project’s support stops (Score 1).

203. Environmental impact: The evaluation found the current level of achievement of EA-FMPs to be good (score 5) and made constructive criticisms on their current potential for implementation and likely positive impact on the fishery.

7.2 Recommendations

204. On the basis of evidence analysed, and the countries visited and people met, the Evaluation recommendations are given below.

Project Concept and Design

205. The Project needs a formulation for Phase II, in continuation with Phase I with a results-based logical framework, suitable indicators of impact at regional (shared resources) and national fishery level. The Project may take the opportunity of the coming Project Forum meeting (scheduled to be held in Dar es Salaam in November 2013) to put together a formulation Task Group.

206. The co-financing of survey costs (VOC and associated services) can be a powerful instrument of development and improve coordination between and within FAO, other UN agencies and Norway’s development cooperation programs in Africa. However, long-term co-financing arrangements need to be developed directly with the countries, RFBs and regional coordination bodies, and with financing bodies such as the GEF rather than through projects. Furthermore, co-financing should not only concern essential Project capacity at FAO-PCU or IMR, but it should support the scientific survey plan for the R/V Dr. Fridtjof Nansen developed in collaboration with all concerned partners.

207. It is important that NORAD and FAO keep appropriate regional agencies fully informed of survey results, and encourage their financing partners to provide support and financial assistance to the countries concerned.

Recommendation 1: For Norad and FAO FI

- Devise co-financing arrangements for the R/V Dr. Fridtjof Nansen cruises directly with institutional financial partners such as GEF in association with the user community of RFBs, RFMOs and environmental protection agencies. This effort could be coordinated and overseen at African Union level recognizing that AU-IBAR and NEPAD are developing the new Pan-African Fisheries policy framework and strategy. Secretariat for the mechanism could be provided by NEPAD, thereby strengthening its mandate from CAMFA and the work of the new Fisheries Policy Think-Tank and Working Groups.

208. The MFA/Norad and IMR need to set up a similar working party to establish links with other Norad-funded programs (Oil for development, bilateral, NorHed, continental shelf initiative) that would institutionalize their co-financing support for research vessel deployment over five-year periods.
209. Some countries and RFBs are organizing co-financing partnerships to develop and implement policy revisions and EA-FMPs with other donor-funded projects. These examples need to be showcased.

Project implementation (Transition and Phase II)

210. On the basis of Phase I excellent ground breaking results in support of EAF, the challenge will be for the Project to continue to support the countries’ effort towards EA-FMP implementation and cycle of monitoring, evaluation and revision; and for the Nansen surveys to demonstrate the importance and modalities of connections between marine ecosystem science and EAF. To address these challenges, both FAO-PCU and IMR core teams need to be reinforced.

Recommendation 2: For Norad

Increase capacity of the PCU to support the countries’ process of EA-FMP implementation and revision, in particular relating to fisheries governance and management, including policy, legal and institutional aspects; and to continue its support of a marine ecosystem scientist for the Transition Phase into Phase II.

211. Following some confusion in Phase I, in part created by the co-financing model, it is very important that the Project puts together a clear plan for the R/V Dr. Fridtjof Nansen movements, surveys and on-board training.

Recommendation 3: for Norad/IMR/FAO Regarding the R/V Dr. Fridtjof Nansen

Commission (possibly through NEPAD PAF) an in-depth assessment of current and forward needs and capacity in R/V surveys, scientific services and skills at country and regional levels; on the basis of which

• Establish a 5-year R/V Dr. Fridtjof Nansen survey and capacity building program, based on the Project’ objectives and a coherent science plan in support of the EAF, with a 2 year rolling R/V cruise plan, and

• Increase the Project’s support to national and regional research vessels, and communicate the importance and synergies between R/V Dr. Fridtjof Nansen and coastal research vessels for EAF; from which

• Convene 6-months forward planning meetings with RFBs including a specific forward communication schedule for Fisheries Ministers, Fisheries Directors and Research Institutions; and finally

• Develop the activities and identify the capacities necessary to i) Produce prompt cruise report summaries for managers, including identification of data collected and planned analyses, training provided, expected land-based activities and inputs to EAF; ii) Provide clear estimate of capacity needed on board, in-country and through collaborations, for countries to obtain full benefits of all cruises and particularly for ecosystem baseline and monitoring biodiversity cruises.

Partnerships and alliances
212. The Project was able to develop extensive and constructive partnerships with regional fishery bodies and institutions involved with the marine environment, which will be important to strengthen in Phase II. Looking into the future, the Project may want to work closely with RFBs and AU-level emerging institutions in order for them to secure co-financing directly from the GEF and other funds. This could start as suggested above with the development of regional and AU-wide marine ecosystem science plans, research vessel cruise plans, and support to African wide marine ecosystem information resources, training opportunities, and collaboration on Higher Education and research strategies.

**Capacity development**

213. The EAF-Nansen Project is about increasing the EAF knowledge base and national and regional management capacity. Phase I has developed new and very promising activities and partnerships with African educational providers, which could be further developed and include a wider support from Norad, and in particular to:

214. Provide a wider base of possible cooperation with Norwegian institutions and resource persons, that may be called upon through specific further ‘baby projects’ to support countries in the implementation of EA-FMPs, such as for technical advice and training on social, economic, legal or technical aspects, private sector development, marketing or local training on project management (for focal points and NTGs), accountancy; and to

215. Further develop EAF courses at African University, college and school levels initiated in the transition period, for example through new Project activities linked to Norad’s programs to support higher education and research cooperation (NORHED and NansClim).

**Recommendation 4: for the Project**

| - Devise, with Norad’s support and in collaboration with PAF, RFBs and MCs, a Capacity Building Strategy that would consider a wider base of Norwegian and African partners. The strategy would also promote exchanges of information, experience and expertise between countries in relation to the promotion of EA-FMP. The Strategy implementation, and its impacts would be monitored through records kept by FAO-PCU and IMR, and published annually through Capacity Building summary reports for EAF on-shore and sea going activities. |

**Communication and Contribution to Normative products**

216. The Project is breaking new ground and bringing exciting demonstrations of the challenges and benefits of an EAF, EA-FMP and of the importance of marine science to sustainable resource use, biodiversity and natural resource management resilience and adaptation to environmental change. Communication activities will need to be organized as a sufficiently resourced and comprehensive strategy to showcase the Project’s important results from Phase I. To further an integrated understanding of key EAF principles the Communication Strategy will also need to make clear the links between marine ecosystem science, resource management and development, including EA management of data poor fisheries and advocate the importance of marine biodiversity and ocean climate research.

217. The challenge for Communication activities in Phase II will be for the Project to demonstrate its dual purpose (EAF and research surveys) as strengths, to develop strong links with African institutional partners and programs, and to connect with the communication materials of the EAF Toolbox, of IMR (R/V Dr. Fridtjof Nansen and scientific services) and that of other partners, to increase the Project visibility and impact.
218. In terms of Normative Products, the Project put aside the idea to develop its own Guidance document during Phase I, in favor of contributing to the FAO FI development of the EAF Toolbox. This is a more cost-effective and possibly much more sustainable solution for the long term. However, the Project will need to ensure that it contributes guidance of a practical nature, and that it delivers detailed analyses and lessons learnt from its demonstration “Baby” projects, for example, to support the preparation of Technical guidelines on EA-FMP design and implementation. An important purpose of such guidelines would be notably to clarify key concepts relating to EA-FMP as major policy instruments for improved governance and to provide guidance on means to support the planning process. This technical activity would need to be considered as an independent Communication activity in Phase II.

**Recommendation 5: to Norad/IMR/FAO:**

- Devise a Communication Strategy and support a full-time Communication staff (possibly based with NPCA or a Regional Fisheries Body) to implement it.

**Gender mainstreaming**

219. Phase II will see some of the EA-FMPs implemented and it will be important for the Project to consider gender explicitly including specific indicators in the logical framework. This could be done also through an additional Project activity, for example delivered in collaboration with experienced Norwegian professionals, and in Partnership with NEPAD-Program for African Fisheries (PAF), to showcase innovation in terms of best practice and planned approach adapted to a variety of fisheries-specific situations in African MCs.

**Recommendation 6: To FAO and the Project Team**

- Consider gender explicitly in Phase II of the project. The logical framework will need to be ‘engendered’, with detailed indicators to illustrate the extent of women’s voice in the project’s local, national and regional activities and fora.
Table 6. Overall project Phase I assessment (July 2013)

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* 6-Highly Satisfactory (HS)/ excellent/ very high relevance; 5-Satisfactory (S)/ good/ high relevance; 4-Marginally Satisfactory (MS)/ adequate/ some relevance; 3-Marginally Unsatisfactory (MU)/ inadequate/ little relevance; 2- Unsatisfactory (U)/ poor/ limited relevance; and 1-Highly Unsatisfactory (HU)/ very poor/ no relevance at all; N/A not applicable.
EAF-Nansen project: Strengthening the Knowledge Base for and Implementing an Ecosystem Approach to Marine Fisheries in Developing Countries, (GCP/INT/003/NOR)

Terms of Reference for the final evaluation of the first phase of the project
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1 Background of the Initiative

1. In 2001, 57 countries issued the Reykjavik Declaration on Responsible Fisheries in the Marine Ecosystem, which included a declaration of their intention to work on incorporating ecosystem considerations into fisheries management. This was followed by the 2002 Plan of Implementation of the World Summit on Sustainable Development that called for the application of the Reykjavik Declaration by 2010. While the signatories to the Reykjavik Declaration on Responsible Fisheries in the Marine Ecosystem agreed that "There is a clear need to introduce immediately effective management plans with incentives that encourage responsible fisheries and sustainable use of marine ecosystems" they also recognized that it was very important to advance the existing, limited knowledge of how ecosystems function if EAF was to be effective and result in the achievement of the desired ecological, social and economic objectives.

2. When the implementation of EAF was discussed in connection with the 25th session of the FAO Committee on Fisheries (COFI) in 2003 some Member States indicated that they were already addressing several aspects of EAF (e.g. impact of fishing on associated species, effectiveness of spatial and temporal closures, stakeholder involvement in fishery management, restoration of critical habitats etc.). Many others, however, particularly from developing countries, expressed their concern that attempts to operationalise the EAF were invariably hindered by lack of sufficient relevant data and information and that increased costs and difficulty in incorporating ecosystem considerations in fishery management would contribute to a broadening of the gap between developing and developed countries. They therefore appealed to the international community for technical assistance.

3. As mandated by COFI, FAO developed the technical guidelines on the Ecosystem Approach to Fisheries (EAF) that include the precautionary approach, ecosystem management, biodiversity considerations while focusing on human well-being and equity. The broadening scope of fisheries management under EAF requires an expanded knowledge base and, in turn, the collection of new type of data and information, largely unavailable.

4. As a follow-up of the Nansen Programme, Norad agreed to support FAO to operationalise the EAF in developing countries and decided to fund the EAF-Nansen project. The EAF-Nansen project is a partnership between Norad, the Institute of Marine Research (IMR), and FAO to support participating countries to fulfil their commitment towards the implementation of the ecosystem approach to fisheries. The partnership is governed by a Tripartite Agreement. The Project is financed by Norad and executed by FAO with the support of IMR for the scientific and operating services of the research vessel “Dr. Fridtjof Nansen”. The research vessel is an important tool in the Project and has a long tradition of carrying out surveys in developing countries in cooperation with FAO. The use of the UN flag (as a house flag) facilitates movement across jurisdictional boundaries.

5. The implementation of the EAF-Nansen project started in January 2007, with an initial funding of 150 million NOK from Norad. An additional contribution of NOK 30 million was granted to expand and enrich the planned activities of the EAF-Nansen Project, particularly through facilitating a stronger and deeper interface between scientific knowledge and monitoring and the governance and human dimensions of fisheries. The additional contribution provided provision to support improved policy formulation, development of EAF management plans and targeted EAF research including the development of a more comprehensive GIS system to facilitate analysis of linkages between the existing and future
information collected on resources, environment and socio-economic features. The total
collection of Norad at the end of the first phase is 205.1 million NOK, including the vessel
operating costs. Other partners such as the Large Marine Ecosystem projects contribute to the
EAF-Nansen project in cost sharing for the use of the research vessel. The project has a
global outreach, with an initial focus on Sub-Saharan countries in Africa.¹

6. The immediate objective of the EAF-Nansen project is to provide the fisheries
research institutions and management administrations in participating countries with
additional knowledge on their ecosystems for their use in planning and monitoring and to
further the implementation of the key principles of the ecosystem approach to fisheries
management (EAF). For the transition phase the immediate objective was modified into
“Staff of the fisheries research and management administrations in the participating countries
are sustainably managing their fisheries” and the log-frame was revised accordingly.

7. The six main components of the project are:
   i. Support to policy formulation consistent with EAF principles at national and
      regional levels;
   ii. Support to fisheries managers to take EAF considerations into account in their
       planning and implementation of fisheries management regimes;
   iii. Ecosystem assessments and monitoring (including sea going surveys with the R/V
       Dr. Fridtjof Nansen and advice on use of relevant tools for research, development of
       an appropriate set of biological as well as socioeconomic scientific indicators based
       on standardized data collections and sampling methods, to allow monitoring of key
       ecosystem properties and features);
   iv. Capacity building at scientific and management levels to achieve country and
       regional level sustainability for an EAF;
   v. Advice on use of national and or regional vessels and coordination of regional
       coverage by local and other vessels; and
   vi. Project planning and dissemination of information.

8. The target beneficiaries of the EAF Project include:
   • national and local Governments of participating countries;
   • existing and emerging regional organizations, such as the Benguela Current
     Commission and the South West Indian Ocean Commission;
   • officials in research institutions and management administrations; and
   • other key stakeholders such as commercial and artisanal fishers, academic
     researchers and NGOs.

9. An internal mid-term review (MTR) of the project was carried out in 2009 to provide
   an assessment of the implementation status of the project, and make recommendations for
   changes in its overall design and orientation as well as more detailed recommendations for the
   work-plan for the remainder of the project.

10. At the Semi-Annual Meeting in October 2010, Norad expressed its willingness to
    support the continuation of the EAF-Nansen project with an expanded research programme to
    include climate change-related issues and biodiversity. FAO was requested to prepare a
    project document for the transition phase (2012-2014) leading to the second phase of the

¹ In January 2013, these amounts corresponded to USD 26.7 million, USD 5 million and USD 36.6 million,
respectively.
project. Subject to Norwegian Parliamentary approval a new research vessel is expected to be constructed during the transition phase of the project. The implementation of the ecosystem approach to fisheries remains the main focus of the project with an expanded field research programme to serve broader needs for monitoring the state of the marine ecosystem in terms of changes in biodiversity and productivity that may result from impacts of climate change and pollution.

11. This transition period will also give the opportunity to FAO and IMR to engage in discussions with potential partners regarding the use of the vessel as a wide UN platform for cooperation, the co-financing possibilities of the operating costs of the vessel and synergies with other UN Agencies and donors to support activities of common interest.

2 Purpose of the Evaluation

12. As part of the project document, a final evaluation is expected to take place towards the end of the first phase of the project “in order to review needs, implementation and operations modalities, for the continuation of the project”. During the semi-annual meeting in October 2012, Norad explicitly requested that an independent evaluation be carried out in close collaboration with the Evaluation Service of Norad. The findings and the main recommendations of the evaluation will feed into the preparation process of the next phases of the project.

13. In the light of the above, the evaluation will focus on assessing progress being made towards achievement of outcomes and provide recommendations for the second phase of the project. Its specific purposes will be:
   a. Assess project achievements in terms of outputs and outcomes and progress made towards contributing to the long term objective (impact), as well as any factor affecting performance, positively or negatively;
   b. Formulate recommendations on the thrust, scope, duration and approach of the second phase of the project.

3 Evaluation framework

3.1 Scope

14. The evaluation will assess the programme since its inception to date, in all participating countries. Earlier initiatives will also be taken into consideration, to allow assessing the relevance and objectives of the current project in the context of the long-term collaboration among Norway, FAO and other Member Countries of the Organization.

15. The evaluation will also analyse the extent of integration of project’s results in other FAO’s initiatives in participating countries, as well as at regional and global level.

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See paragraph 79 of the Project Document.
16. As the evaluation team will not be able to dedicate the same level of attention to all participating countries, different approaches and tools will be developed to reach out to all stakeholders.

17. The section below describes in detail the evaluation criteria and questions. Specific issues to be addressed, that are of particular interest to the Government of Norway, are also highlighted here:
   • The efficiency and effectiveness of the co-funding mechanisms, as planned and as actually implemented;
   • The actual requirements in terms of human resources to manage the programme in an efficient and effective manner, against deployed resources, and possible remedial measures.

3.2 Evaluation criteria

18. The project will be critically assessed through the internationally accepted evaluation criteria, i.e. relevance, efficiency, effectiveness, impact, and sustainability.

19. In line with the new FAO project cycle\(^3\), the evaluation will assess compliance with the following UN Common Country Programming Principles: Human Rights Based Approaches (HRBA)\(^4\); Right to Food\(^5\); Decent Work\(^6\); Gender equality\(^7\); Environmental sustainability, Capacity Development\(^8\) and Results Based Management. However, HRBA principles will receive minor attention in the evaluation, in consideration of the programme research focus.

3.3 Evaluation issues

20. The evaluation will assess the EAF-Nansen project on the basis of the issues listed below.

I. Relevance of concept and design

a. Project relevance to:
   ▪ the Code of Conduct for Responsible Fisheries;
   ▪ the EAF Guidelines;
   ▪ FAO Global Goals, FAO Strategic Objective C “Sustainable management and use of fisheries and aquaculture resources” and its Organizational Results and FAO Core Functions;
   ▪ member countries policies and strategies, as well as knowledge needs in terms of management of national main types of fisheries; and
   ▪ Norway’s policy and strategies for development cooperation.

b. Robustness and realism of the theory of change underpinning the project;

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\(^4\) See [http://hrbaportal.org/](http://hrbaportal.org/)


c. Clarity, coherence and realism of the Logical Framework\(^9\) of the project and of its design, including:
  - The causal relationship between inputs, activities, outputs, expected outcomes (immediate objectives) and impact (development objectives);
  - Validity of indicators, assumptions and risks;
  - Approach and methodology;
  - Resources (human and financial) and duration, including co-funding mechanisms;
  - Stakeholder and beneficiary identification and analysis;
  - Institutional set-up and management arrangements.

II. **Effectiveness of outputs and outcomes**

d. Overall effectiveness of the project, actual or potential, in attaining its intermediate/specific objectives
  - the organisation/arrangement established in countries between fisheries research and administrators to strengthen the implementation the EAF;
  - the extent of uptake and integration of the EAF principles in national and regional policies and management plans;
  - the extent of capacity development among government and university staff in participating countries, at scientific and management level;
  - extent of adoption of standardized systems for data collection, sampling methods and appropriate set of scientific indicators.

e. Use made by the project of FAO’s normative and knowledge products and actual and potential contribution of the project to the normative and knowledge function of the Organization; particular attention in this respect will be paid to:
  - the integration of the EAF principles in the work of the initiative;
  - the use by participating institutions of relevant documents, publications and tools produced by FAO on the EAF.

III. **Efficiency and effectiveness of project implementation process**

f. Assessment of project management:
  - Effectiveness of the coordination and management structure comprising FAO/FIRF, Norad and Institute of Marine Research (IMR), including staffing and quality and realism of work plans;
  - Efficiency and effectiveness of operations management both at the Coordination Unit at FAO and in IMR, Norway;
  - Effectiveness of the scientific services rendered by IMR through the Letter of Agreement;
  - Gaps and delays if any between planned and achieved outputs, the causes and consequences of delays and assessment of any remedial measures taken;
  - Efficiency in producing outputs;
  - Effectiveness of internal monitoring and review processes;

g. Institutional Setup:
  - Efficiency and effectiveness of partnership arrangements with other agencies, e.g. the GEF funded Large Marine Ecosystem Projects, among others;

\(^9\) The Logical Framework embodies the Results-Based Management approach in a project.
Efficiency and effectiveness of the governance structure, including steering committee meetings, Annual Forums, annual consultative meetings;

- Quality and quantity of administrative and technical support by the FAO Coordination Unit to National Task Groups (NTG) and Regional Task Groups (RTG); particular attention will be given to assessing the channel of communication between the Coordination Unit and National Task Groups established in each participating country and partners;

- Timeliness, quality and quantity of inputs and support by participating countries and partners, including the co-funding mechanisms.

h. Assessment of financial resources management, including:

- Adequacy and realism of budget allocations to achieve intended results;
- Adequacy and realism of Budget Revisions in matching implementation needs and project objectives;
- Rate of delivery and budget balance at the time of the evaluation and in relation to work-plans.

IV. Analysis of the application of the UN common country programming principles and cross-cutting themes

i. Analysis of gender mainstreaming for gender equality. This will focus on the analysis of the following:

- how gender issues were reflected in project/programme objectives and design, in particular in the identification of the socio-economic indicators within the EAF approach; and
- how gender equality was integrated in the development of management plans and support to the implementation of the EAF at national and regional level.\(^\text{10}\)

j. Analysis of the Capacity Development dimension in the design, implementation and results of the project, at individual, organizational and enabling environment levels.\(^\text{11}\) This will include CD on both technical and soft-skills, i.e. planning, budgeting, partnering and negotiating.

k. Analysis of Partnerships and Alliances, namely:

- how they were planned in the project design and developed through implementation;
- their focus and strength; and
- their effect on project results and sustainability.\(^\text{12}\)

l. Analysis of how environmental impacts were taken into consideration and addressed, following the steps and criteria contained in the FAO Environmental Impact Assessment guidelines.\(^\text{13}\)


\(^\text{13}\) See [http://www.fao.org/docrep/016/i2802e/i2802e.pdf](http://www.fao.org/docrep/016/i2802e/i2802e.pdf)
V. Impact

m. In consideration of this being a final evaluation of the first phase of the project, the analysis will focus on the programme’s potential to contribute to the established development objective.

n. More in detail, the evaluation will analyse the overall performance of the EAF-Nansen project: extent to which the initiative has attained, or is expected to attain, its intermediate/specific objectives and contributed to FAO Strategic Objective C and its Organizational Results; this will also include the identification of actual and potential positive and negative impacts produced by the initiative, directly or indirectly, intended or unintended.

VI. Sustainability

o. The prospects for sustaining and up-scaling the initiative’s results by the participating countries. The assessment of sustainability will include, as appropriate:
   ▪ Institutional, technical, economic and social sustainability of proposed innovations, coordination mechanisms and processes;
   ▪ Perspectives for institutional uptake and mainstreaming of the newly established mechanisms and capacities at national and regional level.
   ▪ The catalytic role of the Project in supporting the creation of an enabling environment with a view to achieve sustainable global benefits within the Region.

21. Based on the analysis, the evaluation will draw specific conclusions and formulate recommendations for any necessary further action by Governments, FAO and/or other parties to ensure sustainable development, including any need for follow-up action. The evaluation will draw attention to specific good practices and lessons of interest to other similar activities. Any proposal for future and further assistance should include specification of major objectives and outputs and indicative inputs required.

4 Evaluation methodology

4.1 Approach and tools

22. The evaluation will adhere to the UNEG Norms & Standards\(^4\).

23. The evaluation will adopt a consultative and transparent approach with internal and external stakeholders throughout the evaluation process. Triangulation of evidence and information gathered will underpin the validation of evidence collected and its analysis and will support conclusions and recommendations.

24. The team will conduct country visits, in so far as possible in all five regional clusters, to meet with stakeholders in a small sample of participating countries, that will allow assessing more and less positive results and different contexts of intervention. Countries will be selected to allow assessment of the project’s work in different conditions including:

\(^4\) [http://www.uneval.org/normsandstandards](http://www.uneval.org/normsandstandards)
• geographical and ecological context;
• characteristics of the fisheries sector, including small scale and industrial, the importance of the sector to the national economies and in terms of livelihoods;
• volume of resources allocated;
• modality of partnerships with member countries;
• stages of project progress; and,
• security issues and cost considerations for access.

25. With basis on the criteria above, the countries selected for the evaluation team to carry out a direct and in-depth analysis are as follows:
• Mozambique, Tanzania and Mauritius for the Western Indian Ocean cluster;
• Namibia for the South-Western Africa cluster;
• Gabon for the Central Africa cluster;
• Ghana and Sierra Leone for the Gulf of Guinea cluster;
• Senegal for the North West Africa cluster.

26. The evaluation will include the following activities:
• Desk review of the project documents, technical reports, internal mid-term review report, progress reports, minutes of the annual and semi-annual meetings and other internal documents;
• Review of past FAO evaluation reports, namely the Evaluation of FAO’s support to the implementation of the Code of Conduct for Responsible Fisheries, completed in mid-2012, and the mid-term evaluation of the CCLME GEF-funded and FAO executed programme, expected to be available in late June 2013 in its final version;
• Review of specific products such as Project website, publications, newsletter (e-Approach) and other materials and reports;
• Questionnaire survey to the Focal Points and stakeholders in participating countries;
• Semi-structured interviews with internal and external stakeholders, in the visited countries, to canvass their views on achievements, issues and ways forward. The team will also attend two of the project’s important meetings, namely: i) the 15th Consultative Committee Meeting on Large Marine Ecosystems (LMEs) in UNESCO, Paris, on 10-11 July 2013 which will offer the opportunity to interact with a high number of stakeholders and observe the relevance of the programme at the international level; and ii) the Working Group of project Focal Points and the fisheries administrations and partner research institutions of the Gulf of Guinea cluster, which will be held in Accra on 15-19 July 2013.

4.2 Stakeholders and consultation process

27. The evaluation team will discuss in detail with the key stakeholders of the project and will take into account their perspectives and opinions. Key stakeholders will include:
• Norad in Norway and its representatives at country level;
• Institute of Marine Research in Norway;
• FAO staff in HQ, including the Coordination Unit based in Rome and the Project Task Force Members;
• FAO staff in the Regional, Sub-regional and country offices in the visited countries, the National Task Groups and the Regional Task Groups;
• senior managers and technical staff in the national institutions in participating countries;
• senior managers and technical staff in partner organizations.
28. The Evaluation Team will maintain close liaison with the Office of Evaluation of FAO and the Project Coordination Unit based in Rome. Although the mission is free to discuss with the authorities concerned anything relevant to its assignment, it is not authorized to make any commitment on behalf of the Governments participating in the project, the donor or FAO.

29. The Team will present its preliminary findings, conclusions and recommendations in a debriefing meeting in FAO HQ to obtain feedback. The draft Terms of Reference and draft evaluation report will be circulated for comments before finalisation. Suggestions to the draft report will be incorporated as deemed appropriate by the evaluation team.

30. The draft ToR was circulated among key stakeholders, including member countries, for comments before finalisation; suggestions were incorporated by OED. The draft evaluation report will also be circulated among key stakeholders for comments before finalisation; suggestions will be incorporated as deemed appropriate by the evaluation team.

31. The ToR was presented for endorsement at the Norad-IMR-FAO annual meeting on 20 and 21 March 2013 in FAO, Rome. Individual Terms of reference will be developed for each team member.

5 Roles and responsibilities

32. FAO Budget Holder (BH), the Lead Technical Officer (LTO) and the Project Task Force (PTF) of the project to be evaluated are responsible for initiating the evaluation process, drafting the first version of the Terms of Reference, and supporting the evaluation team during its work. They are required to participate in meetings with the team, make available information and documentation as necessary, and comment on the draft final terms of reference and report. Involvement of different members of the project Task Force will depend on respective roles and participation in the project.

33. The BH is also responsible for leading and coordinating the preparation of the FAO Management Response and the Follow-up Report to the evaluation, fully supported in this task by the LTO and PTF. OED guidelines for the Management Response and the Follow-up Report provide necessary details on this process.

34. The evaluation will be conducted by the Evaluation Office of FAO (OED) in cooperation with Norad. OED will take the lead in all the following steps: drafting of the terms of reference, identification of the team responsible for carrying out the evaluation, recruitment and briefing of the team, organization of the team’s work, debriefing and review of the draft report for quality assurance purposes. OED will proceed through these steps upon reaching consensus with Norad and in close collaboration with FAO staff responsible for managing and backstopping the initiative.

35. The Office of Evaluation has also a responsibility in following up with the BH for the timely preparation of the Management Response and the Follow-up to the MR.
36. The Evaluation Team is responsible for conducting the evaluation, applying the methodology as appropriate and for producing the evaluation report. All team members, including the Team Leader, will participate in briefing and debriefing meetings, discussions, field visits, and will contribute to the evaluation with written inputs for the final draft and final report.

37. The Evaluation team will be free to expand the scope, criteria, questions and issues listed above, as well as develop its own evaluation tools and framework, within time and resources available.

38. The Team Leader guides and coordinates the team members in their specific work, discusses their findings, conclusions and recommendations and prepares the final draft and the final report, consolidating the inputs from the team members with his/her own.

39. The mission is fully responsible for its report which may not reflect the views of the Government or of FAO. An evaluation report is not subject to technical clearance by FAO although OED is responsible for Quality Assurance of all evaluation reports.

6 The evaluation team

40. Mission members will have had no previous direct involvement in the formulation, implementation or backstopping of the initiative. All will sign the Declaration of Interest form of the FAO Office of Evaluation.

41. The Evaluation Team will comprise the following skill mix:
   - Demonstrated experience in the evaluation of large/complex, regional technical assistance projects;
   - Substantial experience in working in fisheries management in developing countries;
   - Experience in marine research programmes including research vessel surveys;
   - Climate change and effects on the marine resources/environment;
   - Experience in the application of scientific advice and information to marine fisheries management within national and/or regional management frameworks;
   - Experience in development and implementation of national, regional or international fishery management plans;
   - Familiarity with the principles of the Ecosystem Approach to Fisheries, including its socio-economic components;
   - Understanding of governance, political, economic and institutional issues;
   - Working experience in African countries participating in the EAF-Nansen project.

42. The Evaluation Team will tentatively be composed as follows:
   - Team leader with extensive experience in the evaluation of regional development programs in marine fisheries;
   - Fisheries, natural resources and marine ecosystem specialist with experience in planning and implementing marine surveys and use of scientific advice and information to marine fisheries management (Expert 2);
   - Specialist in development and implementation of fisheries management plans with application of an ecosystem approach to fisheries (Expert 3).
43. Each team member should have a University Degree and a minimum of 15 years of professional experience, or equivalent level of competence, in their respective areas of specialization. As much as possible, each member will be fluent in English and/or French and have minimum understanding of the other language. Individual Terms of reference will be developed referring to this ToR to facilitate the recruitment of each team member.

44. The team will be gender and geographically balanced, so as to ensure diversity of perspectives and experience. At least one of the experts would be a citizen of a participating country.

7 The Evaluation deliverables

45. The evaluation report will illustrate the evidence found that responds to the evaluation issues, questions and criteria listed in the ToR. It will provide a synthesis on the implementation of activities and results obtained by the project since its inception, including the technical assistance provided to the participating countries. It will include an executive summary. Supporting data and analysis should be annexed to the report when considered important to complement the main report.

46. The recommendations will be addressed to the different stakeholders and prioritized: they will be evidence-based, relevant, focused, clearly formulated and actionable.

47. The evaluation team will agree on the outline of the report early in the evaluation process, based on the template provided in Annex I of this ToR. The report will be prepared in English, with numbered paragraphs. Translations in other languages (French and Portuguese), if required, will be FAO’s responsibility.

48. The team leader bears responsibility for submitting the final draft report to OED within three weeks from the conclusion of the mission. OED will submit its comments to the team within a week, to be integrated in two working days before circulating the draft report to FAO/FIRF for initial factual comments. These will be sent to the team within eight working days and will be incorporated as appropriate in the report within three working days. Substantial comments and suggestions will be then provided by FAO/FIRF, Norad and the other stakeholders within five weeks, to be included as appropriate in the final report within one week.

49. Annexes to the evaluation report will include, though not limited to, the following as relevant:

- Terms of reference for the evaluation;
- Profile of team members;
- List of documents reviewed;
- List of institutions and stakeholders interviewed by the evaluation team;
- List of project outputs;
- Evaluation tools.
8  Evaluation timetable

50. The evaluation is expected to take place during the second and third quarters of 2013. The field phase is expected to last approximately five weeks. The timetable in the box below shows a tentative programme of travel and work for the evaluation team. It will be finalised upon the recruitment of the evaluation team.

Table 1.  Tentative timetable of the evaluation

<table>
<thead>
<tr>
<th>Task</th>
<th>Dates</th>
<th>Duration</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Briefing Meeting at HQ</td>
<td>4-6 July</td>
<td>3 days</td>
<td>TL + Expert 2</td>
</tr>
<tr>
<td>Mission to Bergen (IMR) and teleconference with Norad in Oslo</td>
<td>7-9 July</td>
<td>3 days</td>
<td>TL + Expert 2</td>
</tr>
<tr>
<td>15th Consultative Committee Meeting on Large Marine Ecosystems in Paris (UNESCO)</td>
<td>10-11 July</td>
<td>2 days</td>
<td>TL + Expert 2</td>
</tr>
<tr>
<td>Mission to Ghana</td>
<td>12-17 July</td>
<td>6 days</td>
<td>TL + Expert 3</td>
</tr>
<tr>
<td>Mission to Gabon</td>
<td>18-20 July</td>
<td>3 days</td>
<td>TL + Expert 3</td>
</tr>
<tr>
<td>Mission to Senegal</td>
<td>21-23 July</td>
<td>3 days</td>
<td>TL + Expert 3</td>
</tr>
<tr>
<td>Mission to Tanzania</td>
<td>22 July</td>
<td>1 day</td>
<td>Expert 2</td>
</tr>
<tr>
<td>Mission to Mauritius</td>
<td>23-25 July</td>
<td>3 days</td>
<td>Expert 2</td>
</tr>
<tr>
<td>Mission to Sierra Leone</td>
<td>24-25 July</td>
<td>2 days</td>
<td>TL</td>
</tr>
<tr>
<td>Mission to Namibia</td>
<td>26-30 July</td>
<td>5 days</td>
<td>TL + Expert 2</td>
</tr>
<tr>
<td>Mission to Mozambique</td>
<td>31 July – 3 August</td>
<td>4 days</td>
<td>TL + Expert 2</td>
</tr>
<tr>
<td>Preparation of the draft report</td>
<td>5-23 August</td>
<td>15 days</td>
<td>All team members</td>
</tr>
<tr>
<td>OED comments on the draft report</td>
<td>26-30 August</td>
<td>5 days</td>
<td>OED</td>
</tr>
<tr>
<td>Incorporation of OED comments</td>
<td>1st week of September</td>
<td>2 days</td>
<td>All team members</td>
</tr>
<tr>
<td>Debriefing at HQ</td>
<td>1st week of September</td>
<td>2 days</td>
<td>TL</td>
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<tr>
<td>FAO/FIRF initial factual comments</td>
<td>1st and 2nd week of September</td>
<td>8 days</td>
<td>FAO/FIRF</td>
</tr>
<tr>
<td>Integration of FAO/FIRF comments</td>
<td>3rd week of September</td>
<td>3 days</td>
<td>All team members</td>
</tr>
<tr>
<td>Preparation of comments by all stakeholders</td>
<td>3rd week of September until the 4th week of October</td>
<td>27 days</td>
<td>FAO/FIRF, NORAD and other stakeholders</td>
</tr>
<tr>
<td>Integration of comments and preparation for circulation of the final report</td>
<td>5th week of October October</td>
<td>5 days</td>
<td>All team members</td>
</tr>
</tbody>
</table>
Annex 2. Brief profile of evaluation team members

Sophie des Clers is a Franco-British independent consultant with more than 25 years of experience of fisheries policy design, management and development, in Africa and Europe. She has a Master in Public Policy (Univ. of London, UK) and a doctorate in Biometrics (France). She has been Team Leader for the identification, formulation and evaluation of a number EU-funded development cooperation projects for African countries.

Magnus Ngoile currently serves as Senior Lecturer in the Department of Aquatic Sciences and Fisheries, University of Dar es Salaam, Tanzania. He has extensive managerial, teaching and research experience in fisheries, marine ecology, marine protected areas and environmental management. Has coordinated and participated in national, regional and international fora/dialogue on marine and coastal issues.

Mr Christophe Breuil is freelance consultant specialized in fisheries planning and management. His background is both in ecology and in economics for development. He has almost 25 years’ working experience in an international context. He has worked with several UN agencies, intergovernmental organizations and European consulting firms in Africa, the Mediterranean, Indian Ocean and Caribbean.
### Annex 1. Mission timetable (amended from tentative version in Terms of Reference - Final May 2013)

<table>
<thead>
<tr>
<th>Task</th>
<th>Country</th>
<th>Start date</th>
<th>End date</th>
<th>Team</th>
</tr>
</thead>
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<tr>
<td>Desk preparation</td>
<td></td>
<td>01 July</td>
<td>04 July</td>
<td>SDC, MN, CB</td>
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<td>Briefing Meeting FAO HQ and teleconf. with Norad</td>
<td>Italy - Rome</td>
<td>04 July</td>
<td>05 July</td>
<td>SDC, MN</td>
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<tr>
<td>Meetings at HQ</td>
<td>Italy - Rome</td>
<td>06 July</td>
<td>09 July</td>
<td>MN</td>
</tr>
<tr>
<td>Travels and desk work</td>
<td>Norway, Bergen</td>
<td>06 July</td>
<td>07 July</td>
<td>SDC</td>
</tr>
<tr>
<td>Mission to Bergen (IMR)</td>
<td>Norway, Bergen</td>
<td>08 July</td>
<td>09 July</td>
<td>SDC</td>
</tr>
<tr>
<td>Travels and desk work</td>
<td>France, Paris</td>
<td>09 July</td>
<td>09 July</td>
<td>SDC, MN</td>
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<td>Large Marine Ecosystems at UNESCO - IOC</td>
<td>France, Paris</td>
<td>10 July</td>
<td>11 July</td>
<td>SDC, MN</td>
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<td>Travels and desk work</td>
<td>Ghana, Accra</td>
<td>12 July</td>
<td>14 July</td>
<td>SDC, MN, CB</td>
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<td>Mission to Ghana + EAF-Nansen regional Workshop</td>
<td>Ghana, Accra</td>
<td>15 July</td>
<td>19 July</td>
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<tr>
<td>Travels and desk work</td>
<td>Senegal, Dakar</td>
<td>20 July</td>
<td>20 July</td>
<td>SDC, CB</td>
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<tr>
<td>Travels and desk work</td>
<td>Senegal, Dakar</td>
<td>21 July</td>
<td>21 July</td>
<td>SDC, CB</td>
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<td>Mission to Senegal</td>
<td>Senegal, Dakar</td>
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<td>23 July</td>
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<td>Mission to Mauritius</td>
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<td>23 July</td>
<td>25 July</td>
<td>MN</td>
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<td>Travels and desk work</td>
<td>Senegal, Dakar and back to base</td>
<td>24 July</td>
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<td>25 July</td>
<td>09 August</td>
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<td>Mission to Tanzania</td>
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<td>16 September</td>
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<td>28 October</td>
<td>31 October</td>
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</table>
### Annex 4. List of documents reviewed and websites

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#### 1. General

*(not produced by the project)*


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1 Documents sourced from the www were obtained between July and August 2013
Annex 3. EAF-Nansen Phase I Evaluation – List of documents reviewed

- NFDS (2010). In depth analysis of two options for the continuation of the project “Strengthening the Knowledge Base and Implementing an Ecosystem Approach to Marine Fisheries in Developing Countries (EAF-Nansen)” (1) replacement of the Research Vessel Dr. Fridtjof Nansen or (2) major upgrade of the existing Research Vessel Dr. Fridtjof Nansen. Report prepared by Nordenfjeldske Development Services, October 2010, 119p.
- Norad (2006). Instructions for evaluation activities in Norwegian Aid Administration, Approved by the Secretary General, 29 May 2006, 8p.
- Norway-MFC (2012). White Paper to Parliament (Storting) on Norway’s leadership in Fisheries and Aquaculture. Directions for Norwegian development cooperation in fisheries and aquaculture: 12.3 Nansenprogrammetog forskningsfartøyet «Dr. Fridtjo
2. **FAO EAF-related normative products** and publications


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3. **Project management meetings minutes**

4. **Project documents**

   **Tripartite Agreement**
   - EAF-Nansen Project Document Addendum 1_June 2007. In response to FAO request for additional assistance to the EAF Project through letter dated 20 December 2006; Additional contribution from Norad (NOK30 million) to cover Human resources support, EAF Activities, Capacity Building, including Fellowships; Development of a more complete GIS system to facilitate analysis of linkages between resources, the environment and socio-economic features; and Procurement by IMR of a multifrequency echosounder for the research vessel R/V ’Dr. Fridtjof Nansen’, 19p.
   - EAF-Nansen Project Document Addendum 2_Oct 2010. Additional Grant from Norad not exceeding NOK7.34 million to be used exclusively to finance vessel operating costs (VOC), 4p.
   - EAF-Nansen Project Document Addendum 3_May 2011. Additional Grant from Norad not exceeding NOK25.1 million to be used exclusively to finance vessel operating costs (VOC) and IMR scientific services, 3p.

   **FAO-IMR**
   - FAO EAF-Nansen – IMR (2008). Letter of Agreement Provision of Funds from the FAO to Institute of Marine research (IMR), 1st amendment. Budget increased to add IMR coordinator’s field travels and Development of GIS and 20 additional Vessel survey days (@ NOK65,000/day), 16p.
   - FAO EAF-Nansen – IMR (2010). Letter of Agreement Provision of Funds from the FAO to Institute of Marine research (IMR), 2nd amendment. Budget increased to add 36 additional Vessel survey days (@ NOK65,000/day), 13p.
5. **EAF-Nansen report Series**

(From PCU and Updated from EAF-Nansen website)

- FAO (2013). Consultation on a Collaborative Programme to Assess and Monitor Climate-related changes in Marine Ecosystems in Tropical/Sub-tropical Regions and in

Annex 3. EAF-Nansen Phase I Evaluation – List of documents reviewed

6. EAF-Nansen Stakeholders Meetings
(published as EAF-Nansen reports – list above)

Regional Steering Committees
- No. 19- CECAF North area
- No.12- CECAF South Area
- No.1- Gulf of Guinea
- No.8 and No.18- Benguela Current Commission area
- No.9 and No.17- South West Indian Ocean Fisheries Commission area
- No.13- Joint Meeting of the Regional Steering Committees

Annual Forum
- Report No.5.

Advisory Group
- Report No.3.

Regional Task Groups
- No.2- Gulf of Guinea
- No.4 and No.16- South West Indian Ocean

7. LME and Country reports on EA-FMPs

CCLME

GCLME
Sierra Leone
- EAF Baseline Report, Sierra Leone: Desk Study on Artisanal Fisheries, including their Socio-Economic Significance (March 2011)
- Draft Risk Assessment Report: Sierra Leone Artisanal Fisheries (July 2011)
- The Republic of Sierra Leone. Ministry of Fisheries, Marine Resources and Aquaculture. A management Plan for the Marine Small Scale Fisheries of Sierra Leone (August 2012)

Liberia
- Baseline Report on Artisanal Fisheries in Liberia (?)

Côte d’Ivoire
- Rapport de référence des sennes de plage en Côte d’Ivoire (March 2012)
- Etude socioéconomique validée. March 2012
- Rapport d’évaluation des risques écologiques de la pêche à la senne de plage en Côte d’Ivoire (?)
- République de Côte d’Ivoire. Ministère des ressources animales et halieutiques. Plan de gestion de la pêcherie de la senne de plage du littoral de la Côte d’Ivoire (mai 2013)

Ghana
- The Beach Seine Fishery in Ghana. EAF Baseline Study (Feb. 2011)
- ERA Report on the beach seine fishery in Ghana (Mar. 2011)
- Management Plan for the beach seine fishery in Ghana – NTG draft (Dec. 2011)

Togo
- Rapport de référence pour l’aménagement de la pêcherie de la senne de plage au Togo (février 2011)
- Rapport ERA-AEP de la senne de plage au Togo (juin 2011)
- République togolaise. Ministère de l’agriculture, de l’élevage et de la pêche. Plan de gestion de la pêcherie de la senne de plage au Togo (janvier 2013)

Benin
- Rapport de référence sur la pêche à la senne de plage au Bénin (février 2011)
- Rapport des ateliers sur l’évaluation des risques écologiques de la pêche à la senne de plage avec les pêcheurs (nov. 2011)

Nigeria
- Baseline Report (?)

Cameroon
- Atelier de consultation des parties prenantes sur l’analyse des risques écologiques – Rapport (avril 2011)
- Situation de référence de la pêcherie chalutière crevettière au Cameroun - Rapport d’étude (mai 2011)
- Plan d’aménagement de la pêcherie crevettière industrielle du Cameroun (?)

Gabon
Annex 3. EAF-Nansen Phase I Evaluation – List of documents reviewed

**Benguela Current Commission**


**ASCLME**

**Mozambique**

- Baseline Report of Linefish Fisheries in Mozambique (Sept 2012)

**Tanzania**

- Baseline Report for the Tanzanian Small Scale Marine Pelagic Fishery (?)
- Report on the stakeholders workshop to comment and validate the draft baseline report of small artisanal pelagic fishery in the marine waters of Tanzania held at Tanzania Episcopal Centre – Kurasini, Dar es Salaam on 24/4/11. May 2011
- Risk Assessment Report for the Tanzanian Small Scale Marine Pelagic Fishery (June 2011)
- The United Republic of Tanzania. Ministry of Livestock and Fisheries Development. Management Plan for the Tanzanian artisanal Fishery for Small and Medium Pelagic Fish Species (?)

**Comoros**

- Baseline Report
- Ecological Risk Assessment Report (ERA)
- Fisheries Management Plan

**Mauritius**

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Annex 3. EAF-Nansen Phase I Evaluation – List of documents reviewed 8
- Ecological Risk Assessment Report (ERA) for the shallow water demersal fish species of the Saya de Malha and Nazareth Banks of Mauritius (July 2012)

8. NTG reports

2010
- EAF-Nansen project National Task group of Tanzania. Report on meeting of FAO EAF-Nansen project coordinator, Tanzania NTG and representative from Seychelles held on 23rd – 24th July 2010 at the ministry of livestock development and fisheries conference hall, Dar es Salaam, Tanzania. August 2010
- EAF-Nansen project National Task group of Tanzania. Report on the meeting held by the NTG FAO EAF-Nansen Project at Tandika Conference hall. August 2010

2011
- EAF-Nansen project National Task group of Tanzania. Report on sensitization visit to Tanga Region on Ecosystem Approach to Fisheries (EAF) activities. May 2011
- EAF-Nansen project National Task group of Liberia. Progress report of the activities carried out in the framework of the EAF-Nansen baby-project. June 2011

9. Project Communication material

CD

EAF-Nansen Video
  o English http://www.youtube.com/watch?v=gJ3AfYN08G0
  o French http://www.youtube.com/watch?v=c7u8Unxhkg
  o Portuguese http://www.youtube.com/watch?v=JqVK6uLDIRc

Communication material
- EAF-Nansen Illustrative poster:
  o English: The ecosystem approach to fisheries benefits fish, fishers and fishing communities!
  o French: L’approche écosystémique des pêches bénéficie aux poissons, aux pêcheurs et aux communautés vivant de la pêche !
  o Portuguese: A abordagem de ecossistema para a pesca beneficia os peixes, os pescadores e as comunidades pesqueiras!
  o Swahili: Usimamizi wa Uvuvi unaojumuisha Ikolojia na Mazingira huwa na faida kwa Jamii za Wavuvi Samaki na Wavuvi wenye. 
  o Malagasy: Tombotsa hoan’ny trondro, sy ny fiaraha monina mivelona amin’ny jono ny fomba fijery ekosistemika ny jono
- EAF-Nansen project three languages poster: Assisting developing countries to implement an ecosystem approach to fisheries
- EAF-Nansen project Flyer
  o English: The Fisheries Manager and the ecosystem approach to fisheries
French: Le gestionnaire des pêches et l’approche écosystémique des pêches
Portuguese: A gestão e a abordagem do ecossistema às Pescas
Swahili: Meneja/Afisa Uvuvi na Usimamizi wa Uvuvi unaojumuisha Ikolojia na Mazingira
Malagasy version of the poster
- EAF-Nansen project Brochure:
  - English: Strengthening the knowledge base for and implementing an ecosystem approach to marine fisheries in developing countries
  - French: Renforcer la base de connaissances pour une approche écosystémique des pêches (AEP) marines et sa mise en œuvre
  - Portuguese: Fortalecendo a base de conhecimentos e implementando uma abordagem de ecossistema para a gestão pesqueira
- Brochure on the activities of the R/V Dr Fridtjof Nansen (soon on the web)
  - A day onboard the R/V Dr Fridtjof Nansen
  - Un jour a bord du N/R Dr Fridtjof Nansen
- Leaflet. Engaging Children in the Ecosystem Approach to Fisheries (EAF) (soon on the web)
  - EAF-Nansen Booklet (soon on the web)
  - Changing the face of fisheries management
  - Changer le mode de gestion des pêches
  - Fisheries Management plan brochure (soon on the web)
  - Preparing a fishery management plan in line with EAF. Notes on the process
  - Préparer un plan de gestion de la pêche en accord avec l’AEP. Notes sur le processus

Project Newsletter
- eAPPROACH Issue No. 1 English and French
- eAPPROACH Issue No. 2
- eAPPROACH Issue No. 3-4
- eAPPROACH Issue No. 5
- eAPPROACH Issue No. 6-7
- eAPPROACH Issue No. 8-9
- eAPPROACH Issue No. 10-11
- eAPPROACH Issue No. 12-13
- eAPPROACH Issue No. 14

10. "Dr. Fridtjof Nansen" cruise reports summaries
    (from FAO project team)

2007
- Benefit survey no. 1. Transboundary survey between Namibia and South Africa with focus on shared stocks of hake. 10 January – 5 February 2007.
- The survey on the influence of dissolved oxygen concentrations on the distribution and trophodynamics of pelagic fish larvae and key zooplankton species in the Benguela Current region, 7 February - 23 February 2007
- The survey of the demersal resources of Angola. 24 February - 25 March 2007
- The transboundary survey between Namibia and South Africa with focus on spawning and the early life history of hakes. 30 March – 19 April 2007
- Surveys of the fish resources of the Western Gulf of Guinea. Part I: Guinea Bissau, Guinea, Sierra Leone and Liberia. 5 May - 29 May 2007
- Surveys of the pelagic and demersal resources of the Gulf of Guinea. Part II: Côte d’Ivoire, Ghana, Benin, Togo, Cameroon, São Tomé and Principe, Gabon and Congo. 3 June – 6 July 2007
- The Survey of the fish resources of Angola. Survey of the pelagic resources 7 July - 10 August 2007
- The Hake Multidisciplinary survey in South Africa. 14 September – 21 September 2007
- The surveys of the living marine resources of Mozambique. Ecosystem Survey and Special Studies, 27 September – 21 December 2007

2008
- The transboundary survey between Namibia and South Africa with focus on the shared stocks of deepwater hake 7 January – 26 February 2008.
- Surveys of the fish resources of Angola, Survey of the demersal resources, 10 March – 13 April 2008
- The marine environmental survey of bottom sediments in Cabinda province, Angola, survey of the bottom fauna and selected physical and chemical compounds, in April 2008
- The cruise reports Dr. Fridtjof Nansen surveys of the pelagic fish resources of Gabon, Congo, Democratic Republic of Congo, Angola and Namibia part I. Gabon and Congo, 3 may – 13 may 2008
- The Mauritius Ecosystem Survey, 04 - 07 October 2008
- ASCLME survey no. 3, 8 October – 27 November 2008
- ASCLME survey no 4, Preliminary cruise report No 8/2008, 28 November – 17 December
- 2009
- The surveys of the fish resources of Angola, Survey of the demersal resources. 11 March – 7 April 2009
- The marine environmental survey of bottom sediments in Cabinda and Soyo province, Angola, Survey of the bottom fauna and selected physical and chemical compounds, April 2009
- The marine Environmental survey of bottom Sediments in Ghana. Survey of the bottom fauna and selected physical and chemical compounds, May 2009
- The preliminary-Cruise Report "Dr. Fridtjof Nansen", Survey of the living marine resources of North Mozambique, (SWIOFP/ASCLME 2009 Cruise 1), 6 August – 20 August 2009
- The West Madagascar Pelagic Ecosystem Survey, 25 August– 03 October 2009
- The survey of the Comoros Gyre (ASCLME & SWIOFP 2009 Cruise 3), 5 October – 3 November 2009
- The survey of the Southern Indian Ocean Seamounts, (IUCN/ UNDP/ ASCLME/ NERC /EAF Nansen Project 2009 Cruise 410), 12th November – 19th December, 2009

2010
- The transboundary survey between Namibia and South Africa with focus on the shared stocks of deepwater hake. 7 January – 28 February 2010
- The survey of the fish resources of Angola, Survey of the demersal resources. 01 – 31 March 2010
- The marine environmental survey of bottom sediments in Ghana, Survey of the bottom fauna and selected physical and chemical compounds. 6 April – 27 April 2010
- The surveys of the demersal fish resources of the outer shelf and slope off Ghana. 30 April - 07 May 2010
- The surveys of the fish resources of São Tomé & Príncipe. Survey of the demersal resources. 10 May - 20 May 2010
- The surveys of the pelagic fish resources of Gabon, Congo, Democratic Republic of Congo, Angola and Namibia. Part I. Gabon and Congo. 18 – 30 June 2010
- The surveys of the pelagic fish resources of Gabon, Congo, Democratic Republic of Congo, Angola and Namibia. Part II Gabon and Congo. 18 - 30 June 2010
- The surveys of the fish resources of Angola. Survey of the pelagic resources. 1 – 30 July 2010
- The surveys Angola and northern Namibia. 29 July – 11 August 2010
- The surveys of the fish resources of Mauritius. Survey of the demersal resources on the western slopes of St. Brandon and Nazareth Bank, Mauritius. 16 - 25 September 2010
- The surveys in Mauritius and Southern Mascarene: Pelagic Ecosystem Survey. 6– 21 December 2010

2011
- The BCC Transboundary survey between Namibia and South Africa with Focus on the shared stocks of deepwater hake. 20 January – 16 February 2011
- The survey of the fish pelagic resources of Angola. 17 February- 19 March 2011
- The survey of the Demersal Resources of Angola. 20 March – 9 April 2011
- The survey monitoring Ghana Environment. 19 April – 7 May 2011
- The Marine Environmental Survey of bottom fauna, selected physical and chemical compounds and fisheries survey in the JDZ between Nigeria and São Tomé & Príncipe. 9 May – 27 May 2011
- The CCLME Ecosystem Survey. 4 – 18 June 2011
- The survey of the pelagic fish resources off North West Africa. Senegal, the Gambia, Guinea Bissau, Guinea. 22 June – 7 July 2011
- The Survey of the small pelagic resources of Angola and Namibia. 18 July – 28 August 2011
- The BCC survey to determine spawning of the deepwater hake M. paradoxus in the Northern Benguela Region off Namibia. 26 September – 8 October 2011
- The regional ecosystem baseline survey from Guinea to Morocco. 20 October – 21 December 2011
11. Websites

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Name</th>
<th>Web address</th>
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<tbody>
<tr>
<td>BCC - SA</td>
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<td><a href="https://www.environment.gov.za/content/ednamolewa_tosignbcc">https://www.environment.gov.za/content/ednamolewa_tosignbcc</a></td>
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<td>CSRP</td>
<td></td>
<td><a href="http://www.spcsrp.org/">http://www.spcsrp.org/</a></td>
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<tr>
<td>FAO</td>
<td>EAF Tracking tool</td>
<td><a href="http://www.fao.org/fi/website/MultiQueryAction.do?asking">http://www.fao.org/fi/website/MultiQueryAction.do?asking</a>: EAF Tracking tool @ EAF net</td>
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<td>FMP (UK)</td>
<td>Data Deficient Fisheries (UK)</td>
<td><a href="http://www.seafish.org/retailers/responsible-sourcing/protection-fish-stocks/data-deficient-fisheries-">http://www.seafish.org/retailers/responsible-sourcing/protection-fish-stocks/data-deficient-fisheries-</a></td>
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<tr>
<td>GEF</td>
<td>IW Learn</td>
<td><a href="http://iwlearn.net/">http://iwlearn.net/</a></td>
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<tr>
<td>IMR-CDCF</td>
<td></td>
<td><a href="http://www.imr.no/forskning/bistandsarbeid/about_cdcf/en">http://www.imr.no/forskning/bistandsarbeid/about_cdcf/en</a></td>
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<td>IMR-Nansen</td>
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<td><a href="http://www.imr.no/om_havforskningsinstituttet/fasiliteter/fartoy/dr_fridtjof_nansen/en">http://www.imr.no/om_havforskningsinstituttet/fasiliteter/fartoy/dr_fridtjof_nansen/en</a></td>
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<tr>
<td>NEPAD-PAF</td>
<td>Partnership for African Fisheries</td>
<td><a href="http://www.nepad.org/foodsecurity/fisheries/about">http://www.nepad.org/foodsecurity/fisheries/about</a></td>
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<td>NORAD</td>
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<td><a href="http://www.norad.no/en">http://www.norad.no/en</a></td>
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<tr>
<td>NORAD-OiD</td>
<td>Oil for Development</td>
<td><a href="http://www.norad.no/en/thematic-areas/energy/oil-for-development/how-we-work">http://www.norad.no/en/thematic-areas/energy/oil-for-development/how-we-work</a></td>
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<td>Norway - MFA</td>
<td>Ministry of Foreign Affairs</td>
<td><a href="http://www.regjeringen.no/en/dep/ud/selected-topics/development_cooperation/area_03.html?id=714710">http://www.regjeringen.no/en/dep/ud/selected-topics/development_cooperation/area_03.html?id=714710</a></td>
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<td>Oil prices</td>
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<td><a href="http://inflationdata.com/Inflation/Inflation_Rate/Historical_Oil_Prices_Table.asp">http://inflationdata.com/Inflation/Inflation_Rate/Historical_Oil_Prices_Table.asp</a></td>
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<td>UNDP-GEF</td>
<td>International Waters</td>
<td><a href="http://www.thegef.org/gef/International_Waters">http://www.thegef.org/gef/International_Waters</a></td>
</tr>
</tbody>
</table>
### Development Objective

To strengthen regional and country specific efforts to reduce poverty and create conditions to assist in the achievement of food security through development of sustainable fisheries management regimes and specifically through the application of the ecosystem approach to fisheries in a number of developing countries, with an early emphasis on Sub-Saharan Africa.

**Assumptions & risks**
- Political stability, no natural or man-made disasters; no extreme climatic seasons

### Immediate Objective

Staff of the fisheries research and management administrations in the participating countries provided with additional knowledge on their ecosystems and on EAF principles for their use in planning and monitoring.

- EAF principles included in the monitoring, assessment and management of key marine resources in 6-10 selected partner countries
- Revised policy documents developed in 6-10 partner countries
- Databases developed and made available to partner countries
- Stakeholders’ workshops organised in each region, Workshop reports, Mission reports
- Political will, participation of all stakeholders

### Outputs (Results/Products)

#### Component 1

1. Policies formulated consistent with EAF principles at national and regional levels.

   - Revised policy documents developed in 6-10 partner countries.
   - Databases developed and made available to partner countries
   - Stakeholders’ workshops organised in each region, Workshop reports, Mission reports
   - Political will, participation of all stakeholders

2. Revised management plans that include EAF considerations developed

   - Revised management plans for main fisheries formulated in 6-10 partner countries
   - Desk studies on main fisheries finalized, Stakeholders’ workshops organised in each region, Workshop reports, Mission reports
   - Political will, participation of all stakeholders

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**Annex 5: EAF-Nansen project Logical Framework (Tripartite Agreement 2006)**
<table>
<thead>
<tr>
<th>Component elements / Components</th>
<th>Success indicators</th>
<th>Means of verification</th>
<th>Assumptions &amp; risks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Component 2</strong></td>
<td>3. Procedures and methods for assessment and monitoring of key ecosystem properties established, including the development of standardized data collections, sampling methods and appropriate set of scientific indicators</td>
<td>· Regional surveys successfully completed in each sub-region, · Standardized data sets made available, · Procedures and methods for the assessment and monitoring of key ecosystem properties agreed to, · Data produced from enhanced data collection systems, · Scientific indicators agreed to</td>
<td>· Databases developed and made available to partner countries, · Survey, Working group and workshops reports, · Internationally peer reviewed documents, · Indicators for EAF agreed and applied for at least 3 Ecosystems, · Tools for socio-economic assessment considered and used in specific reports.</td>
</tr>
<tr>
<td><strong>Component 3 -transversal</strong></td>
<td>4. Increased capacity at scientific and management level in partner countries on EAF approaches</td>
<td>· 8-10 training courses carried out on issues relevant to EAF, · Adequate numbers of staff attended training courses and training materials delivered at courses, · Staff back in respective institutes addressing EAF issues in working environment</td>
<td>· Reports from trainers, · Training modules developed; · No. of people trained at scientific and management level (Lists of participants), · Report from Focal Points</td>
</tr>
<tr>
<td><strong>Component 4</strong></td>
<td>5. Advice on use of national or regional vessels for research including coordinated regional coverage by local or other vessels</td>
<td>· National or regional vessels in partner countries able to carry surveys, also at regional level, · Planning meetings and Analysis Workshops organised at regional level for coordinated surveys</td>
<td>· Consultants reports; · Survey reports, · Meeting and Workshop reports</td>
</tr>
<tr>
<td><strong>Component 5</strong></td>
<td>6. Project planning and dissemination of information</td>
<td>· Four steering Committees established and able to carry out planning and project monitoring duties</td>
<td>· Membership lists of Steering Committees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Five Annual Forums organized, · Project activities reflected in project webpage, · Project staff and/or focal points participating in 4-6 national, regional or international fora or symposia, · Field guidelines produced</td>
<td>· Copies of TORs for Steering Committees, · Proceedings of Annual Forum, · Webpage established and frequently visited, · Presentations and publications</td>
</tr>
</tbody>
</table>
Reorganised Activities in the Transition Phase Project Document

<table>
<thead>
<tr>
<th>Outcome 1: The fisheries management authorities have available to them, and are using, the necessary skills, knowledge and systems based on EAF principles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output 1.1 - Management plans for at least one main fishery revised or developed to include EAF considerations and for stocks shared between two or more countries.</td>
</tr>
<tr>
<td>Output 1.2 - R/V Dr Fridtjof Nansen completes survey cruises including at least 2 regions with transboundary resources</td>
</tr>
<tr>
<td>Output 1.3 - Data collection, storage and analysis standardised and improved</td>
</tr>
<tr>
<td>Output 1.4 - Support provided to establish and/or strengthen regional and/or international scientific working groups.</td>
</tr>
<tr>
<td>Output 1.5 - Ecological, social, economic and governance indicators for EAF based on fisheries-dependent and independent data developed.</td>
</tr>
<tr>
<td>Output 1.6 - Analysis of long-term changes in species distributions, size structure, productivity and trophic interactions that would inform the development of early warning systems promoted.</td>
</tr>
<tr>
<td>Output 1.7 - Personnel of research institutes and fisheries managers from partner countries trained to include EAF considerations in the exercise of their responsibilities.</td>
</tr>
<tr>
<td>Output 1.8 - A mentoring scheme to support the training of scientists and managers is established and in use.</td>
</tr>
<tr>
<td>Output 1.9 - Assistance given on demand in the development of analytical tools for use in EAF implementation.</td>
</tr>
<tr>
<td>Output 1.10 - A university training course on EAF that includes a climate change module is developed and running with support of the project</td>
</tr>
<tr>
<td>Output 1.11 - Advice provided on use of national or regional vessels for coordinated regional surveys, including the use of research instruments, and in planning and other preparatory work.</td>
</tr>
</tbody>
</table>

**Outcome 2: Enabling environment for implementing EAF is in place**

- Output 2.1 - Policies consistent with EAF (with special attention to climate change) developed/revised in participating countries.
- Output 2.2 - Institutional capacity for EAF management built/enhanced in participating countries.

**Outcome 3: Greater awareness of EAF generated**

- Output 3.1 - Project Forum and Steering Committee meetings held
- Output 3.2 - Project communications strategy revised to accommodate additional activities
- Output 3.3 - EAF-Nansen web-site improved and maintained
- Output 3.4 - Public educational materials produced and made available
- Output 3.5 - Field guidelines for implementation of EAF prepared
- Output 3.6 - Network of partnerships and strategic alliances further developed
## Correspondence between Transition and Phase I activities *(new activities in blue)*

**Outcome 1: The fisheries management authorities have available to them, and are using, the necessary skills, knowledge and systems based on EAF principles**

<table>
<thead>
<tr>
<th>Output 1.1</th>
<th>Management plans for at least one main fishery revised or developed to include EAF considerations and for stocks shared between two or more countries.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 1.1.1</td>
<td>Target desk studies on main fisheries, including their socio-economic significance.</td>
</tr>
<tr>
<td>Activity 1.1.2</td>
<td>Assist countries, through the National Task Groups, to promote EAF and to prepare fisheries management plans. This will entail facilitating workshops/consultations to identify EAF issues in main fisheries at national and regional level, risk assessment to prioritize issues, development of operational objectives for these and analyses of management options required to incorporate ecosystem considerations in fisheries management.</td>
</tr>
<tr>
<td>Activity 1.1.3</td>
<td>Provide assistance to countries to revise fisheries management plans (including consultations when required).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output 1.2</th>
<th>R/V Dr Fridtjof Nansen completes survey cruises including at least two regions with trans-boundary resources.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 1.2.1</td>
<td>In close collaboration with partners, conduct resource and ecosystem surveys using the R/V Dr. Fridtjof Nansen, including on-board training.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output 1.3</th>
<th>Data collection, storage and analysis standardised and improved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 1.3.1</td>
<td>Standardize collection and reporting of data; development of data storage routines and analytical tools such as statistical modules, modules for spatial analysis (GIS approach) and time series analysis.</td>
</tr>
<tr>
<td>Activity 1.3.2</td>
<td>Organize workshops on survey data analysis (including design, execution and analysis of ecosystem surveys) and the Nansis database.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output 1.4</th>
<th>Support provided to establish and/or strengthen regional and/or international scientific working groups.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 1.4.1</td>
<td>Provide support to establish and/or strengthen regional and international scientific working groups (to include ecosystem considerations in WGs).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output 1.5</th>
<th>Ecological, social, economic and governance indicators for EAF based on fisheries-dependent and independent data developed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 1.5.1</td>
<td>In cooperation with international efforts, develop ecological, social, economic and governance indicators for EAF based on both fisheries-dependent and independent data and others.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output 1.6</th>
<th>Analysis of long-term changes in species distributions, size structure, productivity and trophic interactions that would inform the development of early warning systems promoted.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 1.6.1</td>
<td>Promote investigations of long-term changes in species distributions, size structure, productivity and trophic interactions, with a view of developing early warning systems.</td>
</tr>
</tbody>
</table>

**Phase I Activities**

<table>
<thead>
<tr>
<th>Activity 2.1</th>
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<tbody>
<tr>
<td>Activity 2.2 to 2.4</td>
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<tr>
<td>Activity 2.5</td>
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<tr>
<td>Activity 3.1</td>
<td></td>
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<tr>
<td>Activity 3.2</td>
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<td>Activity 3.3</td>
<td></td>
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<td>Activity 3.4</td>
<td></td>
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<tr>
<td>Activity 3.5 and 3.6</td>
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<tr>
<td>Activity 3.7</td>
<td></td>
</tr>
</tbody>
</table>

Output Personnel of research institutes and fisheries managers from partner countries trained to include EAF considerations in the exercise of their responsibilities.
1.7
Activity 1.7.1 Train personnel in fishery research institutes on methods that are appropriate to EAF, providing on site and on-vessel training.
Activity 1.7.2 Train fisheries managers to include EAF considerations in planning, implementation and monitoring process.

Output 1.8
A mentoring scheme to support trained scientists and managers is established and in use.
Activity 1.8.1 Develop a mentoring programme to facilitate the in-depth analysis of samples and data from the Nansen and other surveys for specific scientific purposes, under the supervision of a team of regional and international mentors.

Output 1.9
Assistance given on demand in the development of analytical tools for use in EAF implementation.
Activity 1.9.1 Assist in the development of analytical tools in support of EAF implementation, such as the FAO EAF Toolbox.

Output 1.10
A university training course on EAF that includes a climate change module is developed and running with support of the project
Activity 1.10.1 Contribute to the development and running of university training on EAF in developing countries including development of a climate change module.

Output 1.11
Advice provided on use of national or regional vessels for coordinated regional surveys, including the use of research instruments, and in planning and other preparatory work.
Activity 1.11.1 As and when necessary, provide on request technical support for the operation of research instruments on local vessels, including training of national personnel.
Activity 1.11.2 Provide technical assistance to the local institutions in carrying out coordinated regional surveys by local research vessels, including on the job training of national personnel.
Activity 1.11.3 Support national and regional surveys by local vessels, through the organization of planning groups, including the planning of the inter-calibration between the R/V Dr. Fridtjof Nansen with local vessels.

Outcome 2: Enabling environment for implementing EAF is in place

Phase I Activities

Output 2.1
Policies consistent with EAF (with special attention to climate change) developed/revised in participating countries.
Activity 2.1.1 Review available international instruments relevant to EAF and preparation of overview document as a guide to the development of country and regional policy.
Activity 2.1.2 Integration of EAF considerations into policy making in selected partner countries through stakeholders’ consultations/workshops.
Activity 2.1.3 Support the development of policy documents consistent with EAF in selected partner countries.
Activity 2.1.4 Target desk studies on the impacts of climate change on marine resources, including their socio-economic significance and potential mitigation/adaptation measures.
Activity 2.1.5 Support the integration of climate change issues into policy making through stakeholder consultations/workshops.

Output Institutional capacity for EAF management built/enhanced in participating countries.
Activity 2.2.1 Support institutional capacity building to develop information technology, distribution of data archives, emerging methodologies and an expanded knowledge base etc. in furtherance of an EAF.

Activity 2.2.2 Support participating countries to strengthen fisheries management functions in the department that deals with fisheries and related ecosystem issues.

**Outcome 3: Greater awareness of EAF generated**

<table>
<thead>
<tr>
<th>Output 3.1</th>
<th>Project Forum and Steering Committee meetings held</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 3.1.1</td>
<td>Organize an Annual Forum with participation of the regional steering committees, programme advisors, members of the fellowship programme and other partners.</td>
</tr>
<tr>
<td>Activity 3.1.2</td>
<td>Organize Steering Committee meetings to assess the project progress, and formulate recommendations regarding requirements and priorities.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output 3.2</th>
<th>Project communications strategy revised to accommodate additional activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 3.2.1</td>
<td>Revise the communication strategy of the project, considering the additional activities in particular those related to climate change</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output 3.3</th>
<th>EAF-Nansen web-site improved and maintained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 3.3.1</td>
<td>Maintain and improve the EAF-Nansen Project web site.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output 3.4</th>
<th>Public educational materials produced and made available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 3.4.1</td>
<td>Develop public awareness and educational information brochures and other means of promoting an understanding of EAF, including to schoolchildren.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output 3.5</th>
<th>Field guidelines for implementation of EAF prepared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 3.5.1</td>
<td>Drawing on the FAO Technical Guidelines related to the Ecosystem Approach to Fisheries (FAO 2003) and experience gained, prepare field guidelines for implementation of EAF in developing countries (in English, French, Portuguese and relevant local languages).</td>
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<table>
<thead>
<tr>
<th>Output 3.6</th>
<th>Network of partnerships and strategic alliances further developed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 3.6.1</td>
<td>Increase the impact of the programme by seeking strategic alliances and partnerships that would provide additional opportunities for broad dissemination of the goals, objectives, aspirations and the results, technical reports and training materials of the project.</td>
</tr>
<tr>
<td>Activity 3.6.2</td>
<td>Carry out consultations with potential future partners on issues related to climate change and biodiversity to develop a joint working framework in the second phase of the project.</td>
</tr>
<tr>
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</table>
Ocean Fisheries Commission (SWIOFC)
Annex 7 - Analysis of the EAF-Nansen project website

Introduction

1. The EAF-Nansen project has a dedicated website¹, as part of its communication strategy. This brief review examines the website as a tool of communication and information² for its clarity, ease of navigation and completeness, from the point of view a generally informed user looking for information about the project. The analysis below describes the structure and content of the website in August 2013³. Specifically, the evaluator is looking for the following information:
   - Description of the project, expected results and up-to-date information on past, current and future activities,
   - Access to project reports and contact details.

Content

2. The project home page presents a clear introduction to the project objectives and its implementation arrangements. Together with the “About”, background and components pages, the home page give a clear presentation of the logical framework activities and outputs. Just as for the project document, there is no links to development objectives.

<table>
<thead>
<tr>
<th>Webpage</th>
<th>Evaluation remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td>Clear with illustrations and links; Highlights section (needs updating - workshop announced was in December 2012) and validity dates indicated for the mentoring program; 5 components short summaries with photos</td>
</tr>
<tr>
<td>About EAF-Nansen</td>
<td></td>
</tr>
<tr>
<td>Background</td>
<td></td>
</tr>
<tr>
<td>Project components</td>
<td></td>
</tr>
<tr>
<td>Project’s gallery</td>
<td>Media gallery, connects to Flickr</td>
</tr>
<tr>
<td>Publications</td>
<td>Report and Guidelines 2007 to 2011, and R/V survey reports from 1975, to download</td>
</tr>
<tr>
<td>Meetings</td>
<td>Dec 2009 to Mar 2013, mostly of regional or project-wide importance, short summaries or whole documents to download</td>
</tr>
<tr>
<td>Contacts</td>
<td>EAF Coordinator and EAF Research Coordinator, links to email the project team.</td>
</tr>
<tr>
<td>Newsletter</td>
<td>Instructions to subscribe; Link to archives Oct 2009 to N°14 Jan. 2013; link for users to contribute (e-Approach)</td>
</tr>
<tr>
<td>Download Area</td>
<td>NANSIS- Software (V1.6 free to download); EAF-NANSEN cruises: survey information sheets, annual overviews 2011 2005-2006; Project Reports (N°1 to 9); Project communication material; e-Approach Newsletter (since 2009 N°1 to 10-11 in 2012), Newsletter of the African LME Caucus (N°1 -August 011); Also linked through Components page</td>
</tr>
</tbody>
</table>

¹ http://www.eaf-nansen.org
² Website evaluation criteria and tools inspired from http://olinuris.library.cornell.edu/ref/research/webeval.html
³ As consulted repeatedly between July and August 2013.
In-country activities

| In-country activities | Very effective map of Africa to connect directly with in-country activities, contact details, project proposals and reports. |

3. The website development is one of six communication activities planned in the logical framework (Output 6, Table below). As a relatively widely accessible mean of communication, we checked if it referred to other means of communication. The cross-referencing between means of communication is not systematic. This could easily be improved by adding captions to the photographs, and use by including them in some items of the “Meetings” webpage.

**Output 6. Project planning and dissemination of information**

<table>
<thead>
<tr>
<th>Output</th>
<th>Project planning and dissemination of information</th>
<th>Web?</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1</td>
<td>Organization of an Annual Forum</td>
<td>No</td>
</tr>
<tr>
<td>6.2</td>
<td>Organization of Steering Committees to assess the project progress, and formulate recommendations regarding requirements and priorities</td>
<td>No</td>
</tr>
<tr>
<td>6.3</td>
<td>Development of a project website</td>
<td></td>
</tr>
<tr>
<td>6.4</td>
<td>Development of public awareness and educational information brochures and other means of communication</td>
<td>Yes</td>
</tr>
<tr>
<td>6.5</td>
<td>Broad dissemination of lessons learned through participation in other national, regional, and international fora /symposia as well as through sharing of project results, technical reports, and training material</td>
<td>Yes</td>
</tr>
<tr>
<td>6.6</td>
<td>Drawing on the FAO Technical Guidelines related to the Ecosystem Approach to Fisheries (FAO 2003) and experience gained, prepare field guidelines for implementation of EAF in developing countries (in English, French, and Portuguese)</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Intended audience**

4. The website is designed for a wide audience of those interested in the EAF. The evaluation team found the website very useful to access most output documents and information about the work in progress in Member Countries, in particular the “baby” project descriptions and contact details of the institutions and people involved in the National Task Group. The turnover of people is unavoidable so contacts should have a date of last update next to them, or maybe also include a generic email address in case the individual moves on.

5. From the point of view of the MCs, 28 respondents of our questionnaire survey rated the project means of communication. Of these, 26 found the website very useful (18) or useful (8) and 2 did not know it, compared with 26 who found the Newsletter very useful (21) or useful (5) and 2 who did not know it (with one person who did not know either). The respondents came from 18 different countries equally split between French and non-French speakers.

**Coverage**

6. The information presented is very self-contained and stays tightly focused within the EAF-Nansen project itself. It is very comprehensive and mostly up-to-date for activities in Phase I. The Publications page, gives access to all historical Dr R/V FN
cruise reports (pages 1 to 4), including surveys outside African waters. An information link indicated by an “i” next to each report year gives a short summary in a small pop-up window. Overall it is a very neat presentation for a list of publications. The only minor criticism here is that historical R/V survey reports can only be read one chapter at a time. There is no button to download them as single document file. They are available on CDs to order (for a fee of 30 US$ each page 1). Access to the survey reports is also provided through the Project Components/ Nansen cruises page, which displays the summaries of each report between 2005-2006 and 2011 in a clearer more readily legible format.

7. The Media Gallery is of great quality, particularly viewed on Flickr\(^4\) where 320 photos are varied and inspiring. It brings human faces to the EAF process and very expertly. Unfortunately, not all pictures have captions with a date, country or topic.

Writing style and languages

8. Text on the pages is easy to read, sentences are kept short, paragraphs are short and logically organized. Longer sections of text come with a link (top right hand corner) to the corresponding project document in pdf format (cf. ‘baby projects’ under In-country activities). This is a very good structure for information and reference material.

9. The website is in French and English. The translation quality is very good, although not always there (Cameroun, Gabon, Nigeria shrimp fishery project is only in French). Adding a Portuguese would probably be good for the project as planned in Activity 6.6 “… prepare field guidelines for implementation of EAF in developing countries (in English, French, and Portuguese)”. Translating the EAF Toolbox website into French, and Portuguese would also help.

Links to other websites

10. The website has a number of links on its home page. One side links to Norad as the Funding Agency, to FAO’s Fisheries and Aquaculture Department as the Executing Agency, and to IMR as the Cooperating Agency, and these links remain on every page. The other side of the home page has links to the project partners’ websites, the Benguela Current Commission (not live yet), Fisheries Committee of the West Central Gulf of Guinea, CCLME, GCLME, ASCLME and SWIOP. All links open in a separate tab, but generally, links are to a generic homepage and not to information specific or relevant to the EAF-Nansen. For example, the link to IMR could go to the CDCF page\(^5\) or the R/V DR FN page\(^6\). Similarly for Norad which links up to the Agency home page (and to the Norwegian version from the ‘About’ page) but could link to pages on climate change, higher education/ research or Oil for Development. Through its “ecosystems” link the Fisheries Department FAO page leads to a link to the EAF-Nansen, which is not very visible. The other websites do not appear to link back to the EAF-Nansen project.

11. FAO has a website dedicated to the EAF called EAFnet\(^7\), which showcases the EAF Toolbox. Under EAF projects, the EAF-Nansen has top place, and provides a live link to the EAF-Nansen project homepage. There needs to be a link (opening in a

\(^4\) http://www.flickr.com/photos/67578091@N08
\(^5\) http://www.imr.no/forskning/bistandsarbeid/en
\(^6\) http://www.imr.no/om_havforskningsinstituttet/fasiliteter/fartoy/dr_fridtjof_nansen/en
\(^7\) http://www.fao.org/fishery/eaf-net/en
separate window) in the other direction so that the latest development in the EAF Toolbox can be easily accessed.

12. In the future, the links within FAO between methods and normative product development and field application could be demonstrated more effectively through the website, for example, by linking up the EAF-Nansen in-country project descriptions to the EAF planning and tool selection steps\(^8\), which uses a very effective and simple graphic presentation. Conversely, the EAFnet website would greatly benefit from some of the EAF-Nansen pictures of meetings and of people effectively using the toolbox.

**Conclusion**

13. The EAF-Nansen project website is well developed, generally very easy to navigate and obtain information from. It is comprehensive in following the project documents and activities. Its structure is clear and its format is engaging. A promising development for Phase II would be to develop stronger links with the EAF Toolbox, IMR (R/V Dr FN and scientific services) and Norad websites.

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Annex 8: Detailed Analysis of EA-FMP

1. MAJOR FINDINGS, RECOMMENDATIONS AND LESSONS LEARNED IN VIEW OF PHASE 2

1.1. Major Findings

During the first phase and the interim period, the Project could successfully develop a methodology based on ERA that greatly contributes to awareness-raising on EAF, to building capacities in the countries in planning under EAF and to preparing fisheries management plans that are consistent with EAF. In the meantime, the Project could train some champions in EAF in the different countries and support the operationalization of NTG that in some countries have been institutionalized and are expected to gradually influence decision on fisheries management by making better use of EAF.

Thanks to the Project, 15 countries are now engaged in the preparation of national FMP under EAF, of which a majority have reached the stage of the technical validation. Moreover, it should be stressed that the efficiency of the methodology promoted by the Project is globally satisfactory good in comparison with other similar planning exercises that have been conducted in the recent past in the Region. This is believed to have facilitated the replicability of the planning method, notably for identifying major issues affecting the sustainability of the fisheries based on ERA, as promoted by the Project in the context of other initiatives.

Meanwhile, some improvements to the methodology could be envisaged as regards to the efficiency criteria. This include in particular the need to allocate more inputs to better address key issues in relation to fisheries management such as legal and MCS issues, the need to provide further technical backstopping from PCU, the need to establish clearer links with research activities conducted by the Project and the need to better synergize the activities with other initiatives.

The Project also has contributed to the development of a draft regional policy and a draft regional management plan under EAF for the management of the transboundary small pelagics in the CCLME area which is a very challenging issue.

In doing so, the Project could also develop extensive and constructive partnerships with regional fishery bodies and regional projects dealing with fisheries and/or LME. This is believed to contribute to the sustainability of all of the FMP processes.

The activities conducted and progresses made towards the achievement of outputs are believed to significantly contribute to the outcomes of the Project of relevance for FMP, notably the outcome in relation to providing countries with necessary skills, knowledge and systems based on EAF. Meanwhile, some factors have negatively influenced the achievement of the outcomes including in particular the poor level of incorporation of key EAF principles in most of draft FMP with particular reference to the coherency of the management units, the complexity of the fisheries that were selected, and the difficulty to adequately address some challenges of political, legal and institutional nature.

The level of actual and potential achievement of expected outcomes in relation to FMP under EAF can thus be considered as questionable. This implies that the Project should only reach partially its specific objectives in relation to furthering the acceptance of key principles of the EAF in the countries and to enabling them to sustainably managing their fisheries. However some corrective measures could be proposed in view of the second phase of the Project.
The effectiveness of the Project as regards to FMP should however also be appreciated in terms of the institutional dynamics and processes for improved governance of the fisheries including furthering key principles of EAF that have been launched in the Region. And this should be considered as a major achievement of the Project, particularly when considering that most of FMP are expected to be adopted before the end of the transition period. This would be a confirmation of the willingness and commitment of decision-makers to implement the EAF. This would be also a confirmation that FMP processes are relevant entry points for the Project to improve fisheries governance through improved incorporation of key EAF principles.

Accordingly, effort towards the promotion of FMP should be continued and strengthened during the second phase of the Project. This would notably include support to the implementation and continuous improvement of the national FMP in the course of their revision. And this would also include strengthening the approach developed by the Project to finalize and facilitate the adoption of both the policy document and regional FMP on small pelagics in the CCLME area.

Furthermore, considering that almost all the countries in the region covered by the Project are in a learning process as regards to FMP and that the methodology that is promoted by the Project is still experimental, a major challenge in the future towards the promotion of FMP that are fully consistent with EAF should be to adapt and improve the overall methodology. Another related challenge should refer to the increased capacity of the PCU to accompany the countries in promoting FMP processes in terms of providing specific advice in fisheries governance and management, including improving technical backstopping from the PCU for increased effectiveness and coherency of the FMP.

Based on the above, recommendations are formulated below. Note that some of these recommendations are in line with conclusions of the Evaluation of FAO’s support to the implementation of the CCRF dated June 2012, notably that “FAO needs to further clarify the EAF (and EAA) concepts and determine their relationship with the CCRF” and “to develop better guidance of a practical nature, including on how fisheries and aquaculture managers, working in an ecosystem approach, can better engage in integrated management planning and management processes, such as Marine Spatial Planning (MSP), while staying on track or reinforcing key fisheries and aquaculture governance issues.”.

1.2. Recommendations

1) Promote the adoption and implementation of FMP. This recommendation is addressed to countries. Meanwhile, the project could assist the NTGs in convincing policy-makers through supporting the following activities:
   a. Develop communication and lobbying strategies based on scenario assessing the situation of fisheries with and without an FMP in terms of ecological, economic and social returns.
   b. Support studies aimed at further investigating on the issue of facilitating the access of the fishing communities, including women, to alternative livelihoods to compensate the social impact of some management measures. Such studies should be based on lessons learned of almost 10 years of initiatives in the Region.
   c. Continue promoting a cluster approach to create motivates among countries and improve the effectiveness of the FMP in the case of shared stocks or of fisheries of common interest between neighboring countries. The possibility to enlarge certain clusters to other countries with the support of relevant regional fishery bodies should also be explored considering the possible transboundary nature of certain stocks (e.g.
industrial shrimp cluster could be extended to RDC, Congo Brazza and Equatorial Guinea with the assistance of COREP).

2) Increase the capacities of the PCU in accompanying countries in the implementation and revision of FMP in terms of providing specific advice on several aspects relating to fisheries governance and management including policy, legal and institutional aspects. This could take the form of the setting-up of a multi-disciplinary expert group composed of short-term consultants hired for some months a year placed under the supervision of the PCU and whose TORs could be reviewed each year by the Steering Committee.

3) Create an enabling environment for the implementation of adopted FMPs. This would include in particular the following:
   a. Assist countries in developing operational plans for the FMP, including identifying specific strategies for improved effectiveness and efficiency (e.g. gradual, MSP and right-based approaches in the case of the beach seine fishery, extension of the geographical scope of the small pelagics FMP in Tanzania) and specifying the sharing of institutional responsibilities between public and private institutions as well as financial arrangements for the implementation. Operational plans should furthermore pay due attention to the operationalization of the ICZM approach so that FMP under EAF could also contribute to the mitigation of the environmental externalities on the fishery sector.
   b. Formulate baby projects to support the implementation of the adopted FMP on the basis of the operational plan that would have been developed.
   c. Consolidate and extend partnerships with other projects (e.g. NFFP, SmartFish, WARFP) to mobilize additional funding and to synergize interventions considering that implementing FMP will imply to address other governance aspects such as MCS, registration, information systems, etc. that may not be in the scope of the second phase of the Project. This would also imply that regional fishery bodies are closely involved in the partnerships to be developed.
   d. Improve the contribution of research activities promoted by the Project to the implementation and M&E processes of the adopted FMP.
   e. Continue improving the knowledge and skills of stakeholders in promoting sound planning and management exercise inclusive of key EAF principles, while increasing the number of EAF champions in each country.

4) Increase the sustainability and the impact of FMP with regard to the challenge of furthering key EAF principles in the Region. This will include the following actions:
   a. Assist in the revision of certain FMP after 2-3 years of implementation with a view to promoting a better incorporation of key EAF principles.
   b. Support the up-dating or revision of legal texts as deemed necessary to promote a better integration of key principles relating to CCRF and EAF principles in the system of governance of the fisheries and to increase the effectiveness of FMP in terms of their capacity to influence decision-making and to improve the fishing regulatory framework.
   c. Prepare technical guidelines on the promotion of FMP in Sub-Sahara African countries that are consistent with EAF on the basis of lessons learned from the FMP under EAF as developed by the Project and the ‘more conventional’ FMP that have been developed in some countries for the last decade and FMP developed in the BCC area. This should notably include the holding of several workshops bringing together representatives of decision-makers, research, administration, MCS, and fishers. The purpose of the Technical guidelines would be notably to clarify key concepts relating
to FMP as being a major policy instruments for improved governance (including guiding institutional reforms of key management services such as research and MCS), to examine possible structures of an FMP that is consistent with EAF depending on the social, economic and institutional context and to provide guidance on methods to support planning processes.

5) As regards specifically to the transboundary management process of small pelagics fisheries in the CCLME area, it recommended to conduct the planned and on-going activities and to consider the following complementary actions:

a. Request the NTG in the four countries as well as the established national technical commissions on small pelagics (for SRFC member countries) to become more involved in the process for the elaboration of the regional management plan.

b. Considering that the adoption of a policy document may pose some problems for Morocco, examine the possibilities to, first, develop a Convention on minimal conditions for access to small pelagic resources in the CCLME, in line with the recently adopted SRFC Convention on minimal conditions for access to fishery resources in general, and, second, to assist the four countries in internalizing related provisions in their national fisheries legislation.

c. Support the countries in the elaboration of specific action plans aimed at ensuring that FMPs in preparation or on-going are consistent with both the regional management plan for the small pelagic species and the regional policy document.

d. Support the countries in the implementation of the harmonized FMP while ensuring that each country establishes partnership between the Project and donors when existed (e.g. for Senegal: WARFP, COMFISH, WAMPO).

1.3. Lessons Learned in view of Phase 2

A major lesson learned from Phase 1 and the Transition period is that the issue of selecting the management unit to be subject to an FMP under EAF is a crucial issue that should have been given more attention. Based on this, and assuming that the Project supports the launching of new FMP initiatives under EAF, it would be highly recommended to give particular attention to the selection of the fishery to be subject to an FMP while using the following criteria:

- Coherence of the management unit with EAF, including considering provisions made by the CCRF which states that “to be effective, fisheries management should be concerned with the whole stock unit over its entire area of distribution”.
- Simplicity (instead of complexity with reference notably to beach seine). The most important through the Project should be to initiate processes with increased chance of success so as to show the added value of the FMP versus the sectoral approach for the management of the fisheries, to consolidate the capacities of public and private institutions to promote FMP processes, to consolidate collaborative linkages between all institutions concerned by ICZM and to further convince decision-makers and donors of the relevance of the approach and of the need to extend it to other fisheries.
- Another criteria derived from ‘Value for money for fisheries management’ concept should consist of establishing priorities in the fisheries that could be subject to an FMP based on economic, social and environmental considerations (i.e. comparison between institutional costs and expected benefits), and to start working with those priority fisheries in a context where most of the Sub-Saharan African countries are faced with severe budgetary restrictions.
Furthermore, considering the diversity of situation in the region covered by the Project, it seems more appropriate to adapt the methodology aimed at promoting the elaboration of FMP that are consistent with EAF. Bearing in mind that one of the major outcomes of the Project is to promote the incorporation of key EAF concepts and principles in public policies relating to the fishery sector. This is to say that applying rigorously the methodology developed by the Project, including adopting the prescribed format for the FMP, should not be the only criteria to measure the success of countries in incorporating key EAF principles.

2. IN-DEPTH ANALYSIS OF SELECTED FMP UNDER EAF AS PROMOTED BY THE PROJECT

2.1. Introduction on method used

The in-depth analysis of selected FMP under EAF as promoted by the Project considers both the process for the preparation of the FMP and the likely impact of the FMP than have been drafted with reference to key EAF principles and concepts, including the following elements:

- Coherency of the management unit (with ecosystemic considerations)
- Coherency of the FMP objectives (to reflect both human and ecosystem well-being and equity)
- Effectiveness in addressing resource allocation through appropriate systems of right
- Effectiveness in resolving the issue of exclusion in an equitable manner
- Effectiveness in maintaining production while reducing environmental impact
- Quality of information gathering and analysis to support the planning process
- Efficiency of measures and actions for improved management of fisheries based on EAF key principles
- Effectiveness in contributing to integrated coastal zone management (ICZM) including improved institutional coordination
- Effectiveness in ensuring stakeholder participation in the planning process
- Effectiveness and sustainability of management measures through appropriate legal backing of the plan

In the case studies below, an appreciation (corresponding to personal judgment of experts) of the activities of the Project in support of the development of national FMP that are consistent with EAF was carried out, while distinguishing the process for the preparation of plans and the ‘quality’ of the drafted FMP with regards to key EAF principles.

The process refers to the following key EAF principles: quality of information; institutional coordination in support of ICZM; stakeholder participation. With reference to these principles, it can be stated that the methodology used by the Project, which includes notably the holding of ERA workshops, was very effective in all the case studies.

The quality of the draft plans is however very variable depending on the case study, as it will be further analyzed in the following sections. The notation system that was used to appreciate the quality of the draft plans is as follows:

- “coherency of the management unit” and “coherency of the FMP objectives” were appreciated through the following notation: Satisfactory (S); Moderately Satisfactory (MS); Moderately unsatisfactory (MUS); and Unsatisfactory (US).
- “effectiveness in addressing resource allocation”, “effectiveness in resolving the issue of exclusion in an equitable manner”, “effectiveness in maintaining production while reducing environmental impact” and “cost-efficiency of measures and actions” were appreciated in terms of likelihood: Likely (L) which means there are no risks affecting the satisfaction of the principle considered; Moderately Likely (ML) which
means there are moderate risks that affect the satisfaction of the principle considered; Moderately Unlikely (MUL) and Unlikely (UL) which means that there are severe risks that affect the satisfaction of the principle considered.

Furthermore, the last key EAF principle which refers to the effectiveness and sustainability of management measures through appropriate legal backing of the plan is appreciated under the heading “Adoption and implementation of the FMP”, when information is available.

2.2. Gulf of Guinea and Central Africa Clusters (CECAF South)

The CECAF south cluster includes countries concerned by the Guinea Current Large Marine Ecosystem (GCLME). Regional fishery bodies concerned include, in addition to CECAF, the Fishery Committee of the West Central Gulf of Guinea (FCWC) – Liberia to Nigeria - and the Commission Régionale des Pêches du Golfe de Guinée (COREP) – Cameroon to Angola.

A first Regional workshop on EAF for countries in the GCLME was held in Accra in October 2007. The objectives of the workshop were to introduce participants to EAF and to identify the activities to be carried out in the Gulf of Guinea under the Project. For practical exercises the participants worked in three subgroups (northern, central and southern countries) with each group selecting a specific fishery (shrimp trawl fishery by the northern and southern groups, beach seine fishery by the central group), defining its global and specific objectives and working through issue identification for the selected fishery.

A second Regional workshop was held in Sierra Leone in October 2008 in relation to a meeting of the Gulf of Guinea EAF Regional Task Group (RTG) and to a workshop on Ecological risk assessment methodology. The main objectives of the meeting and workshop were to discuss and facilitate key processes and activities for the implementation of the EAF management in the Gulf of Guinea region. For the exercises, the participants worked in three subgroups formed according to the geographical location of their countries as was done in the preceding regional workshop. The fishery selected by the North and South groups was the shrimp trawl fishery whereas the Central group selected the beach seine fishery.

2.2.1. Beach Seine Fishery in Ghana

The beach seine (BS) fishery has been selected by Ghana, as well as by the other countries composing the Central group (Benin, Cote d’Ivoire and Togo) for several reasons including the following:

- Activities aimed at mitigating the negative impact of BS fishing on the environment while taking into consideration livelihoods of fishing communities were initiated in the countries by the former FAO/DFID SFLP project (Sustainable Fisheries Livelihoods Programme in West Africa) in 2002. The approach developed by SFLP also consisted in encouraging cooperation between neighboring countries. This is to say that institutional dynamics already existed and that it was felt necessary to build on this asset to promote FMP using EAF on the BS fishery.

- BS fishing is a very sensitive/problematic fishing practice in the Gulf of Guinea when considering its negative impact on both fish resources and coastal ecosystems (notably in the estuarine areas\(^1\)) and the social dimension associated notably in terms of employment. BS fishing also is the second most important fishing gear in Ghana in terms of contribution to fish production (about 74,000 tons per year). In the meantime, BS fishing is widely used in the Volta Region, particularly around the mouth of the Volta River and other estuarine areas, to exploit mainly juveniles of fish species. In some areas, it has been observed that over 90% of fish caught by beach seine is comprised of relatively small-sized and juveniles of commercially important species.

\(^1\) For example, the beach seine is widely used in the Volta Region, particularly around the mouth of the Volta River and other estuarine areas, to exploit mainly juveniles of fish species. In some areas, it has been observed that over 90% of fish caught by beach seine is comprised of relatively small-sized and juveniles of commercially important species.
fishing regulation is poorly enforced as regards to the minimum mesh-size of the net as a result of both social pressure (the livelihoods of many poor people within fishing communities rely on this fishing method) and related political interferences which makes MCS and enforcement a major challenge.

- BS fishing is relatively easy to ‘manage’ since both fishing and landing can be monitored from the beach which does not imply the mobilization of important financial and logistical means for MCS.

Note also that practical exercises that were conducted during the two above mentioned regional workshops are believed to have contributed significantly to the selection of the BS fishery as a management unit for the preparation of FMP in the Central zone of GCLME.

**Preparation process: strengths and weaknesses**

Preparation was initiated in 2010. It has led to the formulation of a draft FMP dated December 2011. The draft still has to be finalized notably on the basis of the last validation workshop that was held in February 2013. The last steps of the formulation, including adoption, seem to be hampered by the need for decision-makers to be fully convinced of the feasibility of the activities aimed at offering alternative livelihoods to fishers that are proposed by the FMP as a matter of compensation to constraining management measures.

**Major strengths from the process can be listed as follows:**

- A regional workshop between the four countries concerned by the BS FMP was organized in 2012 in Accra with a view to facilitate the harmonization of the different FMP. In addition to have contributed to the harmonization (e.g. common regulation on mesh size), the workshop gave the opportunity to foster the regional cooperation including in terms of information and experience sharing between countries and of strengthening of the FCWC.

- The preparation process has contributed to increased sensitization of decision-makers at the Fisheries Commission level on the need to take action in the BS fishery despite political interference, provided however that BS fishers can access alternative livelihoods.

**Major weaknesses from the process can be listed as follows:**

- The preparation seems not to have sufficiently considered the current policy and planning document, including the National Fisheries and Aquaculture Policy, 2008, the Fisheries and Aquaculture Sector Development Plan for the period 2010-2015, and the Strategy for Marine Fisheries Management, 2011. All these documents contain elements of relevance for the management of the BS fishery, notably as regards to the crucial issues of controlled fishing capacity, mitigated environmental impact and reduced fishing effort.

- Capacities of the NTG, according to the members, are not strong enough in fisheries planning and management. Moreover, the NTG is still considered as a project structure, hence with little influence on decision-making.

- The overall process in relation to the methodology developed by the Project (with particular reference to ERA workshops), although deemed necessary to ensure effective participation, seems to be quiet time-consuming and expensive. Ghana, as well as other countries of the BS cluster expressed their fear about the replicability of such methodology in the absence of external funding. Note however that in Ghana, the WARFP (West African Regional Fisheries Programme) financed by the World Bank may offer possibilities for additional funding in the near future.

- Significant political interference has been observed in the process, which can explain the delays in the finalization of the drat FMP. Unless decision-makers are convinced
of the need to better regulate the BS fishing for improved marine and coastal fisheries management, the finalization and adoption of the draft FMP may be further delayed.

- The link between research activities promoted by the Project and the FMP process was not sufficiently established. This gap should be better addressed in the second phase of the Project.

Analysis of the content of draft FMP with reference to key principles of EAF

The structure of the draft FMP does not reflect the format for an FMP under EAF that is encouraged by the Project (see box 3). The document emphasizes the need to promote the use of appropriate mesh size, to introduce seasonal restrictions on the use of the gear, and to provide fishing communities with alternative livelihoods. The strategy to achieve these operational objectives is, however, not very much developed at this stage.

Note also that the draft FMP does not consider any possible activities that could be promoted in order to consolidate key management services and functions such as research, statistics, MCS and participation mechanisms. This is believed to be a major gap in view of the implementation and effectiveness of the draft FMP in a context where Ghana has already been experienced with the limitation of such documents in which operational objectives are not adequately addressed (ref. to the Fisheries management plan in the marine sector, 2001).

<table>
<thead>
<tr>
<th>Key EAF principle</th>
<th>Appreciation (*)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management unit</td>
<td>US</td>
<td>The management unit that is the BS fishery is questionable as regards to one of the key EAF principle which is to promote large-scale planning process capable of embracing the different components of the ecosystem. The distribution of the whole fish stocks unit is indeed more extended than the fishing area of the BS and other fishing fleets (artisanal and semi-industrial) do exploit the same stocks composed of both pelagic and demersal species. Note that the draft FMP mentions that during the last validation workshop held in February 2013, participants stressed that although appreciating the proposals on mesh size and closed season for BS, there was a need to extend the measures to the entire fisheries which concern BS but also many other fishing techniques including purse seine. Furthermore, it might be difficult to measure the impact of the FMP based on the M&amp;E of BS fishing only since it is believed that improved selectivity in BS fishing will also impact positively the other fishing techniques which exploit the same resources.</td>
</tr>
<tr>
<td>Objective of FMP</td>
<td>MUS</td>
<td>The overall objective of the FMP is restrictive since it is “to sustain the exploitation of the BS fishery”. The mitigation of the negative impact of the BS fishery on the coastal and marine ecosystems, while taking into consideration human well-being, would seem more consistent with EAF.</td>
</tr>
<tr>
<td>Resource allocation through appropriate system of rights</td>
<td>UL</td>
<td>The draft FMP does not address at all this major issue. Note also that the draft FMP does not address another crucial issue that is the excessive fishing capacity (about 950 BS fishing unit in total). Actually, the draft FMP only makes reference to technical/conservation measures.</td>
</tr>
<tr>
<td>Resolving exclusion in</td>
<td>MUL</td>
<td>Since the draft FMP does not address the crucial issues of the access to resources and of controlling fishing capacity, it can hardly be...</td>
</tr>
</tbody>
</table>
appreciated whether the draft FMP has adequately addressed the issue of exclusion. The draft FMP makes however reference to the need of promoting alternative livelihoods to mitigate negative impacts of management measures.

Maintaining production while reducing environmental impact  

MUL  
The minimum mesh size for the use of BS is 25mm according to the fishing regulations (the delimitation of the minimum mesh-size is based on biological considerations). Today, most of BS do operate with mesh size of 10mm which is illegal. One of the operational objectives of the draft FMP would be to encourage the change in mesh-size so as to be ‘close’ to the legal minimum size. Consequently, the draft FMP is believed to contribute to maintaining production while reducing environmental impact. However, unless access to resource and reduction of fishing capacity is adequately addressed, the impact of the draft FMP in this regards is believed not to be so decisive.

Cost-efficiency  

UL  
Poor level of enforcement of existing fishing regulations is a major issue in the fishery sector in Ghana. For instance, small pelagics that are caught by BS are also caught by purse seiners using light fishing (prohibited) and semi-industrial boats entering illegally the inshore exclusive zone. One of the conditions of success for improved level of enforcement will be that all fishing operators are forced to comply with the regulation. Thus, should only BS fishing be closely monitored, it can be anticipated that costs associated with MCS and enforcement, and possibly compensation, will be very high since BS fishers will logically ask for non-discrimination in complying with the existing fishing regulations. This fear as regards to the success of the FMP also has to be put in relation to the questionable choice of the management unit (see above)

 Adoption and implementation

The adoption of the draft FMP should not be an issue in Ghana since proposed measures make only reference to technical conservative management measures (e.g. closed season, mesh size) and the Fisheries Act, 2002, gives the possibility for the Minister to adopt such measures including declaring closed area/season. This would not have been the case if the draft FMP has considered measures aimed at reforming the legal regime for accessing the fishery and better controlling fishing capacity and effort. 

Note however that a technical measure that is envisaged in the draft FMP may pose some problems as far as legal and governance aspects are concerned. This refers to the increase of the mesh size of the net to a size (15-20mm) that would however still be below the minimum legal size (25mm). This would imply either to amend the existing regulation or to take the risk that the FMP may encourage measures that are illegal.

Institutional and financial arrangements to support the implementation of the FMP are not really addressed in the draft FMP. The draft FMP however mentions that FCWC will have to play a very important role to foster necessary cooperation between the four countries concerned by the BS cluster in various aspects including fund-raising, monitoring, ensuring political commitment and harmonization of legislations, and information sharing.

Other elements that can be derived from the analysis of BS FMP in the other countries (Côte d’Ivoire, Togo, Benin)
Progresses made by the other countries in FMP formulation are believed to be more important in the three other countries than in Ghana. All the three draft FMPs reflect the format suggested by the Project and are expected to be adopted in the near future.

In these countries, the Project has had unexpected impacts that are believed to significantly contribute to the incorporation of key EAF concepts and principles in public policies in the fishery sector. These impacts can be mentioned as follows:

- In Cote d’Ivoire, the NTG has been legally formalized and is now an institution that is closely involved in activities that are out of the sphere of the Project (e.g. establishment of an MPA in Cote d’Ivoire).
- In Togo, the approach promoted by the Project to support the preparation of FMP (including ERA workshops) has been replicated in the context of a project financed by the World Bank focusing on inland fisheries.
- In Benin, the NTG has been closely involved in the implementation of a project dealing with the establishment of an MPA.

The NTGs in the three countries performed their work in relation to FMP on the basis of the contribution of the Project only (lump sum for the NTG and lump sum for the Baby project). The financial means were considered sufficient. The countries however expressed their fear that the implementation of the FMP may be faced with financial constraints due to uncertainties as regards to Government funding. The countries strongly expressed their wish that Project in its second phase be also involved in the implementation of FMP.

**Way forward in view of Phase 2 of the Project**

In order to improve consistency and effectiveness of the FMP using EAF, it would be advisable to think about appropriate strategy for its implementation. A key strategy element would be to be gradual in the implementation (instead of promoting the implementation of the FMP on the entire coastline), with priority given to the most sensitive areas based on ecological considerations (e.g. estuarine areas). This would avoid the widespread of means in a general context of budget restrictions and hence ensure higher efficiency of the FMP using EAF approach in selected pilot sites. Based on success stories and learning, the approach could then be extended to the other sites.

Furthermore, in these priority/pilot areas, the following strategy elements should be considered:

- examine the possibility to identify demarcated zones like MPA (based on ecological, social and economic considerations) where the objective would be to ensure compliance of all fishing activities with the existing fishing regulations
- examine the possibility to controlling and possibly reducing the BS fishing capacity and effort in close collaboration with fishers –to this end, some synergies could be developed with the WARFP project which gives emphasis on right-based approach
- place particular attention on activities aimed at accompanying fishing communities to access alternative livelihoods
- place particular attention on strengthening the existing ICZM mechanisms with a view to reduce externalities to the BS fishery (e.g. destruction of mangroves, water pollution)
- clarify the duties and responsibilities of every stakeholder (both public and private) in the implementation, M&E and revision of the FMP while paying due attention to the provision of required management services.

Note that all the above suggestions are in line with conclusions of the Project Report No. 10 on ‘Legislating for an ecosystem approach to fisheries’. This report notably states that in order
to fully implement the ecosystem approach, a more holistic coastal zone management regime is required, which would require the adoption of coastal zone plans for all activities that have an influence on the marine environment.

All the above suggestions would also have some legal implications in some countries concerned by the BS FMP cluster; particularly in Francophone countries where texts are obsolete (e.g. Ordonnance de 1968 in Benin, Loi de 1986 in Côte d’Ivoire). This implies that the Project should also make provision for expertise in legal matters.

Two other key strategy elements should also be mentioned as follows:

- promote research activities in inshore waters to improve scientific advice and support M&E in support of FMP implementation
- continue supporting collaborative mechanisms between the four countries composing the BS cluster through using the existing FCWC possibilities.

### 2.2.2. Industrial Shrimp Fishery in Gabon

The main criteria used by Gabon to select the industrial shrimp fishery as being the management unit for the promotion of FMP using EAF include ecological (impact of the fishery as regards to by-catch and discards) and economic (potential for better integration of the fishery in the national economy) considerations.

Improving the management of the industrial shrimp fishery is also a thematic issue of common interest in the South group of CECAF, particularly in Gabon, Nigeria and Cameroon, when considering the bio-ecological dynamics of the stocks (and possible ecological interactions of the different stocks at the sub-regional level) and the similarity that exist between countries in terms of the exploitation strategies of the fishing industry and of the governance of the fishery.

Note also that practical exercises that were conducted during the two above mentioned regional workshops that were held in 2008 and 2009 are believed to have contributed significantly to the selection of the industrial shrimp fishery as a management unit for the preparation of FMP in the South group of GCLME countries.

### Preparation process: strengths and weaknesses

Preparation was initiated in 2010. The draft FMP has been validated in 2013 and the adoption is expected in September-October this year by Ministerial Decree in accordance with provisions made by the Fisheries legislation, 2005.

Interestingly, the COREP entered into the industrial shrimp FMP process, through the FAO NFFP project. Economic analysis of the shrimp fishery (using bio-economic modeling) that was conducted through the NFPP was highly appreciated. Also, it is believed that the involvement of the COREP at the later stages of the process was a catalytic in the finalization and harmonization process of the FMP between the three countries composing the cluster.

Major strengths from the process can be listed as follows:

- The various activities, including notably the holding of ERA workshops, has led to significant improvements in the governance of the fishery sector as regards to participation, capacity building and development of collaborative linkages between various public and private institutions concerned by the management of the sector.
- The cluster approach was highly appreciated since it gave the opportunity for information and experience sharing between the three countries in relation to the management of the industrial shrimp fishery. Cluster approach took the form of the participation of 1 to 2 representatives of the other countries at each national workshop.
Gabon adopted the ERA methodology to support a national initiative aimed at improving the management of the inland fishery sector.

Major weaknesses from the process can be listed as follows:

- The overall budget dedicated to support the process, notably participation, is deemed to have been insufficient. In addition, the way the baby project was formulated did not facilitate the mobilization of additional funding from public finance.
- Gabon, as well as the other countries composing the cluster, has had some difficulties at the first step of the process to apply the methodology promoted by the Project. It should be stressed, however, that countries appreciated the continuous support and technical backstopping from the Project coordination which would have greatly facilitated the process.
- The link between research activities promoted by the Project and the FMP process was not sufficiently established. For instance, information on the status of shrimp stocks that is used in the draft FMP makes reference to a scientific campaign held in 2002 by IEO. This gap should be better addressed in the second phase of the Project.

Analysis of the content of draft FMP with reference to key principles of EAF

The structure of the draft FMP is rather different from the format that is promoted by the Project, although containing main elements of relevance to EAF. Moreover, the draft FMP is a plan for supporting institutional reforms in the current governance of the fishery through encouraging the establishment of concession systems (right-based approach) between the owner of the resource (the State) and the users (fishing industry) with emphasis given to the strengthening of the current management services including statistics, research and MCS. Protection of the ecosystems through measures aimed at mitigating the negative impact of trawling (e.g. by-catch reduction devices) and at developing collaboration with other ministers with a view to reducing pollutions generated by other users of the natural resources (mangrove, oil exploitation, etc.).

<table>
<thead>
<tr>
<th>Key EAF principle</th>
<th>Appreciation (*)</th>
<th>Comments</th>
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<tbody>
<tr>
<td>Management unit</td>
<td>MS</td>
<td>The management unit refers to the shrimp stocks that are located in the northern zone combined with the industrial component of the fishing fleets exploiting the stocks. This unit is consistent with the whole distribution of the stocks concerned. The unit however does not really consider the artisanal sector which exploits the same species that are located seasonally in the estuarine areas (shrimp fishery is a sequential fishery). Note that in counties like Madagascar, the limitation of the management unit to the industrial component of the stock is considered as being one of the factors explaining the poor results in terms of stock recovery despite considerable efforts made by the industry to reducing fishing effort for the last 10 years.</td>
</tr>
<tr>
<td>Objective of FMP</td>
<td>S</td>
<td>The overall objective is to maximize benefits that could be derived from the industrial fishing while respecting ecological and social constraints and ensuring equity in the distribution of benefit. The three operational objectives are consistent with EAF: sustainable management, reduction of negative ecological impact of trawling on the ecosystem, minimization of pollutions generated by other users.</td>
</tr>
<tr>
<td>Resource allocation through</td>
<td>L</td>
<td>The major innovation of the FMP is to introduce a right-based system (concession system between State and fishers, based on the allocation of a TAC). This is believed to radically change the way the fishery is managed.</td>
</tr>
</tbody>
</table>
appropriate system of rights | managed to the benefit of both State and fishers. The fishing industry should indeed be inclined to adapt fishing effort to levels close to MSY. And public policies involving advanced co-management mechanisms are expected to be cost-effective.

Resolving exclusion in an equitable manner | ML | The allocation of TAC does not imply that equity be respected. The concession system does not however exclude the possibility to establish individual quotas that could consider equity in resource allocation.

Maintaining production while reducing environmental impact | ML | The management option that is proposed for the industrial segment (concession/TAC) is believed to be in very good coherence with this objective. It is doubtful however that maintaining production can be achieved if the artisanal segment is not considered in the FMP, in a context where artisanal fishers mostly target the juvenile fraction of the stock in the estuarine areas.

Cost-efficiency | L | The concession system is consistent with value for money for fisheries management since it gives emphasis on the application of a win-win approach between the State and the fishers based on a cost-sharing for the improvement of the management services with

(+) Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MUS); Unsatisfactory (US).

Likely (L); Moderately Likely (ML); Moderately Unlikely (MUL); Unlikely (UL)

Adoption and implementation

Gabon is endowed with a recent legislation (Loi de 2005) which includes the possibility to adopt specific fishery management plan. This can be seen as an opportunity since it will give the possibility to ensure proper legal backing of the FMP. The recent legislation would also give the possibility to establish right-based approaches for specific fisheries, including through concession systems between the State and a group of boat owners.

As regards to implementation arrangements, it is interesting to note that Gabon is engaged in ICZM policies through the concept called ‘Gabon Bleu’. This should be seen as an opportunity to consolidate the incorporation of key EAF principles in public policies while promoting the implementation of FMP.

Note also that the COREP would be very much interested in being involved in the FMP implementation using notably NFPP possibilities. The involvement of COREP in the FMP implementation should also be seen as an opportunity when considering the need of promoting cooperation and harmonization between the countries concerned by the shrimp cluster for the improvement of management services including registration of vessels and MCS.

Other elements that can be derived from the analysis of industrial shrimp FMP in the other countries composing the South group (Cameroon and Nigeria)

Cameroon seems to have had difficulties with the option that was proposed by the international consultant to address the issue of improved access to resources. The consultant was in favor of proposing institutional reforms (i.e. introducing differentiated regimes for licensing), which would have implied some changes in the existing legislation whereas the NTG was much in favor of proposing measures that are in accordance with existing provisions in the legislation. Note that the fisheries legislation in Cameroon is dated 1994 and can be considered as obsolete as regard to several international legal instruments including the CCRF and forcedly the EAF guidelines. This example highlights the need of promoting a holistic approach for improved governance of fisheries, where FMP under EAF should be considered as an adequate policy instrument to promoting institutional reforms, but not the only one. Others policy instruments to be considered when working on incorporating key
EAF principles in fisheries management include notably legislation, statistics, research and MCS.

Nigeria is not a member of the COREP but of the FCWC. In this context, the FCWC and well as the EU ACP Fish2 project (for legislation revision) provided assistance to the NTG for the preparation of the draft FMP. The EAR workshops were particularly appreciated by Nigeria since it brought together representatives of each State concerned by the fishery. Note also that all coastal States commissioners endorsed the draft FMP at the validation workshop that was held early in July this year. The draft FMP introduces the setting-up of an interagency coordination committee as a specific action, which should facilitate the application of an integrated approach for the management of the fishery, in accordance with EAF.

The COREP is currently promoting the preparation of an FMP on the shared sardinella stock in the sub-region, with the assistance of the EU ACP Fish2 project. It is interesting to note that the methodology developed by the Project (notably ERA) was used to conduct the diagnosis-analysis of the fishery. To this end, national experts involved in the industrial shrimp FMP assisted by the Project were hired by the COREP.

**Way forward in view of Phase 2 of the Project**

In view of Phase 2, countries expressed their wish to benefit from the assistance of the Project for the implementation of the FMP. Countries insisted on the need to support the work of the NTG through increased allocation of budget and continued capacity building in EAF. Countries also stressed the need to adequately define an action plan to support FMP implementation while clarifying institutional responsibilities: which institution should do what (fisheries administration, MCS, other ministers, fishers, local governments, etc.)?

Other key strategy elements in view of the second phase of the Project should also be mentioned as follows:

- promote research activities in inshore waters to improve scientific advice and support M&E in support of FMP implementation
- continue supporting collaborative mechanisms between the three countries composing the BS cluster, and possibly through using the existing COREP possibilities (Nigeria could be considered as an associated member)
- encourage the cooptation of Congo Brazza, DRC and Equatorial Guinea in the cluster as observers considering that this would offer good opportunities for respective NTGs to increase their capacities in promoting FMP using EAF and also considering that despite the lack of scientific evidence it is believed that some ecosystemic interactions do exist between different shrimp stocks in the CECAF South.

Another key element in view of Phase 2 should be to consolidate partnership with the COREP possibly through a MoU between FAO and the COREP, when considering in particular the following thematic issues in preparation at the COREP level:

- MCS strategy and plan of action
- Regional fishing vessel registry
- Minimal conditions for access to fishery resources

**2.2.3. Small-Scale Fisheries in Sierra Leone**

Sierra Leone selected the artisanal sub-sector as a management unit for an FMP using EAF for several reasons including the fact that the sub-sector is currently faced with several problematic issues such as low compliance with regulations. Also, the Government is intended to improve the overall organization of the sub-sector through notably introducing licencing and territorial user right. Furthermore, Sierra Leone has recently engaged in the
WARFP programme and it was felt necessary to facilitate the mainstreaming of the activities relating to the artisanal subsector into the programme.

Note that the 2010 Fisheries Policy and Operational Framework of Sierra Leone provides framework for the management of major fisheries including shared small pelagic resources, shrimps, and demersal species.

Preparation process: strengths and weaknesses

The draft document entitled ‘Management Plan for the Small-Scale Fisheries in Sierra Leone’ was validated by the NTG in August 2012. Its adoption is expected to occur soon.

During the process, the NTG has developed close collaboration with the WARFP Programme in Sierra Leone. Note also that the NFPP contributed indirectly though the support of economic studies on the fishery sector in the country, including preliminary bio-economic modeling in view of the introduction of TAC on certain fisheries.

Major strengths from the process can be listed as follows:
- The NTG strongly appreciated the methodology of the Project, including notably ERA workshops, to support the preparation of the plan in a holistic and participative manner.
- The WARFP Programme is currently working on the preparation of a shrimp FMP and is making use of the EAF tools developed by the Project.

No major weaknesses from the process were identified by Sierra Leone.

Analysis of the content of draft FMP with reference to key principles of EAF

The ‘Management Plan for the Small-Scale Fisheries in Sierra Leone’ is a very comprehensive and impressive policy and planning document consistent with EAF aimed at supporting the responsible development of the small-scale fishery sub-sector which is a multi-gear and multi-species fishing oriented. However, such document can hardly be considered as an FMP in the context of the evaluation of the Project.

Meanwhile, it is to stress the added value of the EAF methodology for the analysis-diagnosis of the sub-sector. The Management Plan indeed identifies a range of issues that affect the ecological well-being of the inshore resources and the human well-being of the users.

The management and operational objectives of this Marine Small-scale Fisheries Management plan are as follows:
- Conservation and sustainable utilization of coastal fishery resources
- Enhance ecosystem well-being by preserving and minimizing adverse impacts on the ecosystem, including reducing by-catch of shrimp trawlers and establishing MPA
- Improve the livelihoods of small-scale fisheries communities
- Improve governance of the marine small-scale fishery sector, including introducing right-based systems

Adoption and implementation

The Fisheries Act, 1994, gives the possibility to the Minister to approve the management plan and make it operational.

The implementation of the management plan will be a joint responsibility of several public institutions. The Ministry in charge of fisheries will however regulate, promote, support and guide the implementation of the plan, through broad consultative processes with other stakeholders. A Coordinator will be appointed to ensure the effective and harmonious implementation of the plan.
In terms of financial arrangements, Sierra Leone is intended to use WARFP possibilities to support some components of the management plan, including MCS, MPA development and co-management.

**Way forward in view of Phase 2 of the Project**

Expectations in view of the phase 2 of the Project are mainly put in relation to the need of assisting the country in strengthening research capacities on the inshore waters in order to support decision-making and M&E of the management plan.

As regards specifically to the implementation of the FMP, it is believed that the Project could assist in developing communication strategy aimed at ensuring continuous incorporation of EAF in policy-making.

### 2.3. Western Indian Ocean Cluster

The Western Indian Ocean cluster includes countries concerned by the South West Indian Ocean Fisheries Commission (SWIOFC) and the Agulhas and Somali Currents Large Marine Ecosystems (ASCLME). Project activities in the SWIO region have been conducted in close collaboration with the SWIOFC in accordance with a MoU dated 2008.

A first meeting of the South West Indian Ocean EAF Regional Task Group (RTG) was held in Mombasa in January 2009, together with an ERA methodology workshop. Representatives of the South West Indian Ocean Fisheries Project (SWIOFP), the ASCLME project, the UNEP/Nairobi Convention and the African Union Commission were present. The main objectives of the meeting were to discuss and facilitate key processes and activities for the implementation of the ecosystem approach to fisheries management in the SWIO region including the modalities for the formation and functioning of the RTG and NTGs.

A second regional meeting was organised in Mombasa in September 2009. This meeting corresponded to the first meeting of the Project Regional Steering Committee for the SWIOFC area. Representatives of the African Union Strategic Partnership for the Fisheries Investment Fund, the ASCLME project, the UNEP/Nairobi Convention, and the SWIOFP also attended the meeting. It is to note that one recommendation of the S/C dealing specifically with the Project activities in relation to FMP emphasized the need to organize at least one regional training workshop on the development of FMP that are consistent with EAF. The recommendation also stated that the training workshop should include specific case studies of existing FMP in the region, and presenting what would be required for them to include the EAF approach. This recommendation was surely making reference to the existing FMP in Mozambique and Mauritius.

A third regional meeting was organized in Pretoria in February 2011. The objective of this technical workshop was to examine where countries in the SWIOFC area stand in the adoption and implementation of EAF. A tracking tool was used as a means of establishing a baseline for EAF implementation in each of the SWIOFC countries, and in the region as a whole, by working on selected fisheries that are important both nationally and regionally.

Finally a fourth regional meeting was held in Mauritius in October 2012, corresponding to the second meeting of the TRG for the SWIOFC area. This meeting gave the occasion to consolidate the capacities of the countries in implementing EAF and related Project methodology. During the meeting, participants acknowledged the need to cooperate with each other and at the regional level through the SWIOFC for the implementation of harmonized management frameworks in line with EAF principles in the case of shared stocks and stocks of common interest.
2.3.1. Sofala Bank Industrial Shrimp Fishery and Line Fishery in Mozambique

In the internal review of the Project prepared in 2013 and entitled “Report of the Project Phase I (2006-2011)”, the list of countries and fisheries for which FMP were developed is given in annex. For Mozambique, two fisheries are indicated: Sofala Bank shrimp and Line fisheries.

The Sofala bank shrimp fishery can be considered as a strategic fishery for Mozambique with reference in particular to its contribution in terms of fish trade balance and State earnings from the sector. The Fisheries Master Plan 2010-2019 aims at increasing the benefits for the country that can be derived from the fisheries sector. In the specific case of the Sofala Bank shrimp fisheries, a major strategy element is to reviewing the resource allocation scheme to increase the share of artisanal and semi-industrial.

In 2008, Mozambique adopted the Sofala Bank shrimp FMP in response to the bio-economic situation crisis that was seriously affecting the fisheries since 2005, as well as to promote a better integration of the fisheries into the national economy. This FMP put the emphasis on improved MCS and on the reform of the system of access to resources for industrial and semi-industrial fishing (i.e. shift from a TAC to a Total Allowable Effort-TAE- system) to reduce fishing effort.

The Line fishery is “the largest fishery in the country in terms of number of fishermen, the diversity of species caught, variable expectations of its different sub-sectors and possibly the total quantity of fish landed. This large multifaceted fishery operates along the entire 3,000 km coastline in every marine and coastal ecosystem found in Mozambique and is developed in all the recognised sub-sectors namely, industrial, semi-industrial, artisanal, recreational and sport.” (source: draft FMP on Line fishery).

Based on the findings from the field mission in Mozambique, it is not evident whether the Project has developed activities aimed at facilitating the incorporation of EAF principles in the existing Sofala bank shrimp FMP. Therefore, the paragraphs below only refer to the preparation of the Line fishery FMP under EAF as supported by the Project.

Preparation process: strengths and weaknesses

The development of a management plan for the marine linefishery of Mozambique was initiated in 2006 with the support of the Oceanographic Research Institute (ORI) of Durban, South Africa and gradually enhanced as more information became available. In particular, the expansion to include the EAF was seen as a progressive development since 2010, with the assistance of the Project.

The draft FMP was prepared by the Ministry of Fisheries assisted by the NTG under the general guidance of the Project, the SWIOFP and ORI. The process included the preparation of a baseline and the holding of several workshops including workshops on ERA.

Analysis of the content of draft FMP on Line fishery with reference to key principles of EAF

The line fishery is already regulated through the General Regulations of the Sea Fisheries (REPMAR), 2003. Management measures include zoning, limitation of daily catch, limitation of the number of fishing unit by zone and a quota system for the industrial component of the fishery. The added value of the draft FMP is notably to build on the existing management
measures to provide a planning document aimed at organizing public action in the fishery, including strengthening certain management services.

The draft FMP on Line fishery is consistent with the format promoted by the Project and addresses the different component of the EAF. The numerous actions that are listed in the logframe confirm the robustness of the EAF methodology to support a holistic planning exercise.

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<tr>
<th>Key EAF principle</th>
<th>Appreciation (*)</th>
<th>Comments</th>
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<tbody>
<tr>
<td>Management unit</td>
<td>MUS</td>
<td>The line fishery refers to a fishing technique and not to a given species or group of species in a context where other fishing techniques also exploit some of the concerned resources. This means that the effectiveness of some measures on the targeted species or group of species may be compromised by the actions of other fishing techniques. Furthermore, the line fishery is a complex multispecies fishery involving artisanal, semi-industrial and industrial fleets which is believed to complicate the implementation and the M&amp;E of the FMP.</td>
</tr>
<tr>
<td>Objective of FMP</td>
<td>S</td>
<td>Objectives stated in the FMP reflect the objectives of an FMP using EAF.</td>
</tr>
<tr>
<td>Resource allocation through appropriate system of rights</td>
<td>MUL</td>
<td>The management options indicated in the FMP mostly refers to licensing by zone and daily catch control. In practice, such approach to deal with resource allocation has several limitations, in particular in a fishery that involves small-scale fishers.</td>
</tr>
<tr>
<td>Resolving exclusion in an equitable manner</td>
<td>ML</td>
<td>The draft FMP aims at increasing the share of the catch to the benefit of the small-scale sub-sector.</td>
</tr>
<tr>
<td>Maintaining production while reducing environmental impact</td>
<td>ML</td>
<td>The measures proposed by the FMP should contribute to the objective of maintaining production. A fishing effort based system, as it is proposed in the draft FMP, has proved however in other countries not to be the most adequate option to ensure the control of fishing mortality.</td>
</tr>
<tr>
<td>Cost-efficiency</td>
<td>MUL</td>
<td>The complexity of the fishery, and the multitude and lack of prioritization of actions that are proposed in the logframe may result in poor cost-efficiency of a FMP.</td>
</tr>
</tbody>
</table>

(*) Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MUS); Unsatisfactory (US). Likely (L); Moderately Likely (ML); Moderately Unlikely (MUL); Unlikely (UL)

Adoption and implementation

The current legal framework gives the possibility for the Minister to adopt the FMP. Indeed, as it was stated by a representative of Mozambique during the second RTG meeting for the SWIOFC area (Mauritius, October 2012), a different level of endorsement/approval is required depending on the product. The Law is approved by Parliament, Regulations by the Cabinet and operational tools like a management plan are approved by the Minister.

Institutional and financial arrangements to support the implementation of the FMP still have to be identified.
Way forward in view of Phase 2 of the Project

In view of Phase 2 of the Project, it would be advisable to assist the NTG in devising an implementation strategy for the FMP, while paying due attention to the prioritization of the proposed activities.

2.3.2. Small Pelagics Fishery in Tanzania

Tanzania is a United Republic resulting of a Union between Tanganyika and Zanzibar. Under the Union, Zanzibar has retained a sovereign government giving it jurisdiction in non-union matters including fisheries. Both the mainland and Zanzibar have their own fisheries policies and laws of relevance to the territorial waters (up to 12 nm). The Small pelagics FMP in Tanzania only pertains to Tanzania mainland.

The geographical area covered by the FMP is the coastal districts of mainland Tanzania along a coastline of 1,424 km. The species concerned by the FMP include a wide range of small and medium species targeted by small-scale units (beach seines, gillnets, scoop nets) in the inshore area and by motorized canoes operating with purse seine in deeper waters, both in mainland territorial waters and in the shared internal waters with Zanzibar.

The FMP has been designed and prepared with the assistance of the Project as an integral part of the country’s participatory processes. It fits within the framework of the draft National Fisheries Sector Policy (NFSP), 2010, and has been formulated to implement the Fisheries Sector Development Strategy (FSDS) of 2010 of Tanzania mainland.

Preparation process: strengths and weaknesses

The preparation process started in 2009 with the drafting of an early Artisanal Pelagic FMP. The Project then informed the process through supporting the NTG in carrying out a Baseline, conducting ERA workshops and undertaking a Cost-Benefit Analysis study. The FMP entitled “Management Plan for the Tanzanian Artisanal Fishery for Small and Medium Pelagic Fish Species” was adopted by the Minister of Livestock and Fisheries Development of Tanzania mainland early in 2013.

The rest will have to be written on the basis of the reply from the questionnaire.

Analysis of the content of the FMP with reference to key principles of EAF

The overall structure of the FMP is in accordance with the format developed by the Project. The FMP emphasizes the need to improve access conditions to resources, including managing a registry of fishing unit and considering a rights (permits, and permit conditions) allocation strategy for the artisanal sectors, to promote co management and to introduce new technical management measures (to be identified). The FMP also stresses the need to improve basic management services such as statistics and information system and MCS. Improved safety at sea also is considered to address human well-fare.

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</thead>
<tbody>
<tr>
<td>Management unit</td>
<td>MUS</td>
<td>The small pelagics stock is a shared stock with Zanzibar and the FMP only address the share of the stock that is located in the territorial waters of Tanzania mainland. Also, most of purse seine fishes operate in the internal waters that are not concerned by the FMP. This is to say that the coherency of the management unit seems very questionable.</td>
</tr>
<tr>
<td>Objective of FMP</td>
<td>S</td>
<td>The FMP addresses the broad objectives of the Tanzanian Government, set out in the National Fisheries Policy and Strategy Statement of 1997, which are in accordance with EAF principles.</td>
</tr>
</tbody>
</table>
Resource allocation through appropriate system of rights | ML | The FMP stresses the need to examine the possibility to introduce a right based system. Reference is also made to the concept establishing Beach Management Units and Collaborative Fisheries Management Areas (CFMA’s) that would provide for community participation in fisheries management. The system still needs however to be further identified.

Resolving exclusion in an equitable manner | UL | The issue of the possible exclusion of fishers is not addressed in the FMP (no reference for instance to alternative livelihoods).

Maintaining production while reducing environmental impact | MUL | Due to the lack of coherence of the management unit with the bi-ecological dynamics of the small pelagics stocks, maintaining fish production through the implementation of an FMP that only considers the mainland territorial waters is moderately unlikely to occur. Furthermore, environmental impact seems not to be adequately addressed when considering the absence of measures aimed at regulating the beach seine fishery.

Cost-efficiency | MUL | Once again, due to the lack of coherence of the management unit, it is anticipated that management efforts in the context of the FMP implementation will produce low benefits.

(*) Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MUS); Unsatisfactory (US).
Likely (L); Moderately Likely (ML); Moderately Unlikely (MUL); Unlikely (UL)

Adoption and implementation

During the 2nd RTG meeting for the SWIOFC area (Mauritius, October 2012), representative from Tanzania said that “all regulations and management plans are endorsed at the level of the Ministry if a change in the Fisheries Act is not required”. This was the case for the adoption of the small pelagics FMP in Tanzania.

Institutional and financial arrangements to support the implementation of the FMP still have to be further examined.

Way forward in view of Phase 2 of the Project

In order to ensure better coherency and effectiveness of the FMP, it is strongly recommended to support the harmonization of the management measures on small pelagics fisheries between mainland and Zanzibar. Also, it would be advisable to promote the establishment of legal and institutional arrangements between the two entities for the joint management of small pelagics in the internal waters.

2.3.3. Bank Fisheries in Mauritius

The Bank fishery in Mauritius is a very specific fishery relying on valuable demersal resources in the shallow waters of the Saya de Malha and Nazareth Banks. Fishing area is far from port facilities (650 to 1,000 km) and the fishing industry is composed of refrigerated mother ships carrying small canoes called ‘dories’ (about 20 dories per ship) operated with hook and line.

The fishery has been closely monitored since early 90’s. Management measures include a licensing system for all fishing vessels and a system for allocation of quota as from 1994. Data for the last ten years show that the stocks have been moderately fished at about two thirds of the total MSY of both banks. However, exploitation has remained at these levels due to operational and related economic problems faced by the fishing companies. The most important rationale for the management of the fishery is that potential of the fishery in terms of social and economic returns would not be achieved.
In 2004-2005, FAO provided assistance to Mauritius to elaborate an FMP covering the banks and St Brandon fisheries through its technical cooperation programme. The over-arching goal of the FMP was to contribute to the sustainable utilization of the fishery resources for increased economic growth and improved livelihoods of fishing communities.

The initiative for elaborating an FMP consistent with EAF with the assistance of the Project emerged during the regional meetings held in Mombasa in 2009. The FMP was endorsed by the Ministry of Fisheries in December 2012 in the course of a validation workshop.

**Preparation process: strengths and weaknesses**

The FMP was prepared by the Ministry of Fisheries assisted by the NTG under the general guidance of the Project and the SWIOFP, and in collaboration with the Banks Fisheries Management Consultative Committee and other key stakeholders. It was developed on the basis of the Baseline and ERA reports.

The preparation process was considered very adequate by the NTG and no major weaknesses are to be mentioned. Note also that the NTG benefitted from the technical and financial assistance of the SWIOFP.

**Analysis of the content of the draft FMP with reference to key principles of EAF**

The structure of the FMP is in line with the format promoted by the Project. The Plan contains information on the social, economic and institutional aspects related to the Banks fishery. It outlines the broad objectives of the fishery, and the operational objectives of prioritized issues that need to be addressed.

The general objective of the FMP is to contribute to the sustainable utilization of the fishery resources on the Banks for increased economic growth and improved livelihoods of fishing communities. Note that the nature of this FMP is particular when compared to others that are promoted by the Project since it emphasizes the need to “develop” the fishery in a responsible manner through providing enabling environment based on the assumption that the fishery resources would be moderately exploited (operational objective 1 is to revitalize the fishery to increase production to the MSY). Other operational objectives of the Plan are to improve governance of the Banks fishery notably through ensuring better domestication of the fishing industry, and to ensure sustainability of the fishery through improved management measures and reduction of discards.

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Management unit</td>
<td>S</td>
<td>The Bank fishery constitutes a very coherent management unit based on ecological, economic and social considerations.</td>
</tr>
<tr>
<td>Objective of FMP</td>
<td>S</td>
<td>Both general and operational objectives are consistent with EAF.</td>
</tr>
<tr>
<td>Resource allocation through appropriate system of rights</td>
<td>L</td>
<td>The Plan proposes to strengthen the existing management system that is based on the limitation of the number of fishing vessels and the application of a TAC. This should contribute to establishing appropriate systems of rights.</td>
</tr>
<tr>
<td>Resolving exclusion in an equitable manner</td>
<td>L</td>
<td>The Plan proposes several measures aimed at giving preference to national fishers with a view to ensuring better domestication of the fishery.</td>
</tr>
</tbody>
</table>
Maintaining production while reducing environmental impact

The Plan includes measures dealing with the strengthening of MCS which should contribute to the realization of the biological objective. The Plan also gives the possibility to establish MPAs in spawning areas and to introduce measures aimed at limiting discard of non-targeted species which should contribute both to biological and ecological objectives. Note that the line fishery is a selective fishing technique with little negative impact on the environment, with exception made to the discard issue.

| Cost-efficiency | ML | Cost and benefit analysis is not addressed into-depth in the FMP, which hampers the appreciation of the cost-efficiency of the Plan particularly as regards to MCS and enforcement. It is however believed that the close participation of the industry (as it is proposed in the FMP) will contribute to voluntary compliance and hence reduction of MCS costs. |

(*) Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MUS); Unsatisfactory (US). Likely (L); Moderately Likely (ML); Moderately Unlikely (MUL); Unlikely (UL)

Adoption and implementation

The Fisheries and Marine Resources Act, 2007, does not seem to make explicit reference to the possibility of elaborating and adopting fisheries management plans. However, the Cabinet is mandated to approve regulations that could possibly include FMP. The adoption of the draft FMP that was validated in December 2013 would be imminent.

Institutional and financial arrangements to support the implementation of the FMP still need to further clarified. Government may provide some funding, and other partners including the SmartFish Programme could possibly provide additional support for the implementation.

Way forward in view of Phase 2 of the Project

Major expectations from Mauritius as regards to the second phase of the Project would be that the Project assists the research institute (Albion) in improving stock assessment and the NTG through technical backstopping in various aspects relating to fisheries planning and management in the context of EAF.

2.4. North West Africa Cluster (CECAF North)

Small pelagics in the CECAF North area are very important and strategic fishery resources for the concerned countries (Mauritania, Morocco, Senegal and The Gambia). The transboundary nature of the species (certain stocks are shared stocks between one or several countries) implies that a sound management of the fisheries inclusive of EAF principles requires the promotion of concerted fisheries management regimes between countries.

Based on the above, a demonstration project (demo) was identified in close collaboration with the four concerned countries during the design of the GEF funded FAO/UNEP CCLME project in 2005-2006. The objective of the demo is to prepare a management plan for the small pelagic species in accordance with an ecosystem approach. Expected outputs include the formulation and agreements on regional policies and the elaboration of at least one FMP on a given shared stock. The demo involves partnership with the Sub-Regional Fisheries Commission (SRFC) and is based on cofounding mechanisms with other donors supporting the work of the SRFC.

The CCLME project started in mid-2010. But some activities planned in the demo were initiated before by the SRFC with the assistance of donors including bilateral cooperation (Holland, France) and the EU through the ACP Fish 2 programme.

The first Regional steering committee for the CECAF North area was held in November 2010. In order to ensure cooperation and avoid duplication between the EAF-Nansen and CCLME
projects, it was proposed to develop a strategic partnership between the two projects for the implementation of the demo on small pelagics.

An MoU was signed in early 2012 between the SRFC and FAO with the aim of strengthening cooperation between the two projects and the SRFC.

In the context of the demo, the Project has contributed to two major activities:

- Development of a sub-regional policy for the small pelagic fisheries in North West Africa taking into account the EAF principles (lead SRFC)
- Elaboration of a regional management plan for the small pelagic species using EAF (lead CCLME/EAF Nansen)

2.4.1. Small Pelagics in Senegal in the context of the Management of Transboundary Fishery Resources in the CECAF North (CCLME) Region

Development of a sub-regional policy for the small pelagic fisheries in North West Africa

A first draft policy document entitled ‘Strategic orientation to support a sustainable exploitation and concerted management of the small pelagics in North West Africa’ was prepared by SFRC in 2012. The draft policy document was reviewed in the context of a regional meeting held in Nouakchott in February 2013, and that was jointly organized by the SRFC and the EAF-Nansen and CCLME projects. Morocco could however not attend the meeting. The revised draft policy document was examined in March 2013 by the Coordination committee of the SRFC which recommended its technical validation at the regional level.

A second regional meeting was held in Casablanca in May 2013 which would have enabled significant progresses on the technical validation of the draft policy document. Note that the report of the meeting is still under preparation. Based on discussions held by the mission, it seems that Morocco would be reluctant with the idea of an institutional anchoring of the policy document at the SRFC level since Morocco is not member.

Elaboration of a regional management plan for the small pelagic species using EAF

A regional baseline was prepared by an international consultant with the support of the CCLME project, in close collaboration with the SRFC. Note however that some information from Morocco (not member of SRFC) were lacking. The baseline was examined during a first ERA workshop that was held in Dakar in October 2012. A second ERA workshop was organized in Casablanca in May 2013. Based on the findings from the two ERA workshops, an international consultant is expected to prepare soon the first draft of a regional FMP for the small pelagics using EAF.

The general approach of the Project for addressing fisheries management of the transboundary small pelagics was specified during the second meeting of the Regional steering committee of the Project for the CECAF-North area, held in Tenerife in November 2012. The approach would be that an overall regional FMP with clear goals and objectives be first developed, and then that the four countries develop national implementation/operational plans to achieve those goals and objectives.

Furthermore, the SRFC is supporting a process for the preparation of harmonized FMP on small pelagics in Mauritania, Senegal and the Gambia, based on a slightly different approach. The first step was to set up National technical commission on small pelagics. Countries were then assisted in the preparation of draft FMP on selected small pelagic species. Senegal started with the sardinella with a little financial support from AFD. Sardinella species are mostly caught by artisanal purse seiners. Activities have included so far value chain analysis.
and analysis of local management measures in close collaboration with producers’ organization. Note that it is to deplore that the NTG of the Project is not participating to any of the activities of the national technical commission.

In the meantime, SRFC is intended to establish a regional consultative commission on small pelagics bringing representatives from administration, research and produces and making the link with the national technical commissions. The last step would be to assist the concerned countries to ensure that FMP in preparation are in line with the strategic orientations agreed upon at sub-regional level (policy document).

Other elements of relevance as regards to the elaboration of a regional FMP for the small pelagics include the following:

- During the second ERA workshop held in Casablanca, Morocco would have expressed its preference for an institutional anchoring of the regional FMP in the framework of CECAF. It should also be noted that Morocco has already an FMP.
- The NTG of the Project have not been very much involved in the process until now. For instance, the focal point of the Project in Senegal was not invited to the first ERA workshop held in Dakar.

**Way forward in view of Phase 2 of the Project**

The Project is expected to continue supporting the technical and political validation of the regional policy document (strategic orientation) for the management of small pelagics, in close collaboration with the SRFC and the CCLME project. The Project is also expected to continue supporting the preparation of a regional management plan for the small pelagic species that is consistent with EAF.

Considering institutional dynamics in the sub-region, and in order to ensure a better effectiveness and coherency of these initiatives, it would be advisable to the following aspects be considered in the transition as well as in the second phase of the Project, considering that some actions would have to be planned on a longer term:

- Request the NTG in the four countries as well as the national technical commissions on small pelagics (for SRFC member countries) to become more involved in the process for the elaboration of the regional management plan
- Considering that the adoption of a policy document may pose some problems for Morocco, examine the possibilities to, first, develop a Convention on minimal conditions for access to small pelagic resources in the CCLME, in line with the recently adopted SRFC Convention on minimal conditions for access to fishery resources in general, and, second, to assist the four countries in internalizing related provisions in their national fisheries legislation
- Support the countries in the elaboration of specific action plans aimed at ensuring that FMP in preparation or on-going are consistent with both the regional management plan for the small pelagic species and the regional policy document
- Support the countries in the adoption of the draft FMP through communication and lobbying based notably on elements from bio-economic modeling
- Support the countries in the implementation of the harmonized FMP while ensuring that each country establishes partnership between the Project and donors when existed (e.g. for Senegal: WARFP, COMFISH, WAMPO)
- Improve the contribution of the Project activities on research in decision-making for the management of small pelagics through improved communication on scientific findings and advice to the attention of the fisheries administrations.
Annex 9. Number of project persons trained on R/V Dr Fridtjof Nansen surveys

<table>
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<tr>
<th>LME Region</th>
<th>Country</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>No of Persons</th>
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<tr>
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ANNEX 10. Data Management Agreement for the FAO/ASCLME Cruises


The intention of this Data Management Agreement is to clarify and protect the interests of all scientists and countries. This Agreement is appended to the ToRs for all scientists that are working on the Nansen as part of the 2008 ASCLME Cruise Schedule.

Introduction

Participating countries in the ASCLME Project, and their designated representatives, have the mandate to develop a comprehensive document on principles and guidelines for ASCLME data and information management so that it facilitates the effective collection, use and dissemination of information in support of TDA/SAP development in the short term and the ecosystem approach in the long term. National Data and Information coordinators in particular, have a responsibility for developing mechanisms for reliable long-term storage and use of information collected under the ASCLME Project.

This Agreement is intended to govern the collection, storage and access to data on the ASCLME 2008 Cruises as an interim measure prior to agreement of a more detailed MoU on data access and management which is currently under development as part of the overall ASCLME Programme (particularly as a joint MoU between the ASCLME and SWIOFP projects and their respective countries). In this context, data collected will be shared freely between the ASCLME and the SWIOFP Project with due note being taken of SWIOFP’s own MoU with each of its countries regarding Transboundary Marine Scientific Research in Support of the South West Indian Ocean Fisheries Project (SWIOFP). Nothing in this current agreement should jeopardise the ability of SWIOFP scientists on joint research cruises from abiding by their terms of agreement as specified in this SWIOFP MoU.

Bearing in mind that access to new data, associated metadata, information collection activities and resulting products funded by the FAO/ASCLME Project shall be free and unrestricted;

The primary owner of data sets shall be the UNDP GEF ASCLME Project, the FAO and the member-countries of the ASCLME Project, and the primary contact points and archive locations for ASCLME-generated data shall be at nationally appointed data centres as well as through the ASCLME Project Coordination Unit and the FAO.

The first right to publish findings from new data, associated metadata, information collection activities and resulting products funded by the ASCLME Project resides with the principal investigator and her/his associated team (in the case of a scientific investigation), the participating country and the ASCLME Project and FAO.

These guidelines for intellectual property assume that adequate opportunity has been given to regional scientists to collaborate on research projects (data collection, processing and paper-writing), particularly from countries in whose territorial waters the research cruises have taken place.

Interim data management guidelines with specific reference to 2008 ASCLME/EAF-Nansen cruises

Detailed documentation will be made of all measurements and samples collected during each cruise. Documentation will include the cruise track, timing, geo-referenced and time-referenced records of every sampling site and station. All specimens and samples collected will be described and documented electronically during each cruise.
Wherever possible, duplicate or triplicate voucher specimens of macrofauna will be preserved. The IMR Cruise Leader and the ASCLME Chief Scientist will be jointly responsible for ensuring the accurate documentation of activities, preservation of samples and backup of electronic data.

The primary custodians of data sets shall be the Institute of Marine Research, Bergen (on behalf of the FAO EAF-Nansen project,) the UNDP/GEF ASCLME Project and the member-countries of the ASCLME Project. The primary contact points and archive locations for the survey data shall be at nationally appointed data centres as well as through the ASCLME Project Coordination Unit. The intellectual property of new data, associated metadata, information collection activities and resulting products resides with the principal investigator (in the case of a scientific investigation), the Institution to which the scientist belongs, the participating countries, the ASCLME Project and FAO.

**Timing of cruise data reports and products**

**Specimens**
Morphological specimens which are preserved as voucher specimens will be fixed in formalin during the cruises. These will be transferred to ethanol after fixing, also during the cruises. At least one voucher will be lodged at each of:

1) The South African Institute of Aquatic Biodiversity in South Africa (SAIAB). This is an African collection where specimens will be preserved for the use and study by scientists throughout the region.
2) The National collection or National focal point institution for the ASCLME Project of the country from which the collection was made. This will ensure that countries also keep voucher collections. Where feasible, appropriate support will be provided by the ASCLME Project to the countries that do not currently have good capacity for specimen curation.

Specimens will be lodged at institutions **within three months of the conclusion of the 2008 cruises (18 March 2009)**

**Electronic data from the cruises**
A provisional cruise report and completed data report (containing documentation of all measurements and samples collected during each cruise, include the cruise track, timing, geo-referenced and time-referenced records of every sampling site and station) will be provided to the ASCLME PCU **within 21 days of end of that particular cruise**. It is accepted that biological samples may not be identified and sorted before the end of the cruises, but those data that are captured must be included in the report.

Together with this, an electronic version (in Excel) of all activity/site/station records, and video & photographic inventories will be given to the PCU.

The provisional cruise reports and completed data reports will be made available to the ASCLME participating countries **within six weeks of the conclusion of the 2008 cruise schedule (21st February 2009)**.

A final draft cruise report will be made within three months of the completion of the survey. The Cruise Leader and the Chief Scientist are responsible for finalising the report, which will be distributed to ASCLME and FAO for final editing and approval. After approval this will be named the Final Cruise Report and will be printed and be available in electronic copies in pdf format.

**Processed data from the cruises**
A complete set of all processed data collected on the 2008 ASCLME cruises will be made available to the PCU **within three months of the conclusion of the cruise (18 March 2009)**. Examples of these data will include CTD, ADCP, multibeam data sets, as well as inventories of identified specimens. It is recognized that some data sets may not be processed by this time. In that case, any raw electronic data must be provided to the PCU together with a report on the steps (and timing) that will be taken to process the data.
The provision of flagged (data to be published) data sets to the PCU will be safely retained offline until either
\(a\) Chief scientists agree to the dissemination of data sets OR
\(b\) Publications are submitted OR
\(c\) Eighteen months has passed since the conclusion of the cruise, whichever is the soonest.

As soon as processed data sets are distributable, they will be lodged at nationally appointed data centres for the
ASCLME.

Raw OR processed data collected by scientists under the ASCLME Project shall be immediately available to the
Regional Information Working Group (made up of national D&I Coordinators) for the sole purpose of *(internally, not
for distribution)* informing the TDA/SAP, should it be necessary.

**Proposed time line for delivery of data products**

<table>
<thead>
<tr>
<th>Proposed Time Line</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>During each cruise</td>
<td>All sampling activities are carefully documented, geo-and time-referenced.</td>
</tr>
<tr>
<td></td>
<td>Voucher specimens are fixed.</td>
</tr>
<tr>
<td>Final day of the 2008 cruise schedule. 18 December</td>
<td>Provisional cruise reports, and final data report (containing a record of sampling activities) is delivered to the PCU. Electronic inventories are provided to the PCU.</td>
</tr>
<tr>
<td>After completion of the 2008 cruise schedule (ongoing)</td>
<td>Public domain data sets are reviewed, checked and made available to the PCU and National data centres.</td>
</tr>
<tr>
<td>Six weeks after that: 21 February</td>
<td>Provisional reports, and the final data reports are sent to ASCLME countries.</td>
</tr>
<tr>
<td>Three months from the conclusion of the 2008 cruise schedule. 18 March 2009</td>
<td>Voucher specimens are lodged at National Collections.</td>
</tr>
<tr>
<td></td>
<td>All processed data (or raw data sets + report if not yet processed) provided to the PCU.</td>
</tr>
<tr>
<td></td>
<td>Draft Final Cruise Report submitted to FAO and ASCLME</td>
</tr>
<tr>
<td>Eighteen months from the conclusion of the 2008 cruise schedule. 11(^{th}) June 2010.</td>
<td>The last of the processed data sets are made available to National data centres.</td>
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</table>