Final Evaluation of the EAF-Nansenproject (PhaseI): Strengthening the Knowledge Base for and Implementingan Ecosystem Approach to Marine Fisheries in Developing Countries, (GCP/INT/003/NOR)

Final Evaluation Report

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Final Evaluation Report

Food and Agriculture Organization of the United Nations

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Composition of the Evaluation Team

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Acronyms

AfDB	African Development Bank
AMCEN	African Ministerial Conference of Environment (AU, hosted by UNEP/ROA)
ATLAFCO	Ministerial Conference on Fisheries Cooperation among African States Bordering the Atlantic Ocean (also COMHAFAT)
AU	African Union
AU-IBAR	African Union Inter-African Bureau for Animal Resources
BH	Budget Holder
CAADP	Comprehensive Africa Agriculture Development Program (NEPAD)
CAFRS	Comprehensive African Fisheries Reform Strategy
CAMFA	Conference of African Ministers of Fisheries and Aquaculture (NEPAD)
CCA	Climate Change Adaptation
CCLME	Canary Current Large Marine Ecosystem
CCRF	Code of Conduct for Responsible Fisheries (FAO)
CDCF	Center for Development Cooperation in Fisheries at IMR
CECAF	Fishery Committee for the Eastern Central Atlantic
COFI	Committee on Fisheries, FAO
COMHAFAT	Conférence Ministérielle sur la Coopération Halieutique des Etats riverains de l'Atlantique (also ATLAFCO)
COREP	Commission Régionale des Pêches du Golfe de Guinée
CSO	Civil Society Organizations
CSRP	Commission sous-régionale des pêches (Northwest Africa)
DAC	OECD's Development Assistance Committee
DDF	Data Deficient Fisheries (UK)
DRM	Disaster Risk Management
EA-FMP	Ecosystem Approach Fisheries Management Plan
EAF	Ecosystem Approach to Fisheries
EAF-AG	Ecosystem Approach to Fisheries - Advisory Group to PCU
FAO	Food and Agriculture Organization of the United Nations
FCWC	Fishery Committee for the West Central Gulf of Guinea
FI	FAO Fisheries and Aquaculture Department
FID	FAO Office of the Fisheries Assistant Director General
FIR	FAO Resource Use and Conservation Division
FIRF	FAO Marine and Inland Fisheries Branch
FPMIS	Field Program Management Information System
FRDC	Fisheries Research and Development Corporation (Australia)
GEF	Global Environment Facility
IMR	Institute of Marine Research, Norway
IOTC	Indian Ocean Tuna Commission
IUCN	International Union for Conservation of Nature
JDZ	Sao Tomé – Nigeria Joint Development Zone
LEGN	FAO Development Law Service
LME	Large Marine Ecosystem
LoA	Letter of Agreement
LTO	Lead Technical Officer
MCs	Member country/ies (of the FAO)

MFA	Ministry of Foreign Affairs, Norway
MoU	Memorandum of Understanding
MTR	Mid-Term Review
NEPAD	New Partnership for Africa's Development
NFFP	NEPAD-FAO Fish Program
NGO	Non-Governmental Organization
NOK	Norwegian Kroner
Norad	Norwegian Agency for Development Cooperation
NP	Nansen Program (pre-2007)
NPCA	NEPAD Planning and Coordinating Agency
NTG	National Task Group (EAF-Nansen)
OECD	Organization for Economic Co-operation and Development
OED	FAO Office of Evaluation
PAF	Partnership for African Fisheries, NEPAD flagship program
PC	FAO Program Committee
RFB	Regional Fisheries Bodies
RFMO	Regional Fisheries Management Organization
RSC	Regional Steering Committee
RTG	Regional Task Group (EAF-Nansen)
R/V	Research Vessel
SO	Strategic Objective
SRFC	Sub-regional Fisheries Commission (CSRP - CECAF North)
SSF	Small-scale fisheries
SWIOFC	South West Indian Ocean Fisheries Commission
TPA	Tripartite Agreement between Norad, IMR and FAO for the EAF-Nansen Project
ToR	Terms of Reference
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
US$	US Dollar
WIOMSA	Western Indian Ocean Marine Science Association
VOC	Vessel Operating Costs
WECAFC	Western Central Atlantic Fishery Commission
WWF	World Wide Fund for nature (or World Wildlife Fund)

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-EAF 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

1. 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

2. 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[1]. 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[1]. 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.

3. 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[2].

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".[3] 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:

[1] Approximately 26, 11 and 48 million USD respectively, using an average conversion rate of 5.75 NOK/USD for the 5 years.
[2] See http://www.regjeringen.no/en/dep/ud/press/news/2012/vessel_africa.html?id=704093
[3] See Project Document FAO (2006): 21.

- 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;
- Past FAO evaluation reports, namely the Evaluation of FAO's support to the implementation of the Code of Conduct for Responsible Fisheries (2012) and the mid-term evaluation of the CCLME GEF-funded FAO-executed program available in July 2013; and past Norad evaluation reports, notably previous evaluations of the Nansen program (1983, 1989, 1995, 2002 and 2009) and the 2008 Evaluation of Norwegian Development Co-operation in the Fisheries Sector.

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[5].

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).

[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 Food[6], to Decent Work[7] and five programming principles - human rights-based approach, Gender equality[8], environmental

[6] See http://www.fao.org/righttofood/
[7] See http://www.fao-ilo.org/
[8] See http://typo3.fao.org/fileadmin/templates/gender/docs/FAO_FinalGender_Policy_2012.pdf

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

Component 1: EAF Policy & FMPs	Output 1: Policies formulated consistent with EAF principles at national and regional levels
	Output 2: Revised Fisheries Management Plans (FMP) that include EAF considerations developed
Component 2: Surveys - Ecosystem Assessment & Monitoring	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
Component 3: Capacity Building	Output 4: Increased capacity at scientific and management level in partner countries on EAF approaches
Component 4: Support to Regional Research Vessels	Output 5: Advice on use of national or regional vessels for EAF related research including coordinated regional coverage by local or other vessels
Component 5: Planning & Dissemination	Output 6: Project planning and dissemination of information

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.

[9] See http://www.fao.org/fileadmin/user_upload/capacity_building/Summary_Strategy_PR_E_01.doc
[10] http://www.seachangecop.org/sites/default/files/documents/2001 06FAO Engendered Logframe Approach.pdf

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).

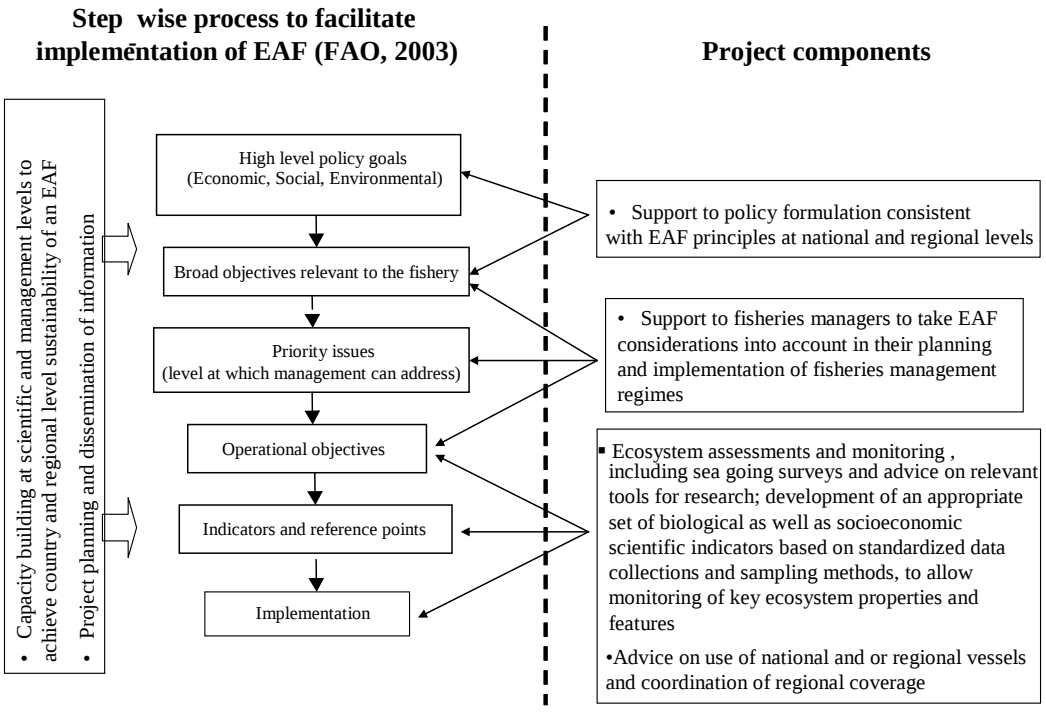

Figure 1. Phase I components to operationalise the EAF (FAO 2006 Project document)

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[1]) over the five years through the Tripartite Agreement with FAO and IMR. A share of NOK75 million (approx. US$13 million[1]) 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[11] 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[12] 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.

[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

Potential donors	US$ (million)	end 2011*
1. The Government of Norway through FAO (towards Pillar 1, 2 and 3)	11	12.29
. The Government of Norway through IMR (towards Pillar 2)	11	20.55
. The Government of Norway through MCs (Pillars 2 and 3)	-	7.24
2. UNDP/FAO GEF Proposal (Pillars 1 and 3)	6	-
3. Partners (BENEFIT and LME's - Pillars 2 and 3)	17	7.66
4. FAO (in kind)	1	>1
Total	**46**	**>49.3**

* 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[13]. 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[14]. 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

[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$26million). By December 2011 (FAO EAF-Nansen PCU, 2013) the final expenditures were NOK 283,476,529[15] (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).

[15] Including partners part of the VOC

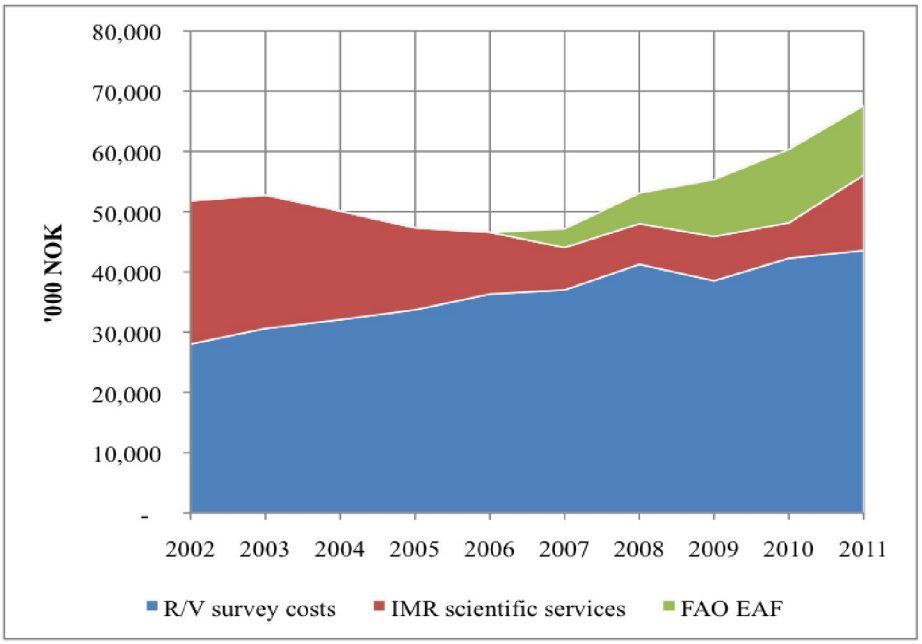

Figure 2. Nansen Program and EAF-Nansen Project annual costs ('000 NOK)

61. 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 (NOK4million) to enable IMR to purchase a multi-frequency echo sounder, VOC in 2010 (NOK7.34 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 1)

62. 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.

63. 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[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[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.

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.

[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 (**Error! Reference source not found.**). 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 difficultly 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 3. Development status for the EA – FMPs (July 2013)

Country	Fishery management unit	FMP Drafted	FMP tech. validated	FMP adopted
Canary Current LME (CECAF North)				
Morocco, Mauritania, Senegal, The Gambia	Small pelagics fishery	in progress		
Gulf of Guinea and Central Africa (CECAF South)				
Sierra Leone	Small-scale fisheries	X	X	-
Liberia	Small-scale fisheries	X	X	-
Cote d'Ivoire	Beach seine fishery	X	X	-
Ghana	Beach seine fishery	X	-	-
Togo	Beach seine fishery	X	X	-
Benin	Beach seine fishery	X	X	-
Nigeria	Industrial shrimp fishery	X	X	-

[18] http://www.fao.org/fishery/eaf-net

Cameroon	Industrial shrimp fishery	X	X	-
Gabon	Industrial shrimp fishery	X	X	-
Western Indian Ocean (SWIOFC)				
Mozambique	Sofala Bank industrial shrimp fishery	-	-	-
''	Line fishery	X	X	-
Madagascar	Demersal fishery	X	X	X
Comoros	Demersal fishery	X	X	X
Mauritius	Bank fisheries	X	X	-
Tanzania mainland	Small pelagics fishery	X	X	X
Kenya	Small pelagics fishery	X	X	-

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[19], 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[20]. 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.

[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)

LME	Nb. R/V Dr. Fridtjof Nansen Cruises	Nb. persons trained on board R/V
CCLME	6	45
GCLME	14	92
BCLME	27	326
ASCLME	9	126
Total	**56**	**589**

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

Year	Survey days	Partners*
2007	289	GCLME, BENEFIT, Mozambique
2008	266	BCC, Angola, ASCLME,
2009	294	BCC, Angola, ASCLME, SWIOFP, IUCN + ZSL
2010	244	GCLME, BCC, Angola, SWIOFP, Mauritius (Pakistan)
2011	268	CCLME, JDZ, BCC, Angola

** 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 Adbdallah, 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[22]) 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[23].

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,

[22] See http://www.eaf-nansen.org/nansen/topic/18010/en

[23] See ftp://ftp.fao.org/FI/DOCUMENT/eaf_nansen/COMMUNICATION_MATERIAL/EAF-NANSEN_brochure_ENGLISH.pdf

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 documents[24] (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 website[25] 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.

[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 (see[26]). 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

[26] See http://www.fao.org/docrep/016/i2802e/i2802e.pdf FAO (2012) Environmental Impact Assessment Guidelines

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.

Box 2. Likely environmental impact of EA-FMP in case study fisheries
Likely (L); Moderately Likely (ML); Moderately Unlikely (MUL); Unlikely (UL)
Beach Seine (BS) Fishery in Ghana - MUL
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.
Industrial Shrimp Fishery in Gabon - ML
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.
Sofala Bank Industrial Shrimp Fishery and Line Fishery in Mozambique - ML
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.
Small Pelagics Fishery in Tanzania - MUL
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.
Bank Fisheries in Mauritius - L
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.

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[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

[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[28];
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-

[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.

6 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[29]. 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."[30]

142. Norway aims to dedicate 1 % of the estimated gross national income to its aid budget[31]. 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[32]. 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[5]

Breath: 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.

Length: 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.

Practice: Theory must always be the foundation, but all experience shows that combining theory with practical design allows faster and more lasting results.

Recipient Ownership: Development projects can only succeed as long as they comply with the partner country's own plans and priorities.

[29] Translated from Meld. St. 22 (2012–2013) Melding til Stortinget Verdens fremste sjømatnasjon, pgg. 134-135.

[30] MFA 1989: Evaluation of the Dr FN R/V programme.

[31] http://www.regjeringen.no/en/dep/ud/selected-topics/development_cooperation/area_03.html?id=714710 NOK 30 208.2 million in 2013 or USD 5.208 billion

[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 1 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[33] 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 result-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)

Score*	HU 1	U 2	MU 3	MS 4	S 5	HS 6	N/A
Project design and concept							
Project relevance						X	
Programming and Theory of change				X			
Project Design			X				
Budget management					X		
Financial planning		X					
Project Implementation							
Project management (Norad/FAO/IMR)						X	
Budget and staffing				X			
Financial resource management						X	
Institutional arrangements					X		
Results and contribution to objectives							
<u>Outputs and outcomes</u> FAO-EAF FMPs IMR Surveys and Scientific services			 (x) (x)	 X X	 X	 (x) (x)	
<u>Cross-cutting aspects</u> Capacity development Communication Contribution to FAO Normative products Gender dimension		 X	 X		 X X	 X X	
Environmental impact					X		
Sustainability of Partnerships and alliances	(x)	(x)			X	X	

* 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.