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**Terminal Evaluation**

**Republic of the Sudan**

**Recovery of Coastal Livelihoods in the  
Red Sea State of Sudan: The Modernisation of  
Artisanal Fisheries and Creation of New Market  
Opportunities**



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION



**UNIDO EVALUATION GROUP**

**Independent Project Evaluation**

**Republic of the Sudan**

**Recovery of Coastal Livelihoods in the  
Red Sea State of Sudan:  
The Modernisation of Artisanal Fisheries and Creation  
of New Market Opportunities**

(UNIDO Project Number: TF/SUD/09/002)



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

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## Abbreviations and acronyms

ACORD	Agency for Cooperation and Research in Development
AMC	Approval and Monitoring Committee
BoQ	Bills of Quantities
CIDA	Canadian International Development Agency
CLARIS	Community Livelihood and Rural Industry Support
CPA	Comprehensive Peace Agreement
CTA	Chief Technical Advisor
DAC	Development Assistance Committee
EIA	Environmental Impact Assessment
ERDP	Eastern Recovery Development Programme
FAO	Food and Agriculture Organisation
FGDs	Focus group discussions
FHH	Female Headed Household
GHP	Good Hygiene Practice
HACCP	Hazard Analysis Critical Control Point
IP	Integrated Programme
LAI	<i>Leginet al Ishraf</i> (Oversight Committee of the Landing Site)
LED	Local Economic Development
LER	Local Economic Recovery
LS	Landing Site
LSM	Landing Site Manager
MDGs	Millennium Development Goals
MDTF	Multi-Donor Trust Fund
M&E	Monitoring and Evaluation
MFI	Micro Finance Institution
MFA	Marine Fisheries Administration
MSME	Micro Small and Medium Enterprises
MTR	Mid Term Review
NGO	Non-Governmental Organisation
NPC	National Project Coordinator
PASED	Port Sudan Association for Small Enterprise Development
PCA	Peace and Conflict Assessment



PCU	Project Coordination Unit
PM	Project Manager
PMF	Performance Management Framework
POPs	Persistent Organic Pollutants
PSC	Project Steering Committee
RoS	Republic of Sudan
RRP	Recovery and Rehabilitation Programme
RSS	Red Sea State
SAP	Systems Applications Products
SDG	Sudanese “pound” (currency)
SECS	Sudanese Environmental Conservation Society
SMART	Specific, Measureable, Achievable, Relevant, Time-bound (indicators)
SME	Small and Medium Enterprise
SPLA	Sudan People's Liberation Army
SPLM	Sudan People's Liberation Movement
SSMO	Sudanese Standards and Metrology Organisation
ToR	Terms of Reference
ToT	Training of Trainers
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization
UR	UNIDO Representative
USD	United States Dollars
VCD	Value Chain Development
VTC	Vocational Training Centre
WFP	World Food Programme
YED	Youth Entrepreneurship Development

# Glossary of evaluation related terms<sup>1</sup>

Term	Definition
Baseline	The situation, prior to an intervention, against which progress can be measured.
Conclusions	Conclusions point out the factors of success and failure of the evaluated intervention, with special attention paid to the intended and unintended results and impacts, and more generally to any other strength or weakness. A conclusion draws on data collection and analyses undertaken, through a transparent chain of arguments.
Effect	Intended or unintended change due directly to an intervention.
Effectiveness	The extent to which the development intervention's objectives were achieved, or are expected to be achieved, taking into account their relative importance.
Efficiency	A measure of how economically inputs (through activities) are converted into outputs.
Impact	Positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended.
Indicator	Quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a development actor.
Lessons learned	Generalisations based on evaluation experiences with projects, programmes, or policies that abstract from the specific circumstances to broader situations. Frequently, lessons highlight strengths or weaknesses in preparation, design, and implementation that affect performance, outcome, and impact.
Outcomes	The likely or achieved short-term and medium-term effects of an intervention's outputs. Related terms: result, outputs, impacts, effect.
Outputs	The products, capital goods and services that result from a development intervention; may also include changes resulting from the intervention that is relevant to the achievement of outcomes.
Recommendations	Proposals aimed at enhancing the effectiveness, quality, or efficiency of a development intervention; at redesigning the objectives; and/or at the reallocation of resources. Recommendations are linked to conclusions.
Relevance	The extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs, global priorities and partner and donors' policies. Note: Retrospectively, the question of relevance often becomes a question as to whether the objectives of an intervention or its design are still appropriate given changed circumstances.
Results	The output, outcome or impact) of a development intervention. Related terms: outcome, effect, impacts.
Sustainability	The continuation of benefits from a development intervention after major development assistance has been completed. The probability of continued long-term benefits. The resilience to risk of the net benefit flows over time.

<sup>1</sup> Based on a glossary prepared by OECD's DAC working party aid evaluation, May 2002

**Map 1: Map of Central and Eastern Sudan**



# Executive summary

## Background

This report outlines the results of an independent final evaluation conducted on the United Nations Industrial Development Organisation (UNIDO) Project, *“Recovery of Coastal Livelihoods in the Red Sea State of Sudan: the Modernisation of Artisanal Fisheries and Creation of New Market Opportunities”*.

The project was funded by Canada (USD 4.7 million) with in kind contributions by the Republic of Sudan (RoS), and focussed on the role of fisheries in the Red Sea State (RSS) for the recovery of livelihoods following the Sudanese conflict. Its overall goal was to improve community based recovery programmes and local development capacities of coastal people in the RSS.

To improve the entire value chain from the inputs required for fishing to the sale of fish products to the customer, the project built three modern landing sites (LS) for fish sorting, processing and storage; developed male and female cooperatives/business associations; built the capacity of government fisheries support organisations; and developed market infrastructure. The project benefitted from an expert’s inception mission early in the project and the findings and recommendations of an independent Mid Term Review (MTR).

This independent final evaluation spans the life of the project from its commencement in 2009 to the end of the project, which included the twenty four-month period of no-cost extensions until December 2013.

The evaluation determined as systematically and objectively as possible the relevance, efficiency, effectiveness (outputs, prospects for achieving expected outcomes and impact) and sustainability of the project. Stakeholders were consulted in Vienna, Khartoum and Port Sudan as part of the evaluation exercise, and their comments and feedback were sought as part of the report finalisation process.

The evaluation was undertaken by an independent evaluation team consisting of a national consultant, Ms. Zainab Mohamed Osman and an international consultant, Mr. Andrew Young. The evaluation field mission took place over 17 November — 2 December 2013.

## Main Findings

Concerning **project design and implementation**, the project focussed on modernising an emerging industry while generating improved and new livelihood opportunities and incomes for vulnerable populations. The project built on the experience of UNIDO’s Integrated programme (IP) in Sudan, particularly the development of Micro Small and Medium Enterprises (MSMES) and institutional capacity building.

The original Logical Framework (LF) was relatively well designed with performance measurements that were to some extent SMART<sup>2</sup>. Performance indicators were later updated collaboratively through the Project Steering Committee (PSC). Although targets provided by the Canadian International Development Agency (CIDA) in their Performance Management Framework (PMF) and deliverables outlined by the LF were partially harmonised, the two frameworks remained largely independent and the PMF was never fully incorporated into project management reporting.

The project document made no specific mention of conflict sensitivity analysis or 'do no harm' principles. However risks and mitigation measures were considered and the project was established in a conflict sensitive manner through extensive and participatory consultations with local government institutions and national organisations and individuals.

With respect to value chain development, the evaluation found that traders did not become proactively involved in the project until the latter stages of implementation. While involvement of women directly in the fishery sector value chain was also limited due to cultural constraints, the impact of increased awareness of health, education and new household income was reported to have effected a positive and empowering behaviour change for women.

The project was implemented over a longer period than planned and the need for twenty four months of no cost extensions reflected not only an unrealistic timeframe established in the project design stage, but the difficulties of implementation in Sudan. There were also some necessary adjustments to the focus of the project as a result of unforeseen constraints.

Although **Project management** arrangements were clearly articulated in the project document, the project faced a high turnover in key management staff during implementation. The project had an inception team leader, three successive Chief Technical Advisors (CTAs) and two National Project Coordinators (NPCs). CTAs had reportedly found it difficult to perform well considering local cultural constraints and the project was not efficiently implemented until the employment of the last CTA. Inefficient local management of fishers' cooperatives was also a key challenge. These factors were assessed by the evaluation as the main reasons for multiple project extensions.

The allocation of a full time consultant who operated from Vienna but spent extensive time in the RSS, the active involvement of a PSC, and the employment of Landing Site Managers (LSM) were practical solutions by UNIDO to overcome these difficulties.

The project was actively managed by government counterparts through a PSC which included not only government counterparts but also representatives of direct beneficiaries. As well as providing logistical and administrative support, proactive technical oversight from the Programme Manager (PM) in Vienna and the UNIDO Representative (UR) Office in Khartoum was also evident, particularly

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<sup>2</sup> Where key performance indicators used to evaluate a project, its objectives and activities are generally referred to as Specific, Measurable, Achievable, Relevant and Time-bound

in regard to placing the project firmly within national government priorities and UN frameworks. The management arrangements for the project were therefore assessed as efficient

The **relevance** of the project was high, particularly with regard to the identified income needs of the beneficiaries, the potential for development and modernisation of a fledgling fisheries sector, and the priorities of the RoS and UN frameworks. The project was highly relevant to UNIDO's focus on private sector and community entrepreneurship development. Finally, the project was also relevant to the donor as activities were implemented in line with their criteria specified for poverty reduction, private sector development and gender equality.

**Ownership** of the project was enhanced by a PSC, and the involvement of local community leaders in the *Leginet al Ishraf* (LAI) which operated as Landing Site (LS) oversight committees and the state government's financial contributions to associated project infrastructure. With respect to the male fishers, ownership was less evident and their traditional relationship with traders remained more developed than that with their associations/cooperatives. Women exhibited a strong sense of ownership. They were proactive in their associations and highly vocal in the support of their leaders and all project results.

There were constraints regarding procurement of services for construction and these delayed the completion of the LS. Despite clear signs of progress, additional support may still be required in management of the fishing cooperatives. Given the original timeframe of the planned intervention, the project's overall **efficiency** can only be assessed as medium, hampered in part also by the fact that this was the first project of its kind in the RoS.

Despite issues related to efficiency and staff turnover, the **effectiveness** of the project interventions are assessed as high. Effectiveness was enhanced by the project working within cultural norms, especially for women, and overcoming the risk of underutilised LS by enhancing the involvement of traders. Fisheries have been improved with regards to marketing, and the fisheries infrastructure in the RSS has been upgraded and traded fish quality has improved. Post-harvest losses have also decreased. MSMEs have been developed, Cooperative management has been improved, and the economic role of women in the local community has been enhanced. At the time of the final evaluation, further infrastructure for each LS such as cold storage for fish was being developed.

The RSS project has had a significant and positive short term overall **impact** and longer term impact is likely. Impact was enhanced through a holistic emphasis not just on the material infrastructure required for economic recovery but in the development of business oriented service provision and local government-institutional support. Women particularly were reporting higher levels of economic independence both within their household and in the wider community and exhibiting a greater sense of empowerment.

Evaluation findings on social impact were mixed. While the project has had a very positive impact for women, the traditional reliance by male fishers on traders largely remains intact. The project gained a better understanding of the traditional

trading relationships during implementation and adjusted accordingly to appreciate the essential role of traders to the success of the project.

Environmental Impact Assessments (EIAs) concluded that the majority of the project activities would have no significant detrimental impact on the physical environment by applying proper environmental operational standards.

**Sustainability** is reported as likely from the state government's perspective. However some concern remains regarding maintenance costs for the LS and the lack of involvement of private sector organisations that could assist to cover such costs. The project has created the likelihood for a sustained role for the Marine Fisheries Administration (MFA) in LS management and cooperative/association support. Management of the MFA expressed no doubt about future commitments of their organisation.

Regarding the cooperatives in their present form, sustainability appears more likely to be guaranteed for the women than the men, as efforts to business-orient the male fishers' associations in an inclusive manner appears incomplete. Environmental sustainability is more difficult to evaluate, principally due to the lack of data on existing fish resources and the increased fish caught as a result of the LS. However, the requisite knowledge base for safeguarding the sustainability of fish stocks has been enhanced by the "Survey of renewable marine resources", a project developed out of the RSS project and the identified need for more data related to fish and shellfish stocks. However, up to five years of analysis is required to provide scientifically sound statistical data.<sup>3</sup> UNIDO is also currently pursuing further funding for follow up activities, particularly to strengthen the management of the LS.

## Main recommendations

Per requirements of the Evaluation Groups Terms of Reference (TOR), recommendations and lessons learned focus on UNIDO's cooperation with the RoS and RSS, particularly in the context of any future similar projects. Recommendations and lessons learned also consider the approach for a wider thematic evaluation of UNIDO's post-crisis projects and take full account of previous thematic UNIDO evaluations.

The following recommendations relate to UNIDO regarding **project identification and formulation**

- Objectives, outcomes and outputs in the preparation of LFs should be clear, must fully consider risks and potential constraints, and performance indicators should consider donor requirements. Changes made to the project plans and LFs should be duly recorded and agreed by stakeholders through an agreed monitoring and evaluation framework.
- The role of all partners as part of an integrated value chain should be analysed through stakeholder consultation.

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<sup>3</sup> UNIDO (2014), Independent Final Evaluation: Surveys of Renewable Marine Resource in the RSS

- UNIDO should apply methodologies on conflict risk assessments and do no harm principles to new project proposals.

The following recommendations on **coordination and management** relate to UNIDO and the LAI.

- Ensure staff are not only technically competent, but also motivated and sensitive to the cultural and societal conditions in which they will be working. This could help reduce the potential for staff turnover.
- Provide further support for the association's consultant to continue working on reorganising the male fishers' cooperatives and enhance marketing.
- Finalise all TOR, arrangements and responsibilities of the MFA at the LS including physical and logistical requirements.

The following recommendations on **efficiency** relate particularly to UNIDO and the national project partners.

- Continue to improve LS' efficiency with a focus on quality control and marketing.

Recommendations on **effectiveness** relate to UNIDO.

- When projects collect baseline data, sufficient time and resources should be allocated to allow for a follow up basic survey on the effectiveness and short term impact of interventions as part of an ex post evaluation.

Recommendations regarding **sustainability and impact** to UNIDO and RoS include

- If LS fail to cover their cost of operation by 2014, the RSS Governor's office should be requested to help identify resources to meet the shortfall.
- To ensure sustainability it is recommended that UNIDO and the RoS actively continue to pursue further funding for a follow up phase.

### **Lessons learned**

- Involving all partners interested in or affected by the development of the value chain is likely to enhance both ownership and the overall implementation of a project.
- The role of women and the potential constraints they face as an integrated part of value chains needs to be analysed prior to the start of project activity.
- A project may enhance its efficiency, effectiveness, sustainability and impact if the traditional cultural norms and social and economic relationships are fully analysed and risks associated with challenging them are properly considered.
- Working with the entire community, particularly traditional leaders, can build a relationship of trust between the project and the beneficiaries.
- Increasing female economic opportunities may strengthen women's bargaining power within the household, leading to more cooperation among household members, potentially higher levels of welfare and indirect increases in their involvement in male business associations.





# 1. Introduction and background

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## 1.1. Introduction

This report outlines the results of an independent final evaluation of the project “*Recovery of Coastal Livelihoods in the Red Sea State of Sudan*”. The evaluation was mandated by UNIDO Technical Cooperation Guidelines that require all projects with a total budget of €1,000,000 or more to be evaluated. In addition, this project evaluation was included in a wider thematic evaluation of UNIDO’s post-crisis interventions due to its relevance to the theme. The evaluation mission was undertaken between November and December 2013.

This Chapter outlines the background on funds mobilisation for the project, the project’s overall objective, outcomes and outputs of the project, intended beneficiaries, the intervention overview and project management arrangements.

## 1.2. Project background

### Planned results

The overall project goal was “to improve community based recovery programmes and local development capacities of coastal people of the RSS in the Sudan.” and the project purpose was improved sustainable harvesting and marketing of fisheries.

An Inception mission at the beginning of the project concluded that the main reasons for the under-development of the artisanal fishers sector and fishing communities as a whole was a combination of five main factors:

1. Weak organisation of existing national fishing associations established by the government in the 1970s. This was particularly regarding management and finance.
2. An absence of service providers to fishing associations, especially entrepreneurs such as fish processors
3. Inadequate LS and market site facilities
4. Limited support from Government (organisations themselves did not identify their need)
5. Limited knowledge regarding marketing strategies.

To attempt to achieve the project goal and purpose, the project constructed modern LS in the communities of Suakin, Mohamed Gol and Osief and provided equipment for basic fish handling, processing and cold storage. Fishing cooperatives were developed at each LS predominately for male fishers, while women’s business associations were also created to provide a range of services and productive capacities a few of which were of direct support to the fisheries sector. The project also built the capacity of its national counterpart the MFA and

worked closely with national and state government institutions with a view to sustainability.

The outcomes and outputs to achieve the goal and purpose are outlined in Table 1 below.

**Table 1: Summary of Project Goal, Purpose and Outputs<sup>4</sup>**

Outcome 1	Market oriented cooperatives utilise fisheries resources in a sustainable manner and utilise/recycle post-harvest waste
Outcome 2	Fishermen market their catch on established markets directly, avoiding middlemen
Outcome 3	SMEs provide better services to the cooperatives
Output 1	Cooperatives, consisting of a) fishermen and b) micro and small scale informal enterprises, organised and qualified in business management and legally registered as business enterprises.
Output 2	The capacity of staff (extension and outreach workers) counterpart institutes in the RSS built to continuously train and provide support to the cooperatives enhanced.
Output 3	Members of the fisheries business associations (cooperatives) are trained in different fisheries resource utilisation, technology, entrepreneurship, environment, hygienic and food safety issues and other auxiliary activities of their area of interest.
Output 4	Three model associations are upgraded in terms of appropriate and environmentally sound technology such as cold store, refrigerated truck etc.
Output 5	Micro and small enterprises service providers (individual businesses) are organised trained and upgraded to provide services for the cooperatives such as ice production, cold store maintenance service, fish salting, drying and packaging, maintenance of fishing boats and motors and waste recycling and disposal such as using fish waste digesters and compost production systems.
Output 6	Market infrastructure such as landing sites and new market places are established or upgraded

## Beneficiaries

Immediate beneficiaries are indicated by the project document as fishing communities who would gain increased income from improved sustainable artisanal fishing, improved market infrastructure and enhanced entrepreneurial and technical skills. The project document indicates that unemployed young men and women would be beneficiaries as they would be supported to establish related MSMEs and that approximately 50 per cent of the beneficiaries would be women. Public institutes such as the State department of Agriculture and

<sup>4</sup> Outputs are based on the updated Logical Framework outlined in the mid-term evaluation. Outcomes are based on the project document.

Fisheries (through the MFA) and some regional training institutes would also be beneficiaries of capacity building of their fisheries outreach services.

The general public of the RSS was also listed as a beneficiary of improved access to safer and affordable fish products.

## **Funds mobilisation**

Even though Canada is not a member state of UNIDO, there has been a working relationship between UNIDO and CIDA<sup>5</sup> in Sudan dating back to the period of the Comprehensive Peace Agreement (CPA) in 2005. Early recovery efforts funded by CIDA in Sudan focused on governance, children and youth, food security, and the reintegration of internally displaced and refugee populations. Since January 2006 Canada has provided over USD 185 million to early recovery initiatives in the country.

CIDA was a part of the Multi-Donor Trust Fund (MDTF) which funded the original UNIDO Community Livelihood and Rural Industry Support (CLARIS) projects in Sudan. Following the successful CLARIS projects, UNIDO developed four new projects in 2008 and 2009. Two other projects closely followed the original CLARIS concept in South Kordofan and Southern Sudan, one project focused on the reintegration of ex-combatants in cooperation with the United Nations Development Programme (UNDP).

The RSS project (designed in 2008) was one of these four projects. Concept notes for consideration by CIDA were prepared and the grant agreement was signed on 19 March 2009 between UNIDO and the Government of Canada. The project commenced in March of 2009 with an initial budget of USD 4,687,240 provided by CIDA. Due to exchange rate fluctuations the project gained USD 952,565 and was extended until December 2012. The project was later extended under no cost extension agreements for two twelve-month periods until December 2014.

## **Project management**

In terms of financial administration and coordination, the project was executed by UNIDO under the overall management of the Project Manager (PM) based in Vienna Headquarters, supported by a consultant allocated to the project based in Vienna, but with considerable time spent in the field.

Technical oversight as well as some administrative and logistical support was provided by the Office of the UNIDO Representative in Khartoum. This included placing fisheries development as one of the priority sectors in the Industrial Modernisation Programme of the Republic of the Sudan. A range of national and international specialists were also recruited either part time or full time during the life of the project and reported to the PM in Vienna or UNIDO in Khartoum and Port Sudan.

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<sup>5</sup> CIDA is now merged with the Department of Foreign Affairs and International Trade

The project was implemented by UNIDO over a period of five years commencing March 2009 and the main Government counterparts were the State Ministry of Agriculture through the MFA and the RSS Ministry of Economic Affairs and Investment.

In the RSS the project was managed by a Project Coordination Unit (PCU) including a CTA and NPC and full time national experts on gender and associations development located in Port Sudan. The CTA operated formally under the supervision of the PM in Vienna though the project's consultant retained considerable oversight as the person was consistently involved with the project from the outset. Administrative and finance staff in the UR Office of Sudan also provided administrative oversight and support. A PSC was established that included representatives from the counterpart line ministries and CIDA, with observers from additional state ministries such as health and the Governor's office.

## **Implementation**

The project document indicates the project built on UNIDO's implementation experience in Uganda, Kenya, Tanzania and Bangladesh, where fisheries cooperatives had been organised and supported for production, processing and export.

Additionally, UNIDO already had a relatively strong field presence in Sudan and experience of implementing multiple projects which included rural community development, micro small and medium enterprise development and vocational training under its IP for Sudan. The Youth Entrepreneurship Development project (YED) and CLARIS were just two such examples.

Training was provided to national counterpart organisations in an attempt to better involve and sustain the outputs of the project. It was intended that national organisations would not only be trained but would form an important part of actually implementing activities, especially as implementation supported the government's priorities for development of the RSS.

Initially, the project was implemented with a view to change behaviours, especially the traditional relationships between traders and fishers and to empower fishers through the development of their associations, infrastructure and related business-orientated activities to become independent.

The project was also implemented with a particular focus on the development of women's associations which would support the fisheries sector and as such, activities fell under the UNIDO branch of Rural and Women Entrepreneurship development.

The LF for the project is attached as Annex C.

## **2. Evaluation purpose, scope and methodology**

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### **2.1. Evaluation purpose and scope**

This independent final evaluation was undertaken in accordance with UNIDO technical cooperation (TC) Guidelines which mandates independent evaluations for all projects over a €1 million threshold. Terms of reference, provided by the UNIDO Evaluation Group, assisted in the development of the broad objectives, purpose and scope of the evaluation.

The evaluation was also mandated as part of UNIDO's accountability and learning process by the decision of the Programme Approval and Monitoring Committee (AMC) meeting on 15 December 2010, and approved by the UNIDO Executive Board. This requires a thematic evaluation of multiple projects that are receiving contributions for post-crisis intervention to support UNIDO's institutional learning in short-term, post-crisis interventions. The evaluation will help UNIDO shape its overall strategy in post-crisis settings with a comparative approach, and to further identify UNIDO's specific role and added value in supporting crisis-affected countries.

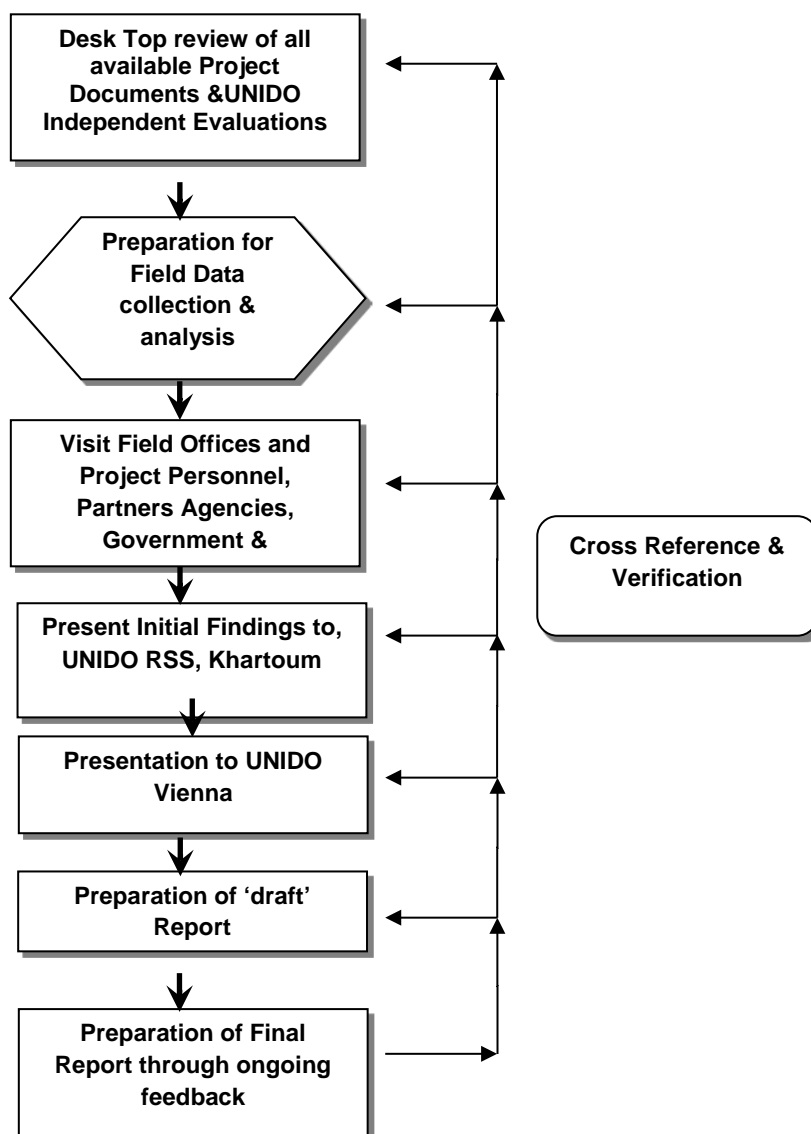
The main objectives of the final evaluation were therefore to contribute to a) any future UNIDO cooperation with the RoS, and b) UNIDO's institutional learning in short-term, post-crisis interventions with a forward-looking approach. The final independent evaluation also takes full account of an earlier thematic evaluation of UNIDO's post-crisis interventions completed in 2010.

The final evaluation was to cover the full period of the project and was expected to focus on the manner of project identification and formulation, how relevant the project was to the RoS in general and the RSS in particular to improve community based recovery programmes and local development capacities of coastal people of the RSS. The likely cost-effectiveness of the project design, project ownership, coordination and management, how efficiently the project was implemented, the projects effectiveness and its expected impact and sustainability were also to be evaluated. Finally, the evaluation was to consider recommendations for future UNIDO interventions (See Annex B for the TOR). The final evaluation was undertaken between November and December 2013 by a national consultant, Ms. Zainab Mohamed Osman and Mr. Andrew Young, an independent International Project Evaluator. Invaluable in-country coordination was provided by the project, particularly the UNIDO Representative in Khartoum and the CTA, the UNIDO consultant designated to the project and the National Project Consultant based in the RSS.

## 2.2. Evaluation methodology

The independent final evaluation based its findings on an extensive review of written documents as well as quantitative and qualitative data gathered from UNIDO headquarters and from the main project locations in Khartoum and the RSS. The field mission was undertaken over a period of 15 days from 17 November — 2 December 2013. Figure 1 below outlines the overall evaluation process.

Figure 1: The Evaluation Process



## **Document review**

To better inform the field mission a desktop review was undertaken on related project documents and other background publications prior to visiting the RoS. Of particular relevance were the project document "*Recovery of Coastal Livelihoods in the Red Sea State of Sudan*" and the associated inception report. Substantial project documents reviewed included the projects own progress reports to its PSC, national and international experts reports, project work plans, training reports, and financial and procurement reports. Of particular relevance was the independent mid-term evaluation report. Project information brochures and videos were also reviewed.

To place the independent evaluation in a broader context, previous UNIDO Evaluation Group publications were reviewed. These included the thematic reviews on "Agri-business/Agro Industry Development Interventions", and "UNIDO's Post-crisis projects". The 2010 independent evaluation report on "UNIDO's IP in Sudan was particularly informative as it included analyses on a broad range of UNIDO projects in community building and vocational training.

In some cases, documentation was reviewed after the commencement of the field evaluation. These included particularly information related to the UN in Sudan, such as the United Nations Development Assistance Frameworks (UNDAF) and documentation from the RoS, particularly the 2013 Industrial modernisation programme of the RoS.

## **Interviews with project partners**

Interviews were held with UNIDO management of the project in Vienna, the UR office in Khartoum and the PCU in Port Sudan. Direct project partners interviewed included representatives of the multiple Ministries on the PSC, and the MFA. The Dean and technical trainers from the Port Sudan Technical training College were also interviewed.

From the government side interviews were held primarily with the state ministries of Industry, Agriculture, Economic Affairs and Investment and Health. The Ministry of Industry was also interviewed in Khartoum. From the UN System, interview material was gathered primarily from the UN resident coordinators office in UNDP. With respect to the views of the donor, the Charge d'Affaires of the Canadian Embassy Sudan was interviewed.

The selection of interviewees was assisted by both the office of the UR in Khartoum and the PCU in the RSS. The list of people interviewed is included in Annex E.

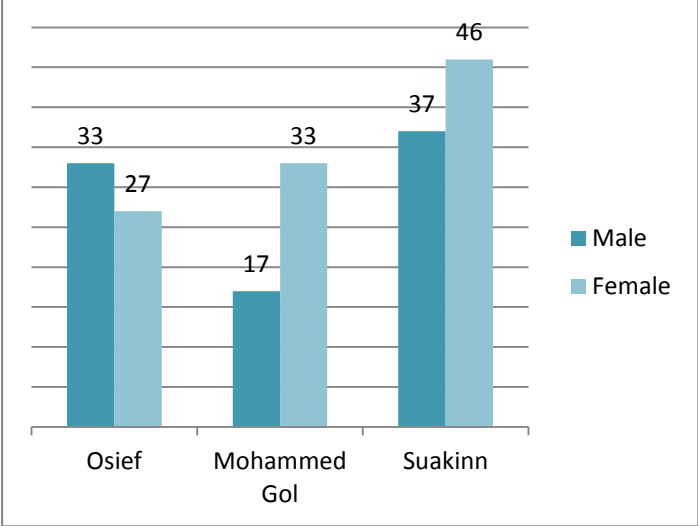
## **Selection of beneficiaries for data collection**

The PCU in Port Sudan assisted the independent evaluation to contact both male and female beneficiaries. The independent evaluation required a cross section of male fishers from all three LS and women from the three main associations. In total 193 beneficiaries (87 male and 106 women) were selected based on a



generally representative sample covering both genders from the project sites in Mohammed Gol, Suakin and Osief all situated on the coast of the RSS. To help corroborate questionnaire answers the largest possible numbers of beneficiaries were contacted.

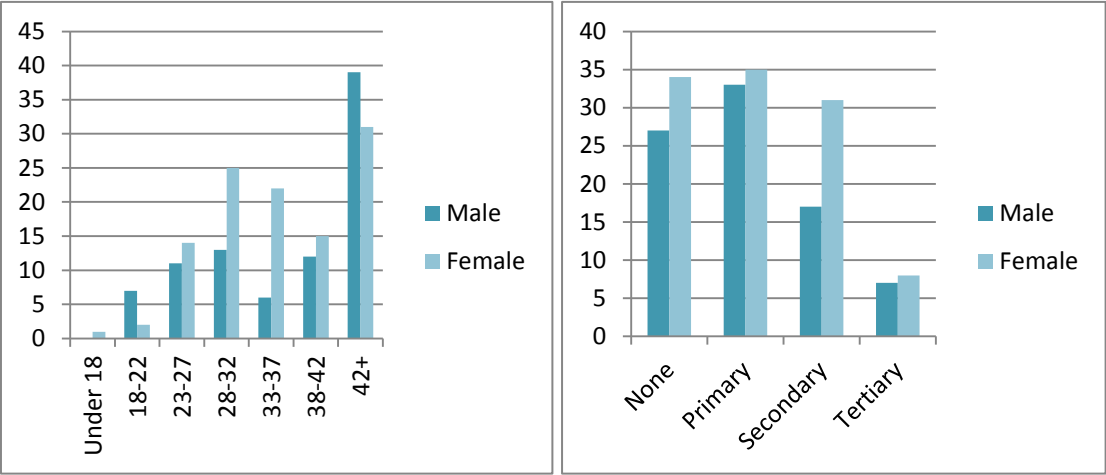
**Figure 2: Number of responses by landing site**



Source: Independent evaluation. Numbers based on total responses

Figures 3 and 4, below indicate the age range and educational level of the beneficiaries selected. Of the respondents, nearly all were between the ages of 20 and 50 with quite large numbers of both males and females being older than 42. The clear majority of both male and female respondents either had none or just a primary level of education. Additional information about the type of male fishers and their supporting occupations is included in Annex A.

**Figure 3 and Figure 4: Age and education level of respondents**



Quantitative data was gathered directly from the project beneficiaries in the form of a questionnaire with qualitative Focus group discussions (FGDs) involving smaller numbers of self-selected beneficiaries from the same group. The development of questionnaires and FGDs is discussed below.

## **Coverage and development of themes in the questionnaire**

Quantitative data was gathered by the use of a questionnaire that was designed to generally assess beneficiaries' views on the purpose and goal of the project, expected outcomes and the probable outputs (See Annex F). While the project document did not specifically disaggregate outputs by gender, it was anticipated the development of particular business associations (cooperatives) would be specifically for women. Additionally the kinds of training provided and the utilities in the forms of tools and infrastructure provided by the project were not the same as for males and females. The best example would be the LS themselves that were very predominately benefitting male fishers activities. As a consequence of this and to accommodate their different social and economic situations, questionnaires were designed differently for men and women.

A common theme for both sets of questionnaires were the focus on the quality of training and facilities and equipment, a post-training assessment regarding whether beneficiaries were generating more income as a result of project outputs and the impact on their livelihoods. Differences between the questionnaires mainly focussed on the type and changes in male fishing activities and the different types of training and equipment /infrastructure support. A very basic household expenditure survey was undertaken for women.

The questionnaires were kept as simple as possible with a majority of questions being multiple choice 'tick-box' responses. The PCU project office in Port Sudan provided the requested input and clarification on the questionnaire. During the evaluation, questionnaire completion was coordinated by the international consultant supported by the landing site managers (LSM) for male fishers and the female national evaluator assisted by the gender consultant for female association members.

## **Focus group discussions**

Quantitative data derived from the questionnaires for male and female members of the associations was complemented with qualitative FGDs held separately for males and females in the communities of Osief, Mohammed Gol and Suakin. In total FGD were held with 196 individuals including 107 female and 89 males. FGDs were held by the national consultant for women and the international consultant for male fishers and traders assisted by the LSM. Discussions were focussed on beneficiaries' views of the project relevance, effectiveness, efficiency, impact and sustainability. FGDs were also held with about 8 extensions workers from the MFA. These questions were more specific and are included in Annex F.

Observations were also made within and around the LS and the associated villages to broadly assess living conditions and use of project provided facilities, particularly in light of project impact and sustainability.

## **2.3. Limitations of the evaluation**

Unlike female beneficiaries of the associations, male beneficiaries (fishers) were not very well represented in the independent evaluation. In total, 87 fishers (about 20 per cent of direct male beneficiaries) were represented and while these formed a relatively broad cross section of foot fishers, full time and part time fishers and traders, many of the most active fishermen were actually at sea fishing. Additionally, not all the fishermen evaluated were direct beneficiaries of the training or fishing equipment, though most were increasingly using the new landing site facilities. Care has been taken, therefore, not to determine absolute findings on the views of a relatively small (though vocal) minority.

Dungonab Bay and Arkayai Friend of Fisheries Women's Associations were not visited due to time constraints. These women's associations were much smaller than the three visited and had been created more recently.

Finally, while short term project effects, especially immediate income generation and training results are possible to independently evaluate, the longer term impact and sustainability of project interventions cannot be ascertained with any certainty due to the fact that some project activities were still ongoing at the time of this report. There also remain potential short term economic and social changes in Sudan, these external factors such as economic shocks cannot be predicated with any certainty.

### 3.

## Country and project context

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### 3.1. Overall situation and trends

Until the Sudanese independence war in 1956, Sudan and Southern Sudan were part of Egypt and ruled by an Anglo-Egyptian condominium. Since independence Sudan has only experienced about a decade of peace. Parts of Eastern Sudan also continue to be affected by a low intensity conflict between the Eastern Front and the National Government in Khartoum.

In 1972, in the aftermath of the first Sudanese civil war, the Autonomous Region of Southern Sudan was formed. The Second Sudanese civil war lasted for 22 years from 1983 to 2005 between the central Sudanese government and the Sudan People's Liberation Army (SPLA). The Government of Sudan and the Sudan People's Liberation Movement (SPLM) signed the CPA in Nairobi in early 2005.

Sudan ranks 169th out of 187 countries in the Global Human Development Index (HDI) 2011, and according to UNDP, a total of 46.5 per cent of the population were living below the poverty line. With the separation of South Sudan, the RoS has lost 75 per cent of its oil reserves. The loss forced the RoS to announce a three-year emergency austerity programme.

Agriculture, including livestock herding, is the main income source of 80 per cent of Sudan's population and contributing 39 per cent of GDP, but most farms remain rain-fed and susceptible to drought. The main agricultural export products, such as sesame, livestock, cotton, gum Arabic and ground nuts, which accounted for more than 90 per cent of Sudan's export in the early 1990s, dropped dramatically. Sudan's total production of commodities is not sufficient to serve the local market. In 2007, 15 per cent of the total population depended partly or wholly on imported food aid.

Small and medium enterprises (SMEs) account for 95% of manufacturing enterprises in Sudan. According to data from Food and Agriculture Organisation (FAO) and the World Food Programme (WFP) 40 per cent of private facilities are in food processing industries including agro industries, 20 per cent are in textiles and the remaining 40 per cent are in cement, ceramics, and engineering assembly industries. Fish and other marine products from artisanal fisheries in the RRS account for a total production of circa 600 tons per annum. However, it has a potential for a significant increase, up to 1,500 tons, per annum.<sup>6</sup>

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<sup>6</sup> Industrial modernisation programme of The Republic of the Sudan, (Ministry of Industry of the Republic of the Sudan and UNIDO, Vienna 2013).

According to a 2010 report by WFP food security in urban areas of the RSS were good. However, as many as 42 per cent of the rural households were food insecure. Analysis found that 15 per cent of rural households were forced to engage in high risk coping strategies and that salaried labour was the main income source for households in both rural and urban areas. UNIDO reported that a high proportion of the RSS lives in poverty and fishermen were reported as among the most vulnerable. UNIDO and FAO have both indicated that fisheries can play a much greater role in the socio-economic revitalisation of coastal areas of Sudan as a major contributor to food supplies and rural coastal employment.

## **3.2. Government strategies and policies**

Since 2009 Sudan has outlined in various strategic documents, its national vision of agricultural development as the engine of growth and rural poverty reduction<sup>7</sup>. The strategies support small-scale producers in their shift from subsistence to market-oriented agriculture. The specific objectives are to:

- Increase agricultural exports and decrease reliance on volatile oil exports
- Increase productivity
- Improve food security and agricultural incomes
- Reduce rural poverty, and
- Correct regional imbalances

Until relatively recently utilisation of agro-fisheries resources was not a priority in Sudan. Recently recurring droughts have undermined traditional agricultural livelihoods and encouraged people such as the nomadic Beja tribe to increasingly consider the benefits of agro-fishing.

Under the RoS second Five-Year National Development Plan (2012-2016) and regarding the overall objectives of the economic sector, the RoS now specifies the need for

*“Rationalizing the use of and developing the natural fish resources, supporting fish stocks and stepping up the fishing industry using the modern methods and techniques”.*

Equally in order to meet Millennium Development Goals (MDG) regarding Poverty Reduction, the RoS recommends the following

*“Encouraging the women's participation in local development through the productive families and food security projects”.*

## **3.3. Technical assistance frameworks**

From the outset the project identified synergies, liaised with and worked directly with multiple development partners in the RoS. The Sudan Recovery and Rehabilitation Programme (RRP) 2005-2010 focussed on assisting agriculture-

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<sup>7</sup> The Government of National Unity's Executive Programme for Agricultural Revival

and fisheries-dependent communities organize themselves into associations and included the provision of boats. The Sudan Productive Capacity Recovery Programme (SPCRP) 2008-2012 implemented by the Food and Agriculture Organisation (FAO) provided training and capacity building for government institutions and communities which aimed to build management capacity required for long term sustainability of the fisheries sector.

The RSS project identified particular synergies with the Eastern Recovery and Development Programme (ERDP) 2009-2012, a three-year initiative aiming to impact livelihoods of poor and vulnerable communities through the implementation of quick start activities. The fisheries sector was specifically targeted in this programme through improving varieties and quality of fish products, better and more appropriately located sales points and other facilities designed to add value. Specific outputs of the programme included equipping and training fishers with appropriate equipment for off-shore fishing; training for women in rural communities; adding value to fisheries products; increasing fish and fish product sales; and the collection of fisheries data.

Partnerships with NGOS such as the Agency for Cooperation and Research in Development (ACORD) who were working with rural communities, especially women were also relevant. Other NGOs included the Sudanese Environmental Conservation Society (SECS) which promotes environmental awareness and previously worked with UNIDO on a project to reduce Persistent Organic Pollutants (POPs) in the RSS.

The Port Sudan Technical College (a Vocational Training Centre) was identified to carry out the vocational training needs specifically in the areas of boat maintenance and marine and vehicle engine maintenance including motor mechanics and welding.

Although the project identified synergies with the Farmer's Commercial Bank (FCB) which was providing equipment to fishers such as 100 fishing vessels and several refrigerated trucks, collaboration was reportedly limited.

## **4. Project assessment**

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### **4.1. Project design and intervention logic**

The initial LF for the project lacked some coherence, especially with regard to outcomes and performance indicators and this complicated the process of evaluation. Although outcomes were mentioned in the project document, they were not mentioned in the LF.

The indicators of the LF were modified during the PSC meeting in October 2011, both to reflect implementation realities and to link the original UNIDO framework to that provided by the donor. CIDA provided a PMF with specific outcomes and indicators after the commencement of the project. It was reported that the CIDA indicators would take priority (see the LF in Annex C with reassessed deliverables), but there was little evidence of this in project reporting. Despite the adjustment of performance indicators and their measurements, the original outputs were not changed.

It was also reported by the MTR of October 2012 that the initial deliverables were too ambitious and the original planned duration of the project of 30 months was quite short to achieve sustainable impact. It was also evident to the final evaluation that there was an initial disconnect between the original project document and the realities 'on the ground'

The roles of national private sector entities are not clearly articulated in the project document or deliverables, though the project clearly focuses on the private sector at the community level and at pro-poor value chain development. Effective Cooperative development was a central intervention of the project and the comparative advantage of UNIDO in the project was evident with its focus on technology transfer through the construction of technologically appropriate LS and specialised training for both the men's and women's cooperatives and their associated support entities.

Common post-crisis roles for UNIDO are summarised in the UNIDO Evaluation Group's 2010 thematic evaluation of UNIDO post-crisis projects. UNIDO interventions normally focus on a combination of restorative activities. These include restoration of livelihood capacities of individuals and community groups, restoring productive capacities, enhancing the investment climate, and rehabilitation of organisations that support economic development.

The project focussed on these interventions by developing diversified livelihood opportunities through the construction of LS and development of fishers' associations, the provision of tools and training to individuals (especially women) and by the rehabilitation, through equipment provision and training, for organisations that support fisheries development (the MFA).

The broad goal of the project was clearly to develop and enhance productive capacities predominately at the micro level and the project combined the value chain approach with institutional capacity building to increase the likelihood of sustainability. However, the development of 'workers' cooperatives appear to have been more straightforward for women than men at the time of the final evaluation. Project design did not fully consider the constraints associated with overcoming or developing traditional business relationships, local social-economic and 'power' based relationships, or a fully integrated role of women in the pertinent value chain.

## **Prior interventions and lessons learned**

This was the first intervention of its kind in Sudan though the project had some continuity with the methodologies of implementation of post conflict projects undertaken previously, particularly in the development of MSMEs, vocational training and institutional capacity building.

UNIDO has had a long term presence in Sudan and an IP for Sudan was first designed in 1998. This was subsequently updated for 2003 to 2008. The IP consisted of four components, social stabilization, sustainable agro-business, environment and rural energy and industrial governance systems.

Regarding implementation arrangements, there was some continuity with the methods of the CLARIS projects that used short term training and equipment provision. The YED project in Khartoum also combined short-term vocational skills training and income generation for vulnerable communities with medium- and long-term capacity building of support institutions (in this case VTCs). Several UNIDO evaluations recommend that projects decentralise management as much as possible and these arrangements were clearly instituted with the project based PCU supported by a PSC with a view to sustainability.

It was reported that during project development, UNIDO used the United Nations Environment Programme (UNEP) document on the marine environment entitled "Marine Environments and Resources" and FAO's "fisheries manual for oceans". The UNEP report found poor fisheries management and noted that the fisheries industry was constrained by a lack of investment in facilities to handle the catch, as well as by a limited domestic market. The FAO similarly assessed the management of fisheries as weak, predominately due to a lack of clear data on fish stocks.

The project document refers to specific experience gained with fishing cooperatives production from similar UNIDO interventions in Uganda, Kenya, Tanzania and Bangladesh. However there is no further mention of any of these projects, or which particular lessons were learned.



## **Conflict sensitivity and principles of “do no harm”**

The project document makes no specific mention of ‘do no harm’ principles. However the overarching goal of the project as a livelihood recovery project working within marginalised and vulnerable communities would be anticipated to improve and stabilise socio-economic conditions necessary to consolidate the 2005 Eastern Peace Agreement and this is considered in the project document.

While the project did not undertake a specific conflict or risk analysis, the project document did anticipate some risks and measurements for their mitigation. These amount mainly to the overarching risk of resumed conflict since the CPA, the necessary support of state ministries, the potential lack of beneficiary interest, and the potentially limited training and associated institutional capacities. During actual implementation, the project was undertaken with a degree of conflict sensitivity through the focus on Sudanese human assets both as beneficiaries and trainers but also as project managers and partners, especially through the PSC. The project locations were not too geographically diverse and selection of beneficiaries and activities was participatory, both importance aspects of do no harm as outlined by the evaluation of the IP for Sudan.

Additionally, it is relevant to note that the project document was prepared prior to the publication of UNIDO’s thematic evaluation of post-crisis projects and the evaluation of UNIDO’s IP in Sudan, neither of which were published until 2010. The United Nations Policy for Post-Conflict Employment Creation, Income Generation and Reintegration which the UNIDO Evaluation Group has recommended is important to refer to, was also not published until June 2009.

FGDs with the beneficiaries and interviews with government counterparts indicated that focussing training on income generation would contribute to longer term poverty reduction as trainees had been provided with the skills to work. The training provided would also contribute to peace by reducing the potential for conflict as beneficiaries would focus foremost on productive income generation. This is in line with the 2009 UN Policy for Post Conflict Employment Creation, which states income generation and employment is vital to short-term stability, reintegration, economic growth and sustainable peace in post-conflict situations.

Interestingly, however the roles of the traders are not considered in the risks, even though the original intention of the project could potentially weaken their role in the sector vis-a-vis the cooperatives. If changes in behaviour were to be effected especially regarding traditional trading and tribal ‘authority’ relationships this should have been considered.

Additionally, the role of women and the extent to which they could form an integral part of fishing cooperatives by providing specific support to the sector was considered, but it was concluded this would not produce a positive return on project time and resource investments due to socio-cultural "constraints".

## **Value chain development (VCD)**

Value chain development (VCD) was paramount to the RSS project. An expert's inception mission assessed the fishing industry in the RSS early in the project and found that fishing communities were under-developed and fishing cooperatives were poorly organised. Additionally, the mission found that micro service providers did not exist, LS were under developed and had no storage or processing capacity leading to product waste, and government support institutions were weak. Finally marketing outlets were limited. All these factors contributed to lower potential values for fishing resources.

To improve the entire value chain from the inputs required for fishing to the sale of fish products to the customer, the project was set up to restructure the associations, create MSMEs as service providers, build technologically modern LS with their associated infrastructure and strengthen fisheries sector support organisations. The intention was not to focus on product improvement or volume extension; rather the value would be added through process improvement.

With respect to the associations UNIDO not only provided training but also the means to implement the training in the form of equipment and facilities to the beneficiaries. In many cases, the project also facilitated indirect small scale financial support for business start up through other projects or providing in kind support that created revenue.

The project attempted to integrate women into the value chain. During implementation, however, it became necessary to develop multiple activities which were not directly involved in production and processing, but were nevertheless considered to increase the effectiveness of the value chain. It appears unlikely that a 'vertical' agricultural value chain concept with actors connected along a chain producing and delivering goods to markets would survive in isolation. An important aspect of the value chain approach was that it also considered "horizontal" impacts on the chain, such as community inputs and extension support.

Considering the level of development in the rural coastal communities, it is difficult to disaggregate the diverse and necessary service provision to communities (now resulting in improved household health and education expenditure) from the overall fisheries sector and mainstream project activities. At the Outcome level the businesses operated by women are now contributing to the livelihoods of fishing families in the RSS. In concrete terms, this means more money for savings, extensions to living quarters, improvements in education, purchase of mobile phones and improved food security.

## **4.2. Project management**

Evaluation of the management of the project provides both positive and negative findings. The project involved a PSC whose main functions and responsibilities were to: (i) advise the project on strategic directions of support activities to be provided; (ii) ensure effective cooperation between all involved stakeholders; and (iii) provide advice on ongoing activities, including progress towards achieving

planned outputs; and (iv) review and approve annual work plans. The final evaluation determined the PSC was actively undertaking its responsibilities on all counts.

It was reported to both the MTR and the final evaluation that while first three successive project CTAs had been experts in fisheries, they had found it difficult to perform well especially considering the local cultural constraints. Additionally the NPCs changed and an association's consultant was not employed full time until the latter part of the project. The project self-assesses that it initially underestimated the potential for national consultants to overcome local cultural constraints.

Interviews with local project management and counterparts such as the MFA indicated that the high turnover of staff did have a negative impact on the delivery of outputs particularly with regard to work plans, logistics and procurement. A specific example was the development of cooperatives, which was anticipated to be much further developed by the time of the final evaluation. Considering the project has been extended (though at no cost) for two years, it is hard for the evaluation not to conclude an overall negative effect of the high staff turnover.

## **Reporting, monitoring and evaluation**

Performance indicators were included in the original LF and in most cases they provided a baseline figure to evaluate performance against. PSC records specify that a key activity was to link the project document with the CIDA PMF and that the CIDA format would take pre-eminence. It was indicated to the final evaluation that the PMF arriving after the commencement of the project (which had already commenced on agreed indicators in the LF) caused some confusion. There was a need to clarify what monitoring tool is going to be used at the beginning of the project. The targets outlined in the CIDA PMF and the deliverables in the UNIDO LF were harmonized but to some extent the project continued to report against two separate frameworks.

The project's internal monitoring and evaluation standards are assessed as high. In order for progress reports and deliverables to be internally assessed a series of baselines studies were undertaken. The most important of these was the original inception report compiled from findings of the inception mission undertaken between May and July 2009.

Socio economic surveys were also undertaken in the latter half of 2009. These included a basic socio economic survey of communities in the RSS undertaken by ACORD and a field fisheries surveys undertaken by SECS. Both surveys were used to identify training and infrastructure needs. A consumer demand survey for fish products was undertaken. Gender assessments were undertaken by national experts and international cooperative expert report was provided. EIA were conducted at the commencement and end of the project.

Despite the lack of a final project report at the time of the evaluation, the project's progress monitoring is assessed as good. A wide range of bi-annual progress reports and other progress reports were evident. Annual progress reports were

provided for UNIDO HQ in March 2009 and 2010 until these were replaced by the reports to the PSC. It was reported to the evaluation that a detailed final report to UNIDO would also be prepared by June 2014. The project had a reportedly active PSC and although the first PSC was postponed, meetings were held regularly following the inception mission. PSC reports were available for 2009 – 2011, 2011 – 2012, and 2012 – May 2013. A final report for the PSC was under preparation at the time of the final evaluation.

Of considerable import and use to the project was the MTR “progress report” undertaken by an independent evaluator in October 2012 and supported by the evaluation group in Vienna. This report made a considerable number of recommendations. Detailed conversations during the final evaluation confirmed that the majority of recommendations to UNIDO included in the evaluation were implemented. This included enhancing the role of traders (despite the original project focus), the employment of a specialised CTA, additional awareness campaigns, selected additional training, the provision of cold storage facilities and jetty repair.

### **4.3. Relevance and ownership**

#### **Relevance**

The RSS project falls under the UNIDO theme of “Community empowerment, income generation and poverty alleviation”. It was clearly relevant to UNIDO’s focus on private sector development and built on prior experience in implementing multiple projects which included rural community development, MSME development and vocational training under UNIDO’s IP for Sudan.

The project was relevant to local needs with its dual focus on the development of local production and state management capacities coupled with the creation of immediate stabilising income. UNIDO operated within its area of comparative advantage developing trades and services at the micro and small level. The project was in line with UNIDO’s corporate approach to post-crisis situations as stated below.

*In the phase of rehabilitation and reconstruction, UNIDO will provide services for enterprise rehabilitation in key industrial areas, promoting income-generating activities for specific groups of affected people, [and] supporting institutional capacity-building.”<sup>8</sup>*

The project was also relevant to the UNIDO priority focus of rural entrepreneurship development establishing locally pertinent cottage industries, common service facilities, and vocational training schemes. By improving entrepreneurial skills and enhancing trade skills and income generation through technology transfer, this recovery input forms a major part of UNIDO’s involvement in post-crisis countries.<sup>9</sup>

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<sup>8</sup> UNIDO (2005) Strategic Long-Term Vision Statement

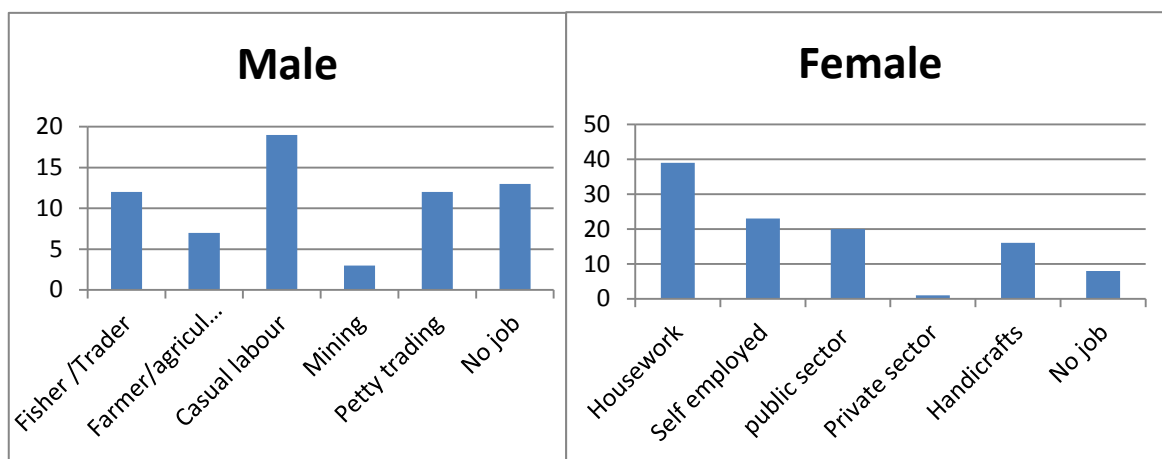
<sup>9</sup> Service Module 4 (Private Sector Development) of UNIDO’s Service Modules as given in the latest Corporate Strategy document

At its outset, the project was relevant to the CIDA thematic development priorities; “poverty reduction, private sector development and gender equality”. It was also relevant to the first pillar of United Nations Development Assistance Framework for Sudan 2009 – 2012 (UNDAF), which specified “Livelihoods and Productive Sector” as a main outcome. The project was also in line with MDG 1, the reduction of extreme poverty and with MDG 3, the promotion of gender equality.

The project was viewed as highly relevant by all national and state partners during discussions with the final evaluation. The methodology of project implementation was considered to be of particular relevance by the state government and project beneficiaries due to the fact that the project had not only provided training but also provided the means to implement the training in the form of improved facilities and infrastructure. One Ministry indicated the relevance of the project was that it had shown the way to professionalise and modernise the fisheries in Sudan and that the government had learned from this and would now follow suit.

The project was relevant to the selected target groups by providing greater opportunities for remunerative work. Prior to project, many of the beneficiaries reported they had little or no work. Figures 5 and 6 below indicate that a large proportion of females had no remunerative work (in this case house work is considered non remunerative). Of the males, significant percentages of current fishers, previously had no job or were involved in daily casual labour.

**Figure 5 and Figure 6: Type of work prior to UNIDO training**



Source: Independent Evaluation based on actual numbers of responses

### **Ownership**

From the perspective of the state government there was little doubt about ownership. Multiple ministries were fully involved in the project from the outset, not only in the management of the project through the PSC, but in the selection of landing site locations.

A good indicator of ownership in the sector was the government contributions either directly to the project or in associated projects and infrastructure. The government had provided office space for the project, cold storage vehicles for the fishermen, fishing boats, and rebuilt some associated infrastructure such as the fishing jetty in Suakin.

With respect to the MFA, while management was fully supportive of the project and expressed strong overall ownership of the outputs there were some issues reported by MFA staff who wanted a greater involvement in the overall technical management of the project and to be better integrated into training provided by UNIDO to the beneficiaries. They also continued to express doubts as to the potential ownership of the cooperatives due predominately to their low capacity.

The creation of the LAI (an oversight committee) comprising key members of the Cooperatives, representatives of key Ministries, the locality and the MFA was implemented to overcome the generally weak management capacity of the cooperatives and improve local ownership. The project also provided an experienced LSM to act as secretary to the LAI and oversee management and operations of the LS facilities. Regarding Cooperatives, ownership of the project with respect to the male fishers was less evident. While many were increasingly using the LS, their relationship with the cooperatives was reportedly mixed. Many who used the LS were not members of Associations and those that were stressed the need for additional cooperative support such as the provision of fishing boats and equipment. Their ongoing relationship with traders was clearly more developed than it was with their associations. Traders were still providing much of the loans and equipment for fishing as well as some social support services. As indicated in the MTR fishers interests were being represented by community elders, not all of whom had a good relationship with all fishers.

With respect to women's cooperatives too, ownership was evident. Women were proactive in the associations and highly vocal in the support of their leaders and all project results. They exhibited a strong sense of ownership, met regularly and reported they were ready to manage their cooperatives independently of the project. This behaviour change was seen as a remarkable achievement by the various government bodies interviewed.

#### **4.4. Efficiency**

It is apparent the initial project document and to a lesser extent the inception report did not adequately consider the difficulties of implementation in Sudan. The original project document broadly envisaged developing a greater independence of fishermen from traders, which would be fostered through strengthening fishermen's associations. As reported by the MTR, a main problem was the initial underutilisation of the new LS. During implementation, it became evident that traders were an essential economic driver in the value chain and that the efficient use of the LS only became possible with their involvement.

The Cooperatives themselves were found to be a constraint during implementation. They were poorly organised, often led by vested interests and it

was suggested that some resources provided by other projects were being misused.

An international consultant was employed on several occasions to develop the cooperatives but it became evident that cooperatives would not function efficiently unless they were significantly reorganised. A national expert had been employed by the project to reevaluate and reorganise the associations, but it was evident this work was not yet complete at the time of the final evaluation.

Although the extent to which entrenched local customs and socio-economic relationships can be changed by external assistance remains pertinent, it is evaluated both by the project management and independently that efficiency could have been improved. The project would have been more efficient to focus on constraints associated with cooperative management through the full time utilisation of national consultants much earlier. It is also apparent to the independent evaluation that had the role of the traders been better understood, coupled with a more local traditional-based approach to cooperative development, the overall efficiency of the project would have been enhanced.

While there was no indication that inefficiencies related to current project staff, management from Vienna or the UNIDO consultant, the high turnover of other project staff was reported as an efficiency constraint particularly by some counterpart organisations.

On a positive note the allocation of a full time international consultant who worked flexibly between Vienna, Port Sudan and in some cases Khartoum certainly mitigated much potential inefficiency. The project had an efficient relationship with the diverse actors in the fisheries sector through the PSC. This allowed all key public and private sector representatives to meet in a single forum, which also had significant input into the project deliverables.

Efficiency of the project was also generally enhanced by the selection of beneficiaries in and around the area of the three LS. Although some of the fishers were seasonal, many beneficiaries lived near Mohamad Gol, Suakin and Osief.

## **Procurement**

Procurement of equipment and services was not straightforward in Sudan. Local management capacities were reportedly low as was the quality of nationally procured materials, and suppliers were not yet working to international standards.

It was reported that the construction of LS was slower than planned and this was partially due to problems with procurement. The start of construction of landings sites was delayed by two months due to insufficient technical and commercial standards in the first round of bids. International companies displayed a lack of interest regarding procurement bids predominately due to their small value, but local contractors lacked the financial capital reserves to commence work prior to payment.

Consequently it was reported it was necessary for the project to stagger the planned work in order to allow the companies to obtain sufficient resources and

complete the necessary “procedural and contractual obligations”. Construction of the LS also was also slower than planned and this was attributed by project management to an inability to procure needed materials and regular revisions to bills of Quantities (BoQ).

While it was not reported that the implementation of UNIDO’s enterprise Systems Applications Products (SAP) resource planning tool had slowed disbursement of funds to the field, more training was a reported need. This was outlined as a need for more detailed classroom training for project officers as this would speed up the time to implement SAP in the field.

A wide range of equipment was procured by the project including generators for the LS and (latterly) ice making machines. The procurement of hardware supplemented the training provided to the MFA and fish finders, GPS units, motorcycles and diesel engines for fishing research purposes were procured by the project internationally. Towards the end of the project, fishing boats and engines were going to be procured for cooperative fishers that did not own a boat. The distribution was to be managed by the LAI and the project was finalising basic selection and equipment management criteria.

With regards to the general infrastructure and equipment provision, project partners and beneficiaries stressed their good quality, though in every case there was a request for more.

## **4.5. Effectiveness and project results**

The overall goal of the RSS project was to improve community based recovery programmes and local development capacities of coastal people of the RSS in Sudan. In support of the overall project goal the purpose of the project was to improve sustainable harvesting and marketing of fisheries. This was further articulated under the following three outcomes in the project document:

1. Market oriented cooperatives would utilise fisheries resources in a sustainable manner and utilise/recycle post-harvest waste.
2. Fishermen would market their catch in established markets directly, avoiding middlemen.
3. SMEs would provide better services to the cooperatives.

The outcomes of the project were supported by six outputs in the LF as follows;

1. Cooperatives, consisting of a) fishermen and b) micro and small scale informal enterprises would become better organised and qualified in business management and become legally registered as business enterprises.
2. The capacity of staff (extension and outreach workers) counterpart institutes in the RSS would be built to continuously train and provide support to the cooperatives enhanced.
3. Members of the fisheries business associations (cooperatives) would be trained in different fisheries resource utilisation, technology,



- entrepreneurship, environment, hygienic and food safety issues and other auxiliary activities in their area of interest.
4. Three model associations would be upgraded in terms of appropriate and environmentally sound technology such as cold store, refrigerated truck etc.
  5. Micro and small enterprises service providers (individual businesses) would be organised trained and upgraded to provide services for the cooperatives such as ice production, cold store maintenance service, fish salting, drying and packaging, maintenance of fishing boats and motors and waste recycling and disposal such as using fish waste digesters and compost production systems.
  6. Market infrastructure such as LS and new market places are established or upgraded.

An additional framework for management reporting was provided by CIDA; the PMF discussed previously. A combination of the original LF with the reassessed deliverables and the independent evaluations assessment of progress is included as Table 2 below.

Analysis of the project's effectiveness is complicated by the lack of an up to date report to either the Steering Committee or UNIDO, as final reports are still under preparation. Additional complications arise from the project's dual reporting against the CIDA PMF and the project's own LF. A final complication is reporting effectiveness against an individual output as many inputs such as those to upgrade cooperatives cover multiple outputs.

Although the project faced constraints, particularly with regard to high staff turnover, the general difficulties of implementing in Sudan and low levels of local technical and managerial competence, the delivery of outputs is generally assessed as effective. Effectiveness of the project goal and purpose and the six outputs of the project are considered below. The analysis includes data collected directly from male and female beneficiaries of the project.

**Table 2: Independent evaluations measurement of achievements against the Logical Framework**

Output (from the original logframe)	Original Deliverables (from the original logframe)	Re-assessed Deliverables (Oct 2011)	Independent Evaluation
<p><b>PROJECT GOAL</b></p> <p>Improved community-based recovery programs and local development capacities of coastal people of Red Sea State (RSS) in the Sudan.</p>	<p><b>PERFORMANCE INDICATORS</b></p> <ul style="list-style-type: none"> <li>• Minimum of 20% increase in family incomes of the beneficiaries</li> </ul>	<p>A minimum of 60% of direct and indirect beneficiaries report a significant improvement in</p> <ul style="list-style-type: none"> <li>• Income and / or</li> <li>• Work based capacity and/ or</li> <li>• Artisanal sector development</li> </ul>	<p>Due predominately to the development of women's associations, select surveys indicate increases in HH incomes exceeding the initial target of 20%.</p> <p>Just fewer than 61 per cent of male fishers reported their income had increased, 23 per cent indicated an increase of more than 50 per cent. More than 90 per cent of women interviewed had increased their income. Female contribution to household expenditure had increased for food, health, and education</p> <p>Incomes, work based capacity and sector development have increased, but a survey of total beneficiaries not undertaken</p>
<p><b>PROJECT PURPOSE</b></p> <p>Improved and sustainable harvesting and marketing of fisheries</p>	<p><b>PERFORMANCE INDICATORS</b></p> <ul style="list-style-type: none"> <li>• Production and marketing of fresh and processed fish increased to 1600 tons per annum from the current level of maximum 600 tons per-annum</li> </ul>	<ul style="list-style-type: none"> <li>• No change</li> </ul>	<p>About 1,090 tons per annum is taken from the Red Sea. Of this, about 42 tons passed through the Suakin landing site in six months. It would appear the target of 1,600 tons is unreasonably high as it exceeds the total caught for the entire red sea.</p> <p>According to latest available figures provided to the PSC as of May 2013, 127 tons of fish had been landed through the LS. If the MTR figures are used, the LS account for just less than 12 per cent of the entire catch for the whole fisheries industry of the RSS.</p>

<p><b>Output 1</b></p> <p>Cooperatives, consisting of a) fishermen and b) micro and small scale informal enterprises, organized and qualified in business management and legally registered as business enterprises.</p>	<p><b>Performance indicators</b></p> <ul style="list-style-type: none"> <li>• Minimum of 18 cooperatives with minimum 1200 members established or strengthen organizationally and operate as a business enterprise</li> <li>• Minimum of 200 of the members of management of the cooperatives are trained in the management of the cooperatives and group dynamics and effectively manage the cooperatives as business enterprise</li> </ul>	<ul style="list-style-type: none"> <li>• 3 major, focal fishing cooperatives, with 500 members established or strengthened organizationally and operating as a business enterprise</li> <li>• 8 other satellite fishing communities / groups received basic organizational training to link to focal points.</li> <li>• 3 Women's business development associations are established in focal fishing communities with 300 are established or strengthened organizationally and operating as a business enterprise</li> <li>• Minimum of 150 of the members of the micro-enterprises are trained in business management of the associations and group dynamics and effectively manage the associations as business enterprise</li> </ul>	<p>Reassessed targets mostly met or exceeded.</p> <p>3 fishing cooperatives established with a total membership of 755 men.</p> <p>Basic organizational training to link 8 other satellite fishing focal points communities not complete. However, 5 Women's Business Associations with a total registration of 533 women are established and operational in focal fishing communities. Funds independently supplied by the UK Embassy to initiate a revolving loan scheme to establish home-based micro-enterprises. Women's associations operate as business enterprises and are now operate independently</p> <p>Bylaws have been drafted and all associations are legally registered.</p>
<p><b>Output 2</b></p> <p>The capacity of the staff (extension and outreach workers) counterpart institutes in the RSS built to continuously train and</p>	<p><b>Performance indicators</b></p> <p>A minimum of 20 dedicated extension workers are selected in participatory way</p>	<ul style="list-style-type: none"> <li>• No change</li> </ul>	<p>41 extension workers/ trainers have been trained by the project in various fields such as organizational, technology and marketing and sustainable fishing services. This has included study tours and study</p>

provide support to the cooperatives enhanced	A minimum of 20 extension workers/ trainers can provide organizational, technology and marketing and sustainable fishing services, including the environment and marine resources conservation and training to the community continuously		courses abroad. The MFA is utilising the knowledge and skill gained during training and will be participating in a related marine resource assessment. Additionally, MFA staff are permanently based at each landing site
<p><b>Output 3</b></p> <p>Members of the cooperatives are qualified in different fisheries resources utilization, appropriate technology, entrepreneurship, hygienic and food safety issues and other auxiliary activities of their area of interest</p>	<p><b>Performance indicators</b></p> <p>At least 1600 members of the cooperatives can perform different activities in the cooperatives for sustainable, profitable production and marketing of fisheries resources for local and regional markets</p>	<ul style="list-style-type: none"> <li>At least 700 fishermen are trained in hygienic and food safety issues (including on-board) and employ new knowledge</li> <li>At least 350 auxiliary activity actors trained in their area of interest</li> </ul>	<p>1,175 trainings in management and technical training have been provided Training provided in HACCP, GMP and GHP.</p> <p>15 individuals have received marine engine repair/maintenance and small-business operation training.</p> <p>9 individuals have received fish trap construction training.</p> <p>The Indicator of training for 350 auxiliary activities remains unclear.</p>
<p><b>Output 4</b></p> <p>Three model cooperatives are upgraded in terms of appropriate and environmentally sound technology such as cold store, refrigerated truck etc.</p>	<p><b>Performance indicators</b></p> <p>Equipment installed and operating and hands-on training to the cooperative members provided.</p>	<ul style="list-style-type: none"> <li>No change except in provision of cold storage aspects</li> </ul>	<p>While physical infrastructure is in place (see output 6) management of fishers cooperatives remain a constraint. Despite the introduction of LAI and LSM and onsite representatives of the MFA, work to subdivide cooperatives into more efficient 'units' is not complete.</p>

<p><b>Output 5</b></p> <p>Micro and small enterprises service providers (individual businesses) are organized trained and upgraded to provide services for the cooperatives such as ice production, cold store maintenance service, fish salting, drying and packaging, maintenance of fishing boats and motors and waste recycling and disposal such as using fish waste digesters and compost production systems</p>	<p><b>Performance indicators</b></p> <p>At least two small or micro enterprises per activity such as ice production, maintenance services, fish drying, salting, transport and marketing etc. are established and are able to link with fishing cooperatives and provide their services and products to the local and regional market.</p>	<ul style="list-style-type: none"> <li>• Activities identified</li> </ul>	<p>Various micro-enterprises have been established, mainly under the Women's Associations.</p> <p>The ice factories and cold storage facilities are becoming operational and contributing profit to subsidizing the LS. Businesses are owned by the LS, but operate independently. Plans for a small goods shop and a marine engine repair shop at each site remain outstanding and will be the responsibility of the Association.</p> <p>Women from the association in Suakin purchase fish from the landing site</p>
<p><b>Output 6</b></p> <p>Market infrastructure such as landing sites and new market places are established or upgraded.</p>	<p><b>Performance indicators</b></p> <p>Market infrastructure in place and operational</p>	<ul style="list-style-type: none"> <li>• No change</li> </ul>	<p>Three modern LS have been established and basic market infrastructure has been developed in the LS.</p> <p>Fish sales occur at the Suakin LS. Fish is also available at the Osief LS though the distance from the town city limits frequency of purchase. In Mohamed Gol, fish is sold almost entirely to fish traders.</p>

## **Output 1: The Development of Cooperatives and MSMEs**

The first output of the project was that cooperatives, consisting of fishermen and MSMEs would become better organised, qualified and become legally registered as business enterprises. Output 1 was one of the key activities of the project and was intended to broadly meet the first project outcome that market oriented cooperatives would utilise fisheries resources in a sustainable manner and utilise/recycle post-harvest waste. The output was also intended to result in the third outcome that SMEs would provide better services to the cooperatives. The output would also produce many of the intermediate (medium term) and immediate outcomes relating to cooperatives, especially gender equity in the CIDA PMF (Annex E). Due to ongoing cultural constraints it is evaluated this work is not complete.

### **Fishing cooperatives**

The strategic development of fishing cooperatives was a central aspect of the project and at the time of the MTR was assessed as incomplete. The project self-assesses that;

*“Cooperative developed continued to be one of the most challenging components of the project. The beneficiaries’ distrust of cooperatives stemming from previous experiences combined with a well-entrenched traditional system of financing fisherfolk decreased the enthusiasm of fisherfolk to form official fishing-based groups, such as cooperatives or associations”.*

The project adopted the approach of working with the existing cooperatives that were established by the government in the 1970s, though at the outset of the project new fisheries and socio-economic data was collected for long-term planning. Socio-economic surveys of selected communities by the NGO ACORD were undertaken in communities north of Port Sudan as a baseline to interventions and to better understand the circumstances of fishing communities. One month later, field fisheries surveys were also undertaken by the NGO SECS.

Suakin was selected as the first fishing cooperative in September 2010 as a model for the other cooperatives to be developed. Training was provided to upgrade the skills of the members of the board of directors and other cooperative officials in basic management and bookkeeping.

An international cooperative development expert was employed for two short term inputs in 2001 and 2012. Through working with local authorities and fishers the activity of developing cooperatives towards more business-orientated fishing was expanded to include Mohamed Gol and Osief.

The project faced significant obstacles with the cooperatives at the start of the project. The cooperatives did not have effective management units equipped with professional staff, capacities or records. There was a lack of any entrepreneurship

spirit. The fishing cooperatives and their members were highly vulnerable to other operators in the value chain. Their internal investment was very low and weak so a high expectation was placed on external support. Their democratic governance was weak. There were also limitations with regard to youth participation and the environment.

To overcome some of these constraints, three LSM were recruited by the project in December 2011. Each LSM lived in the community with the beneficiaries and acted as a mentor for cooperative members in various activities such as cooperative and landing site management.

Some positive progress was reported in the last year of the project with regards to cooperative strengthening since the employment of LSM who helped to identify small groups of fishers and develop their skills to work as sub groups within the wider collective. At the time of the final evaluation the project was continuing to address the challenge of weak cooperatives by creating subgroups such as groups of foot fishermen operating together in one subgroup but under the same cooperative.

By providing a tangible benefit, the ice production facilities (such as the one at Mohamed Gol) were also reported to be quickening the pace of cooperative consolidation.

The Suakin Fishing Cooperative was a member of the oversight committee of the landing site: the LAI, and was heavily engaged in the affairs of the landing site. It was evaluated that the cooperative was just beginning to play a vital role in the fishery marketing chain in the RSS by providing fishers with an alternative (through loans and equipment) to the traditional trader-fisher relationship.

The Suakin Foot Fishers Associations with 74 members and registered with the Humanitarian Affairs Commission (HAC) were selling their harvest to the Suakin Fishing Cooperative who provide them financing for one-day fishing trips. The Irim Fishing Cooperative was also reported to be working closely with the Suakin Fishing Cooperative.

In Mohamed Gol two boats were rented to traders to manage. A portion of the revenue from the boat went to the cooperative. The cooperative is using some of their revenue to purchase fish from foot fishers in Mohamed Gol for sale to traders.

Although the fish harvest remains largely seasonal, Osief cooperative purchases fish from foot fishers in the area and sell the fish at a sales stall that it rents in the town centre. The Cooperative also owns two boats that provide fish for the sales stall.



*Fishermen at Osief*

Despite the progress reported in the last year of the project, it is evaluated that further work is likely to be needed before fishers' cooperatives and their new subunits are running effectively. At the time of the final independent evaluation this was still very much work in progress.

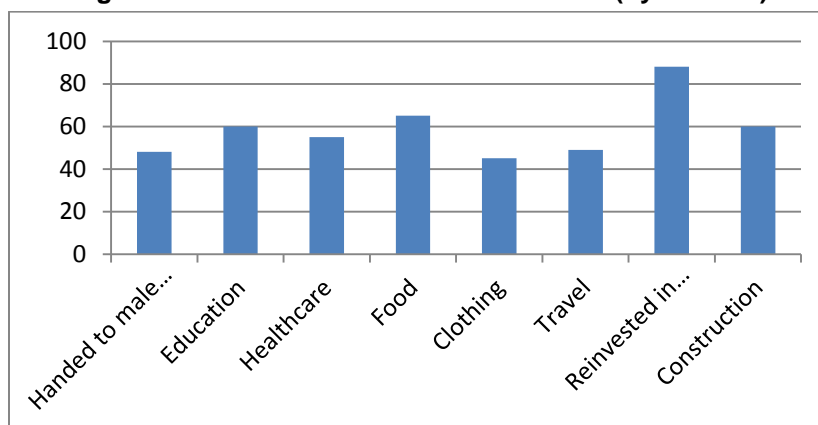
### **Women's associations**

The development of five women's associations presented fewer obstacles to the RSS project and was reported as effective from the outset. At the Outcome level the businesses now operated by women and set up specifically as a result of the project are contributing to the overall livelihoods of fishing families in the RSS, though in most cases they were not operating as an integral part of the fishery sector value chain. It was reported by the project management and evaluated independently that women had little direct role in the fishery sector. The project therefore adopted the approach of better integrating women into the general economic life of their communities, thereby providing indirect support to the fishing communities in which they lived.

Though actual amounts of SDG were not determined by the final evaluation Figure 7 below indicates the number of women who reported making financial contributions to essential household costs such as health and education.



**Figure 7: Female Household contributions (by number)**



The success was mainly attributed to the beneficiaries taking the lead themselves and was evident to the MTR and the final evaluation. Women were selected from fishing families in Suakin, Mohammed Gol and Osief that had an interest in forming business-orientated associations. Women were provided training in business management and they elected governing boards comprising 11 members, including a chairperson, treasurer, secretary and eight additional members. Both a short term international and long term national gender consultant assisted the development of the women's associations.

The project decided in consultation with the beneficiaries that the associations would act as umbrella groups that house the various micro-enterprises. The associations serve several important functions:

- An entry point for support from the project.
- Provider of financial support to establish micro-enterprises.
- Provider of technical support for micro-enterprise establishment and operation.
- Providers of social support to members, such as literacy classes and kindergartens.
- Market sites (physical space and base of consumers).
- Location and organizing capacity for various social functions.

Support was given to the women's associations through networking visits with existing successful women's associations in the Port Sudan area and specific training to undertake the following;

- Outline of steps to develop a business idea into reality
- Conducting a feasibility study
- Profit and loss account
- Developing a business plan
- Business analysis (constraints and opportunities)

- Pricing/price unit
- Demand and supply
- Market and supply
- Book keeping records
- Group working and group organization
- License application procedures (Local and State administrative procedures)

Participants were provided certificates at the successful conclusion of the five-day training course in each community. Each of the three women's associations received a formal certificate of incorporation and became recognized as an official association by the government. Each association adopted the same name, Friends of the Fishery Women's Association. The project provided office equipment such as desks, cabinets, chairs, stationary and cleaning equipment.

Businesses operated by the women in Suakin, Osief and Mohammed Gol continued to expand during the life of the project and all cooperatives indicated they would be able to continue to be effective and sustainable after the conclusion of the project. As discussed previously however, activities were in many cases not fully integrated into a value chain for the fisheries sector.

The Embassy of the United Kingdom independently partnered with three associations for the disbursement of roughly US\$ 22,000. The funds were used to establish a revolving fund in each association. Agreements between each association and the UK Embassy were signed in February 2012 and the funds were deposited in the associations' bank accounts in early April 2012. Loans were used to finance micro-enterprises such as dress-making and biscuit-making. As of the 6 May 2013, the revolving fund continued to operate in all three associations. A total of 192 loans of either SDG 500 or SDG 1,000 had been received by women.

The Osief association was formed on 18 December 2010 and was officially registered with the HAC on 28 April 2011. Micro-enterprises currently being operated by women in the association include a Community General Store, rental of cooking and catering utensils for social occasions, concrete building block manufacturing, clothing sales, goat milk sales and a cost recovery based Kindergarten.

Mohamed Gol association was established on 15 December 2010 and was officially registered with HAC on 9 March 2011. Micro-enterprises currently being operated by women in the association include poultry, biscuit making, spaghetti making, rental of cooking and catering utensils for social occasions and a community general store. The project assessed that many of the activities of the association were traditionally home based and this association was earning the least of the three.

Suakin association was formed on 25 November 2010 and was registered with HAC on 4 January 2011. The association has been meeting the rental costs for its own compound since the cessation of local authority funding. Micro-enterprises currently being operated by women within the association include provision of gas and

cylinders, concrete building block manufacturing, retailing fresh fish to the neighbourhood, rental of cooking and catering utensils and a Kindergarten approved by the RSS Ministry of Education. The association also runs a restaurant next to its building.

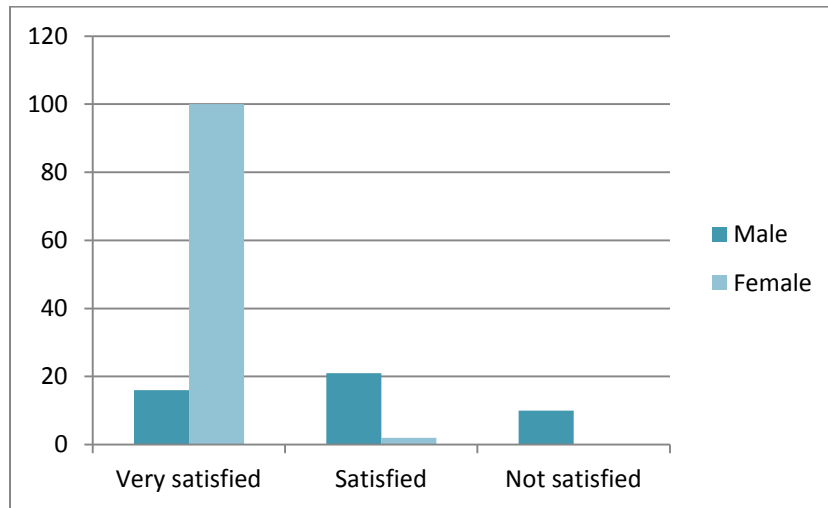


*The Suakin Kindergarten*

In September 2012, local leaders from two additional communities requested the project to establish women's associations in their communities. In response, the project met with women and community leaders in Arkayai and Dungonab Bay. Both the Friends of Fisheries Women's Associations are now registered with HAC and have opened a bank account.

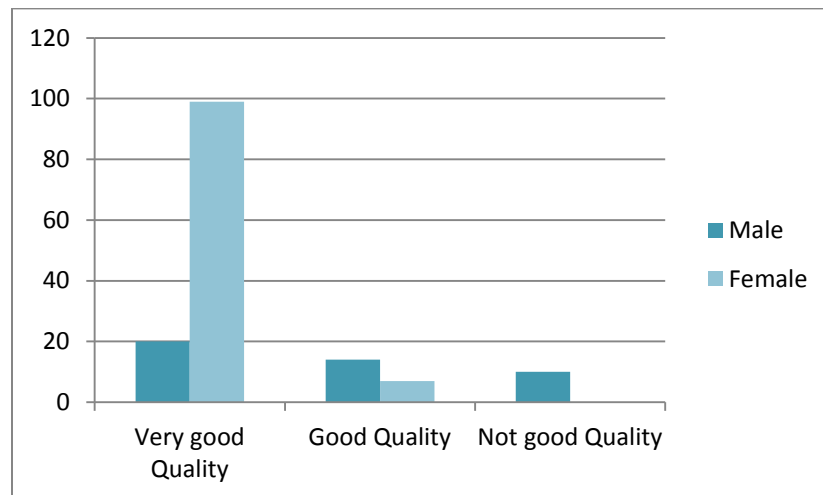
With respect to the quality of training received most members of the predominately male fishing associations and the women's cooperatives expressed satisfaction with training received. It was clear, however, that members of the women's cooperatives were more satisfied with the training and the quality of the trainers than their male counterparts. FGD discussions on the effectiveness of the training indicated a similar result with females being highly satisfied with project outputs. Males were less satisfied as they reported an outstanding need for fishing inputs to be provided by external sources.

**Figure 8 Satisfaction with training received**



Source: Independent Evaluation based on actual numbers of responses

**Figure 9: Quality of trainers**



Source: Independent Evaluation based on actual numbers of responses

Cooperative development training was also provided to selected MFA and Department of Cooperatives staff (training-of-trainers) on the content and delivery of previously developed training courses on the topics of Cooperative Management and Cooperative Business Management. This is covered further under Output 2.

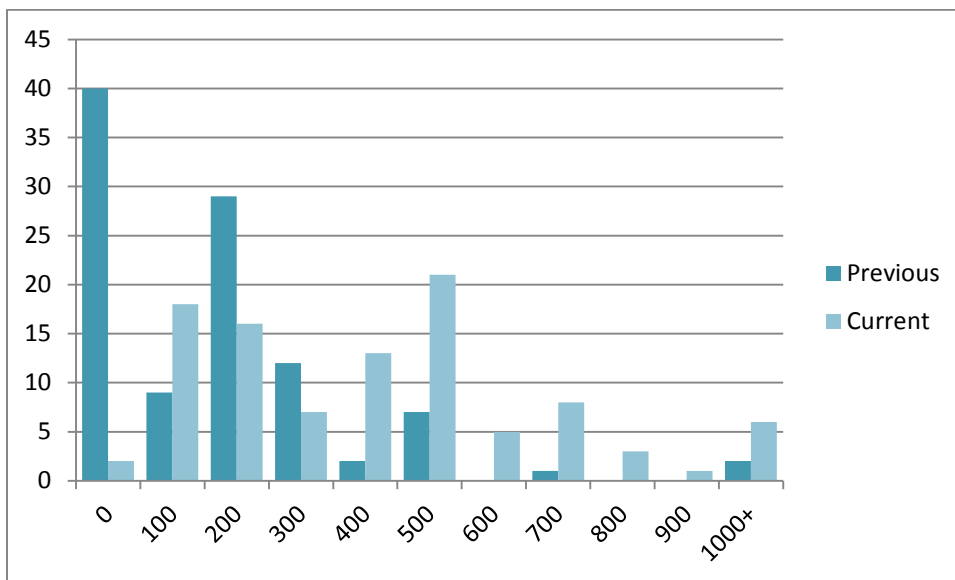
**Income generation**

At the level of the project goal it was anticipated a minimum of 60 per cent of direct and indirect beneficiaries would report a significant improvement in Income and / or

Work based capacity and/ or Artisanal sector development. Although this was to be achieved through all of the project’s outputs the enhanced generation of income is considered as a good indicator of effectiveness of cooperative development and business associations.

Many females were not earning an income before the project so percentage calculations were not possible. Figure 10 indicates the total number of responses regarding incomes before and after the project. The figure clearly indicates that most women were not earning or were earning less than 400 SDG before the project. After the project, significantly greater numbers of women reported earnings in excess of 400 SDG per month, with many more earning from 500 SDG up to 1,000 SDG. A broad overview of the figures provided by women who were earning an income prior to the project indicated that their monthly income had doubled or tripled.

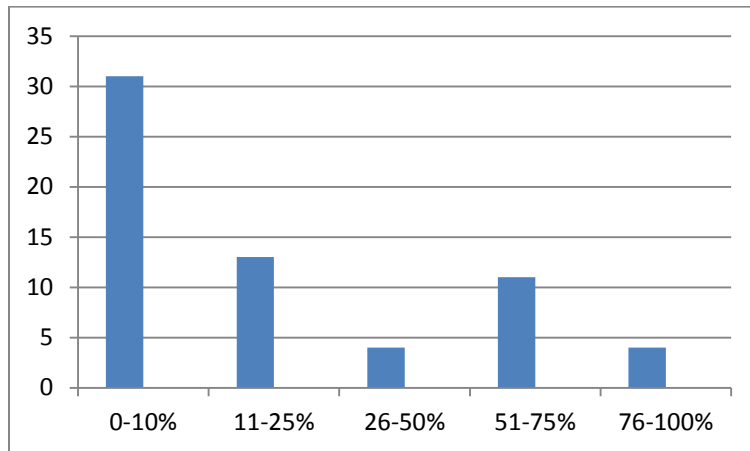
**Figure 10: Reported increase in monthly income following the training (female)**



Source: Independent Evaluation. Based on total numbers of responses

Actual income increases for male fishers specifically as a result of the UNIDO project remained relatively modest. The majority reported increases in income up to 10 per cent, though 23 per cent indicated incomes had increased by more than 50 per cent. See figure 11 below.

**Figure 11: Fisher Income increase attributed to the UNIDO project (male)**



Regarding the project assistance provided to women, around 90, 80 and 70 per cent of the respondents indicated they had received equipment, training and financial assistance respectively.

Female beneficiaries were extremely positive about the effects of the assistance they had received. Without exception, all women reported they believed their training had improved the quality of their skills, had resulted in more work opportunities and would help them to better integrate into the local economy. Ninety per cent reported they had already generated more work as a result of the training.

Male fishers' level of satisfaction was more mixed. Compared to the 100 per cent for women, only 27 per cent positively indicated their new skills would help them better integrate into the local community, 12 per cent did not know and 14 per cent felt their new skills would not help them better integrate.

These figures generally seem to correlate with income increases reported by men and women with women reporting a much more direct, immediate and significant effect on their income.

## **Output 2: Capacity Development of Counterpart Institutions**

The intention of Output 2 was to increase the capacity of extension staff from counterpart institutes in the RSS to continuously train and provide support to the cooperatives. In order to develop counterpart capacities the project adopted a holistic approach. It provided direct training, the material equipment necessary to implement that training, while at the same time the project placed training in the national context through sectoral meetings and within international best practice through study tours.

The project worked in conjunction with the European Union (EU) Project Technical Assistance to the Fisheries Sector in Red Sea State; the FAO/EU Sudan Productive Capacity Recovery Programme; and the EU Eastern Region Development Programme (ERDP) to undertake various experimental fishing operations such as new fishing techniques to improve harvests and the use of GPS and fish finders. MFA Staff were trained in Good Manufacturing Practice (GMP) and Good Hygiene Practice (GHP) and were used as ToT to train selected cooperative fishermen in these new techniques. GHP training was provided to the MFA by an international expert.



*Hygiene Training at Sigala market*

The provision of training for the MFA was supplemented through the procurement of equipment to help it deliver its mandate. The project procured 13 fish finders and 13 GPS units appropriate to the RSS environment. A GPS and eco-sounder training course was provided to MFA staff as part of a training-of-trainer (ToT) capacity building in which 17 extension staff were trained in the use, the maintenance and the potential for GPS with respect to navigation and safety at sea.

In addition to some basic office equipment the project also procured four motorcycles for MFA staff based in landing site communities and two vessels equipped with marine diesel engines.

In June 2012 the project “Surveys of renewable marine resources in the Red Sea State, Republic of the Sudan” commenced with funding from Norway. This project builds on and complements the capacity building of the MFA already provided by the RSS project. The project is mapping fishery resources along the whole coast from the border of Eritrea to Egypt in order to better understand and sustain fish stocks. The two vessels provided by the RSS project are supporting the marine resource survey. It is anticipated that this project together with the completion of the RSS project will contribute to UNIDO’s role in a fishery sector development strategy for Sudan.



*Vessels provided to the MFA for research and extension purposes*

### **Study tours and exchange of experience with other countries**

Study tours formed a central component of Output 2 and were used to enhance the knowledge and capacities of Government institutions to better provide support to the cooperatives and the LS.

A focus of the study tours was training for the MFA as it seconded staff to the LS to supervise technical aspects of LS management and provide training to cooperative members in various hygienic and sanitary fish handling methods. Training was conducted at the fisheries Training Institute in Entebbe, Uganda where all staff from East Africa are trained in landing site management and fish handling to comply with



the pre-requisites for international fish export. The first study tour focussed on the technical aspects of LS management and hygiene while the second course focussed on cooperative development. The two training courses were attended by the relevant technical members of the MFA, cooperative members, Locality representatives and a representative of the Department of Cooperatives.

The Director of the MFA, a fishery inspector at the MFA and staff member from the Ministry of Planning also undertook a study tour to Morocco. This looked at policies and strategies for fisheries management; LS management, cooperative development and export promotion.

Three Indonesian fishery sector trainers (financed by the Government of Indonesia) provided several short training courses to 18 people including cooperative members, MFA and LS staff that covered an introduction to models of landing site management and improved fishing methods. As a follow-up to the training courses, MFA staff visited Indonesia. A second study tour to Indonesia focused on landing site management and included participation from fish traders, locality and LSM and MFA staff.

At the request of the RSS government, the project developed a strategy document for the continued development of the RSS fishery sector. An international expert, supported by a national consultant was recruited to lead the research and drafting of the document. The strategy was submitted to the RSS government in June 2013.

According to the MTR, the MFA is far better equipped to fulfil their mandate and the MFA reported an increased motivation and ability to undertake fish data collection and inspection. The effectiveness of the training was reported to the final evaluation by the management of the MFA, especially regarding the hands-on training and observation of actual LS management and operations in other relevant African countries. Technical experts in the MFA, however, stressed the need for further technical training, especially for the fishers and their associations.

**Table 3: Project Overview**<sup>10</sup>

Number of Direct Beneficiaries	1,940
Number of persons trained by the project	1,381
Male	473
Female	908
Number of Individuals using the landing sites	508
Number of Indirect Beneficiaries	7,760

<sup>10</sup> Source: RSS Project Management (February 2014).

Number of Women in Associations	532
Number of Fishers in a Cooperative/ Association	680
Combined KGs landed at the landing sites	158,250

### **Output 3: Training in fisheries resource utilisation**

Output 3 aimed to train members of the fisheries business associations (cooperatives) in different fisheries resource utilisation, technology, entrepreneurship, environment, hygienic and food safety issues and other auxiliary activities in their area of interest.

In addition to the ToT provided by the MFA discussed under Output 2, training broadly focused on building the technical capacity of fishermen specifically through GPS and eco-sounder training and the introduction of improved technologies and practices in fishing techniques. Several experimental fishing trips occurred in conjunction with training provided to the MFA and were designed to let fishers experiment with new fishing gears procured by the project.

The project reported that initially fishers were hesitant to use new technologies and more experimentation was required before fishers became convinced of the usefulness of new technologies and methods of fishing. Further training courses were combined with the introduction of other new fishing technologies, such as combining fishing traps with fish finders. An international expert was recruited to provide fishers with training on a variety of methods. These included the construction and usage of plastic mesh stackable traps; night fishing; and trawling, including local manufacturing of lures using local materials. It was reported by the project the beneficiaries were changing fishing practices after further training indicated the advantages of combining new technologies and techniques.

Multiple trainings on GPS and eco-sounder use were provided for selected fishers from each cooperative and involved both theory and hands-on experience during fishing. It was reported that courses had a high demand from the cooperatives.



*Training in the preparation and maintenance of fish traps*

In order to allow fishers to implement the training they had received the project procured numbers of outboard motors for distribution to the fishing cooperatives. The project procured 10 fiberglass fishing boats, 30 outboard engines and multiple GPS and eco-Sounder devices which were distributed to the cooperatives along with those already provided to the MFA. The provision of equipment was dependent on cooperative membership, training received on the utilisation of the devices and regular use of the LS as indicated by LS records.

## **Output 4: Upgrading of three model cooperatives**

### **Management upgrading**

Although this output is articulated in the LF as upgrading cooperatives in terms of appropriate and environmentally sound technology, the development of model management structures was a vital input. The overall effectiveness of the LS is also considered.

Establishment of management structures for the LS were collaborative, involving both Cooperatives and members of state government. Consultations were undertaken between May and June 2011 and a private-public partnership approach was agreed. It was agreed the official handover of the facilities would be postponed until closer to the end of the project.

The model of management evolved during the project. It was initially agreed the LS would be owned by the locality, the Fishing Cooperative would be the operators of the facility and the role of the MFA would be supervisory and advisory. Due to constraints in the capacity of the cooperative to operate the LS, however, an oversight committee LAI was created. The LAI in each site comprised two cooperative representatives; a fish trader; a representative from the Ministry of Economic Affairs and Investment, the MFA and the Local authority. It was agreed the project would provide an experienced LSM to act as secretary to the LAI and oversee management and operations of the facility during the transitional period. Later two additional fish traders were added to the LAI for each site.

In Osief the cooperative already directly manages the LS. In Mohamed Gol and Suakin, however, the Locality provided individuals to manage the site under the supervision of the UNIDO LSM. The local LSM are paid for by the Locality as it was felt by project management that they were both 'neutral' and had the ability to pay LSM wages until the LS became financially independent. As per the recommendations of the MTR, the LAI has employed someone to train individuals from the community for accounting and administration and the LAI is now fully responsible for any financial transactions.

The LSM provides support on topics such as general management, accounting and GHP. MFA inspectors are also present at each LS and collaborate with the LSM on fish handling and counting. The inclusion of an additional two private sector fish traders initially in Suakin and later in Osief and Mohamed Gol was reported to have a considerable impact in the utilisation of the LS as traders throughout the RSS felt less excluded from the project. At the time of the final evaluation the project still had to formally hand-over the landing site to the LAI.

### **Technology Upgrading**

In addition to the equipment and training discussed in Output 1, basic equipment was provided to the LS at the outset of the project. Equipment provided concentrated on proper hygienic handling, processing, and storing. The project provided a range of equipment including;

- HDPE Fish Boxes
- Insulated Fish Containers with Lid
- Stainless Steel Platform Trolley
- Polypropylene Ice shovels
- Mechanical Ice crusher
- Platform Weighing scale
- Free Chlorine Test Kit
- Water-proof Food Thermometer
- Stainless Steel Working Table for Meat/Fish Processing
- Heavy Duty Fish Processing Aprons

At the time of the evaluation the project was finalising additional storage for ice and fish to develop infrastructure at each landing site. This included the supply of insulated containers and four cold storage boxes with integrated cooling units. The project was establishing these in the project sites at Suakin, Mohamed Gol, Osief and the Sigala Fish Market in Port Sudan.

### **Overall Effectiveness of the Landing Sites**

The project reported a considerable overall effect of LS construction. Discussions with beneficiaries, the state government, the MFA and traders undertaken during the independent evaluation would confirm these findings.

Fishermen were reporting they saved time and money. Fishers had access to a common amenity and costs previously borne by the fisher for transporting fish to market were now being met by the trader. Fishers were spending less time waiting for a trader to collect their fish as they had the opportunity to store their fish in cool hygienic facilities.

In some cases traders were reporting higher SDG per fish. Traders were also saving money as they no longer had to collect fish from multiple locations. With the LS ability to store fish, traders could keep fish at the location until a better price can be obtained. Improved fish quality was also widely reported by traders.

For the wider community there was small creation of jobs directly at the LS. Many women were now employed some of whose professions were directly linked to the LS. Ice units are also usually providing ice at lower (or matching) costs and faster than that transported from Port Sudan. There is also a reduction of fish waste in the areas surrounding the LS.

For the fisheries sector as a whole benefits are predominately in the modernisation of fishing practices and fisheries management. Fish passing through the LS are subject to a consistent process at each site, including inspection by the MFA. The LS are recording fish harvest information, including species, weights and prices. It is anticipated the LS will continue to play a proactive role in the marine resource assessment currently being undertaken by the MFA. The LS are providing the first opportunity to meet best practices in handling and processing. The LS offer a consolidated location for practical training and a single access point for potential wholesale buyers. It was not found by the final evaluation that the LS are necessarily the sites where market information is provided as mobile phones seemed to be performing this function.

## **Output 5: MSMEs are providing services to the LS**

Output 5 was indicated in the project document and updated LF generally as the upgrading of MSMES to a capacity where they could operate as service providers to the Cooperatives in the LS.

At the outset, the project designed an institutional consumer demand survey undertaken by enumerators from the Red Sea State University to identify opportunities for introducing or increasing the amount of seafood products served by large institutions. The most important finding of these surveys was the growth in demand for fisheries products especially quality produce. As a result of the findings the State government procured three refrigerated distribution trucks to improve quality at the delivery point. The trucks which were distributed to three separate traders are being used to pick up fish from the LS. To date, however, the wholesale distribution of specific types of fish for particular large sale organisations has not been fully realised.

Of more success in the latter stages of the project was the introduction of ice production plants at the LS. These used local technologies designed for ease of local maintenance. Demand for ice was reported to be high, particularly at Mohammed Gol primarily due to competitive prices and the ease of access for local communities (compared to Port Sudan). The ice production plant at Mohammed Gol is reportedly already profitable and supporting some of the running costs of the LS.

Cold store facilities are currently being constructed in Port Sudan and are planned for each LS and Sigala Market. These will also be owned by the LS, but operate as separate businesses which are anticipated to not only recover maintenance costs but to be profitable.

As discussed under output 3, the project recently procured fiberglass fishing boats, outboard engines and multiple GPS and eco-Sounder devices. These will be rented from the cooperative and payment will be in the form of a lump sum. Fishers will also pay a rental fee for the GPS/eco-sounders to the cooperatives.

Five members from each community were trained as marine engine repair mechanics at the Port Sudan Vocational Training Centre (VTC). Repair toolkits were distributed to the cooperatives to be used by the mechanics when required. Nine cooperative members also received training in fish trap construction. The traps were given to the cooperatives.



*Engine Repair training at Port Sudan VCT*

However, apart from some women who purchase the fish from Suakin to sell (fresh and cooked) in the area of their cooperative, there was little evidence that the substantial numbers of small businesses being run by women were currently integrated into a value chain for the fisheries sector. To date, women have not yet identified their need to operate as net makers/repairers, ice sellers or traders.

## **Output 6: Market infrastructure established**

The inception report found that prior to the project, market and LS infrastructure was almost non-existent and this led to high post-harvest losses and poor quality fish. The construction of three modern landing and marketing sites in the fishing communities of Suakin, Mohamed Gol and Osief were therefore planned as the central material input of the project.

Site selection was consultative and involved local administration, fishers and community members Government and members of the academic staff from the Red Sea University. Construction commenced in early February 2011 but delays in the construction of the LS occurred at all three sites due to an inability to procure needed materials, requested revisions to the Bill of Quantities and building designs, and issues related to land ownership and zoning requirements. The companies who were awarded contracts were also small: they could not command the resources to implement construction on their own account whilst waiting payment.

As per CIDA requirements and as stated in the Project Document, the project undertook an Environmental Impact Assessment (EIA) at each of the three proposed LS. The EIA was conducted at each site at the outset of construction, in March 2011. A final EIA was conducted in December 2013.



*The Landing site constructed at Suakin*

In addition to the LS, market infrastructure was improved at Sigala market with the provision of sorting trays, clean water facilities, pumps, piping and raised water storage, ice production and insulated cold storage.

With the completion of the LS and associated market infrastructure, the project has provided a greatly improved environment for fish handling, storage and processing and with the introduction of ice factories and cold storage the requirements for a hygienic value chain for the fisheries sector in Sudan has been created. Whereas previously fish that were caught were transferred directly to Sigala market, the coastal communities now have the opportunity to participate in the value chain through the direct sale of fish and the creation of small businesses that are established to serve the LS.

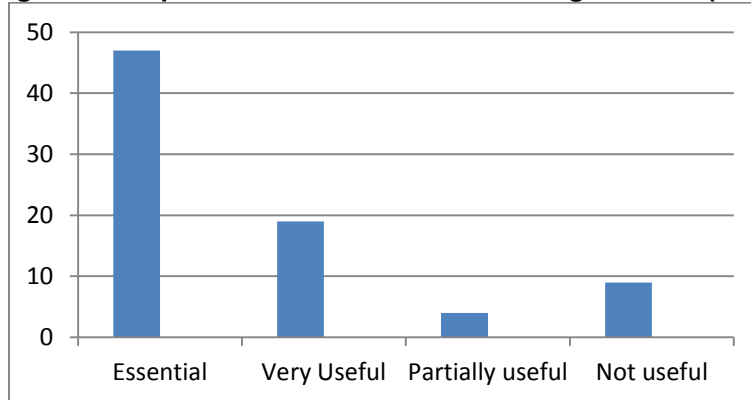
With the recent increase in the use of LS more fishermen are active in the sector and post-harvest waste has been reduced. In one case women's associations are directly providing support services to the fishing industry and MSMEs such as ice making factories are creating new job opportunities.



Fishers can now land and store their catch at one location, saving time, money and transport costs. For traders transport costs are also reduced as they no longer need to collect fish from multiple small locations.

As indicated by the MTR the LS constitute an important contribution to the fishing industry in the RSS and have provided the opportunity to process fish to international standards. A survey of fishers in all three locations undertaken by the final evaluation reveals that the great majority of fishers believe the LS are now essential or very useful to their activities (see figure 12 below).

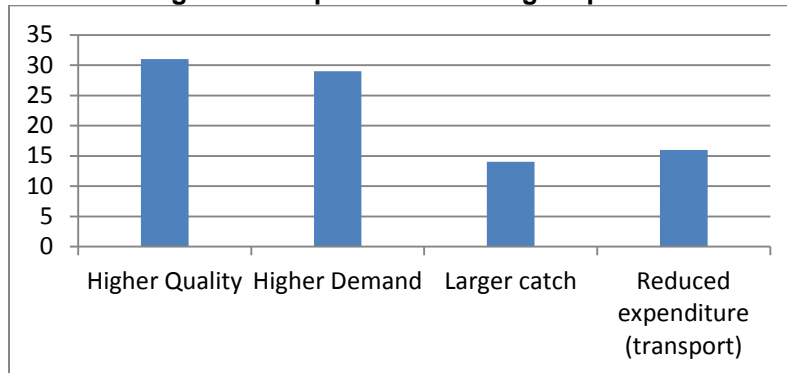
**Figure 12: Reported usefulness of new landing facilities (male)**



It was reported the LS were also having a positive effect on income. Of the 76 male respondents who were asked whether they were selling their catch at a higher price since the LS were built, 52 (68 per cent) indicated they were.

This could not be fully attributed to the construction of the LS as external factors such as market prices and demand would also play a role. However, improved quality of fish produce and a reduction in transport costs can be most likely attributed to the new facilities, and Figure 13 suggests these were major factors in improved incomes.

**Figure 13: Explanations for higher prices**



One clear indicator of the positive effect of the construction of the LS is assessed as the state and national governments' positive response to them. Ministries outlined their associated infrastructure contributions such as the building of adjacent fishing jetties, their commitment to provide management and financial support and their desire to replicate the model LS facilities as a best practice.

### **Use of the Media**

The project produced high quality project brochures, project information was available on UNIDO websites and project factsheets were produced. The 2013 brochure on Recovery of Coastal livelihoods in the RSS highlighted the progress of the project in the context of value chain development, the creation of enterprises particularly for women, the training provided to fishers and their support institutions and environmental considerations. A video was prepared on the outputs of the project and focussed on the beneficiaries and their livelihood development as a project outcome.

## **4.6. Sustainability**

Sustainability is considered in the context of the project's purpose and outputs, principally the sustained utilisation of improved fisheries resources, their associated public and private sector support organisations and environmental sustainability.

The active involvement of project partners particularly the state government of the RSS was intended to improve the project's sustainability. Discussions with government counterparts all pointed to the strong potential for sustainability of the outputs of the RSS project. This was ascribed to the active involvement of government in the management of the project through the PSC, one direct result of which was the Governors promise to meet any shortfalls in the operating costs of the LS for 2014.

There were concerns raised by the government with respect to maintenance costs for the LS and the lack of involvement of private sector organisations who could assist to sustain such costs. Due to limited state budgets most government representatives suggested additional donor assistance would be required, especially to expand the initiative. Conversely some project partners felt that financial contributions from the government had been insufficient and that more assistance could be provided by the government.

One representative indicated they had expected to see more national industrial development of the whole fisheries sector and extensive international export as this was a UNIDO project. Considering the very basic level of fishing reported, the scope of work and the constraints regarding local organisation and management of fisheries prior to the project, this expectation would seem unrealistic. In the latter part of the project, particular focus was placed on the development of private sector activities such as the greater involvement of traders, introduction of LS fees, cold

storage and ice production as well as additional market infrastructure. This led to a more sustainable private sector approach.

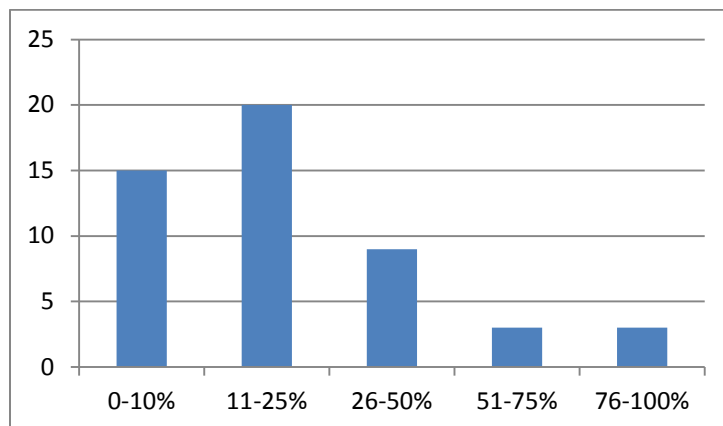
Importantly at the national level, the MoI had recently developed an “Industrial Modernization Programme of the Republic of the Sudan” developed in partnership with UNIDO as a result of the recommendations of the Independent Evaluation of UNIDO’s IP. Fisheries were included as one of the priority sectors in the IMPS for modernisation.

The project has created the likelihood for a sustained role of the MFA and its contribution to the project results. Management of the MFA expressed no doubt about the sustained input of their organisation. The MFA has assigned support staff for data collection, training and cooperative management. The organisation has an enhanced capacity to perform its mandate due to training, study tours and new equipment including boats being used by the MFA for the survey of renewable marine resources.

Regarding the cooperatives, sustainability in its present form appears more likely to be guaranteed for the women than the men. Women’s associations expressed no doubt about their continued existence in their current form and a continuity and expansion of their activities without the need for additional external financial support. For fishermen’s associations, despite considerable work and some success to democratise them and ensure representation of the interests of their most vulnerable members, sustainability is not certain. Unlike the women (who operate a revolving fund) systems of savings and credit have generally not yet been established by men’s cooperatives, members remain indebted to traders and their capacity in marketing remains limited.

Though difficult to quantify absolutely, it appears that the terms of repayment are better for women than they are from men. For women, the associations only charge a 10 SDG administration fee for each loan to cover losses due to inflation. For men however, the repayment of loans from traders (for mainly non-consumables such as boats and gear), can constitute a relatively high percentage of their catch (see Figure 14 below).

**Figure 14: Repayment to Traders (per cent of harvest)**



Environmental sustainability is more difficult to evaluate, principally due to the lack of data on existing fish resources and the increased fish caught as a result of the LS. However, the potential for sustainability of fish stocks will be enhanced by the “Survey of renewable marine resources”, a project which developed out of the RSS project and which is utilising resources and training provided to the MFA by the project. It is anticipated the Norwegian funded project will provide knowledge required for the modernisation of marine fisheries as well as the development of sustainable semi-industrial fisheries. As the LS are the most modern landing facilities on the RSS it appears likely they will be an indirect beneficiary of this project, further ensuring their sustainability.

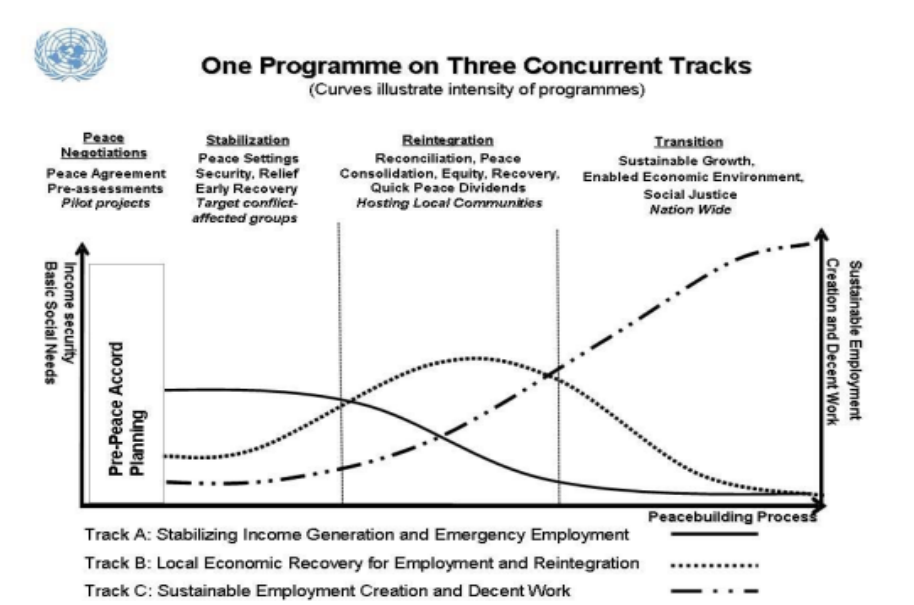
## **4.7. Impact**

An assessment of Impact focuses on the project goal and purpose to develop coastal capacities of communities through the sustainable harvesting and marketing of fisheries resources and the immediate and mid-term impact on direct beneficiaries through the project’s outputs.

The RSS project has had a significant and positive short term impact. While it would be premature to guarantee its long term impact as the activities are only recently completed, long term impact also seems likely. At the level of the project’s overall goal “to improve community based recovery programmes and local development capacities” the impact of the project’s outputs for the short to medium term appear high. For the fisheries sector this lies in the commencement of the modernisation of the industry with the construction of LS and the enhanced income generation opportunities this provides at the community level. Business development services provided by the women were also geared towards community development and an important “indirect” impact of the project could well be an enhanced role for women in the overall development of their communities.

If evaluated against the United Nations Policy for Post-Conflict Employment Creation, Income Generation and Reintegration (see Figure 15 below), the project can be paced in the context of the development curve commencing with very early project interventions implemented just after or during humanitarian crisis, to activities implemented by projects in an environment where stable economic growth and development is the norm.

**Figure 15: Intervention for peace building and income security**



The RSS project covers all three tracks of this continuum. The project was implemented in a way that immediate stabilising income generation and employment was a key outcome for direct beneficiaries, especially women. This was implemented through training to support the development of new or existing business associations either directly within or closely associated to the fisheries sector.

The provision of basic and in some cases advanced training enabled the majority of beneficiaries to either gain paid employment or become self-employed. FGDs, interviews with project partners and quantitative data indicated the project has provided income generation activities in the short term and has resulted in numbers of beneficiaries now becoming service providers in their own right. Through FGD it appeared that women were particularly empowered to set up small businesses as a result of the training.

Progress towards local economic recovery (LER) was also a strong focus of the project with a holistic emphasis not just on the material infrastructure required for economic recovery but in the development of business oriented service provision and local government-institutional support. Indications of sustained impact appear

positive with national and state government commitments towards supporting and further developing the sector (at both the policy and resource allocation level). A positive indication of this commitment is perhaps most clearly indicated by the government's priorities to expand the number of LS up and down the coast stating that "UNIDO has changed the face of the fisheries sector and clearly illustrated to them a clear path for the future". However, financial constraints remain a potential inhibitor and further external support seems necessary.

The project's impact towards sustainable employment creation in a framework of stable economic development cannot be evaluated at this time.

## **4.8. Crosscutting issues**

### **Environmental impact**

The project was aware of the potential environmental impact from the outset and this was referred to in the initial project document and the inception report. A specific environmental impact assessment (EIA) was undertaken during the construction of the LS in Suakin Mohamed Goal and Osief.

The assessment concluded that the majority of the project activities would have no significant impact on the physical environment with the impacts that might exist being easily mitigated by applying proper environmental operational standards.

Recommendations did suggest a specific approach be developed to manage and monitor the fishing effort and the condition of the stocks and the drafting of an environmental management plan (EMP).

A second EIA was being undertaken at the time of the independent evaluation whose ToR included identifying potentially adverse environmental effects stemming from the operation of the LS; determining the significance of these effects; and identifying and recommending measures to reduce or eliminate adverse effects. The second EIA is also expected to draft the EMP on mitigating measures to be implemented by the LS management which would also include Standard Operating Procedures (SOP), based on international best practices.

The longer term potential impact on the fisheries resources of the Red Sea was cited as a major environmental concern even though this was not likely to be a direct impact of the project. However an associated UNIDO project funded by Norway is likely to mitigate some of these concerns. The project "*Surveys of renewable marine resources in the RSS, Republic of Sudan*" commenced collecting data on fish resources through a marine resource assessment in 2013. The intention of this project was to further develop strategies to add value by moving from artisanal fishery towards semi industrial fisheries. With respect to environmental impact, however the focus is clearly on managing resources in a sustainable manner.

## **Social impact**

Determining the direct social impact of the project is not straightforward. The LF does not clearly define impact indicators, and to some extent the impacts of the project are still developing. Taking the increase in incomes and empowerment of women aside, as these are discussed separately, social impact can be considered as broadly effecting a behaviour change in traditional fishing practices.

The project document clearly alludes to the need to change longstanding relationships between traders (middlemen) and fishers. Traders were seen as the reason fishers earn lower incomes and the development of independent fishers associations was seen as the solution. To an independent observer it appears traders were seen a negative constraint to sustainable livelihoods.

Secondly the role of women in the fishing sector was minimal, fishing was very predominately a male occupation and women had little direct role.

Discussions with project management at all levels, project partners and beneficiaries themselves all indicated how difficult it was in practice to change these longstanding cultural “constraints”.

The project gained a better understanding of the traditional trading relationships during implementation and adjusted accordingly. With respect to the fishing cooperatives fishermen were reported to have a low level activity as reported by the MTR. During implementation it was ultimately necessary to involve traders more actively in the management of LS and cooperatives and the result of this was an increased utilisation of the LS. Additionally the role of traders in providing support services (such as medical loans) was also better understood.

Landing site activities are still overwhelmingly male preoccupations and the role of women in providing direct inputs to the value chain was enhanced but still relatively minimal (for example, fish marketing, processing and or packaging remained quite limited). Indirect support from women’s associations to the sector and communities as a whole, though still relatively small scale was, however, significantly enhanced.

The evident lack of substantial behaviour change evident to the evaluation is not assessed as a failure of implementation. Instead a disconnect between the initial project document and the inception report with the realities ‘on the ground’ are the cause. The fact that project management has been flexible and has adjusted its expectations and operations is, on the contrary, assessed as a positive and necessary step.

## Gender

An evaluation undertaken by the international gender consultant indicated the project had “*pushed, but not overstepped, cultural boundaries*”. The project self-assesses that working to extend cultural boundaries based on trust and transparency was a method that worked well and had the project insisted that women be directly involved in the fishery value chain, women would not have many of benefits they now enjoy.

It is independently evaluated that the project has had a very positive impact for women despite the fact they are not fully integrated into a specific value chain for fisheries. The women’s association were established in 2010 and were all registered by 2011. The success of these associations was highlighted in the MTR and the findings of the final evaluation do not differ.

The overall group training and the specific technical training and support in retailing, electrical generation, block making, gas (bottle) supply was highlighted as the main areas of technical intervention and success for the women’s associations.

Women particularly referred to the impact of increased awareness of health, the new income being generated and new skills such as food production and in some case the incentive to read and write. Beyond acquisition of technical skills and enhanced household income, the project interventions were reported to have effected a positive behaviour change among women. Women reported that while previously they “*were just staying at home waiting for the men to provide for them their daily needs*” now they were active in the wider community. Both women and men reported that women were now significantly more empowered and were earning incomes that contributed to important household costs. From FGD it was reported that they also felt more confident to speak about their rights and make decision in the household as they were now more financially independent from the men with an ability to contribute to household income.



## **5. Conclusions, recommendations & lessons learned**

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### **5.1. Conclusions**

The RSS project in Sudan was designed to assist the RoS in its efforts towards developing the local capacities of coastal people in the RSS through improving sustainable harvesting and marketing of fish. This fell within the Governments National Plan for 2012-2037 and the priorities for the development of fisheries and food processing.

Six outputs supported the project's goal and purpose and these were to enhance capacities of cooperatives and SMSEs, enhance the capacity of counterpart support institutions, enhance fisheries resource utilisation, develop three model associations, establish direct service providers to the sector and finally, the development of market infrastructure.

The project was the first of its kind in the RSS and had a significant and positive impact on the fisheries sector. The government and all relevant support organisations credited the project with changing the way fisheries resources were utilised, modernising the industry and providing a clear road map for the way ahead. The construction of modern LS with their associated unloading, sorting, cold storage, and some processing facilities has been paramount to this progress.

The capacity of the MFA has been enhanced, they have received training and equipment to better prepare them to support the fisheries sector, especially to monitor quality and through an associated project undertake a significant marine resource assessment. The daily management of the LS has been improved, especially since the expansion in quantities being landed at the LS. Oversight committees (the LAI) were formed and have been active in pursuing matters relevant to the fisheries sector. The MFA are now also proactively involved in LS management.

LS are becoming cost effective, self-supporting and are expected to independently cover their operating costs by the middle of 2014, especially since the introduction of fees and small business service provision to the LS. It was reported to the final evaluation that there were also more fishermen involved in fishing than previously, post-harvest waste had been reduced and this had a positive impact on incomes. Over 60 per cent of fishermen evaluated their income had increased specifically as a result of the LS construction.

Despite the independently evaluated success of the project there were some problems during planning and implementation. The role of traders had been

insufficiently considered during the establishment of the project and it was only when they became more involved in the project, relatively late during implementation, that the efficiency of the LS increased significantly. Fishermen's Cooperatives were difficult to work with and the project attempted, with some success, to offer an alternative to traditional cultural relationships.

Women's Cooperative development presented no such obstacle at the micro level; they were vocal, fully supportive of all the project inputs and had considerably increased their contribution to household expenses. Perhaps even more importantly they had become significantly empowered, independent and aware of their rights. The positive impact of the training was highlighted, particularly the support provided to women to generate additional household income. Women reported that the most important aspect of the training had been their ability to have some economic independence.

At the macro level, while there was some disconnect between the activities undertaken by the women's associations and the activities of the male fishers associations, women's associations were providing enhanced indirect support to the value chain.

## 5.2. Recommendations

Per requirements of the Evaluation Groups Terms of Reference (TOR), recommendations and lessons learned focus on UNIDO's cooperation with the RoS and RSS, particularly in the context of any future similar projects. Recommendations and lessons learned also consider the approach for a wider thematic evaluation of UNIDO's post-crisis projects and take full account of previous thematic UNIDO evaluations.

The following recommendations relate to UNIDO regarding **project identification and formulation**

- Objectives, outcomes and outputs in the preparation of LFs should be clear, must fully consider risks and potential constraints, and performance indicators should consider donor requirements. Changes made to the project plans and LFs should be duly recorded and agreed by stakeholders through an agreed monitoring and evaluation framework.
- The role of all partners as part of an integrated value chain should be analysed through stakeholder consultation.
- UNIDO should apply methodologies on conflict risk assessments and do no harm principles to new project proposals.

The following recommendations on **coordination and management** relate to UNIDO and the LAI.

- Ensure staff is not only technically competent, but also motivated and sensitive to the cultural and societal conditions in which they will be working. This could help reduce the potential for staff turnover.
- Provide further support for the association's consultant to continue working on reorganising the male fishers' cooperatives and enhance marketing.
- Finalise all TOR, arrangements and responsibilities of the MFA at the LS including physical and logistical requirements.

The following recommendations on **efficiency** relate particularly to UNIDO and the national project partners.

- Continue to improve LS' efficiency with a focus on quality control and marketing.

Recommendations on **effectiveness** relate to UNIDO.

- When projects collect baseline data, sufficient time and resources should be allocated to allow for a follow up basic survey on the effectiveness and short term impact of interventions as part of an ex post evaluation.

Recommendations regarding **sustainability and impact** to UNIDO and RoS include

- If LS fail to cover their cost of operation by 2014, the RSS Governor's office should be requested to help identify resources to meet the shortfall.
- To ensure sustainability it is recommended that UNIDO and the RoS actively continue to pursue further funding for a follow up phase.

### **Lessons learned**

- Involving all partners interested in or affected by the development of the value chain is likely to enhance both ownership and the overall implementation of a project.
- The role of women and the potential constraints they face as an integrated part of value chains needs to be analysed prior to the start of project activity.
- A project may enhance its efficiency, effectiveness, sustainability and impact if the traditional cultural norms and social and economic relationships are fully analysed and risks associated with challenging them are properly considered.
- Working with the entire community, particularly traditional leaders, can build a relationship of trust between the project and the beneficiaries.
- Increasing female economic opportunities may strengthen women's bargaining power within the household, leading to more cooperation among household members, potentially higher levels of welfare and indirect increases in their involvement in male business associations.

### 5.3. Lessons learned

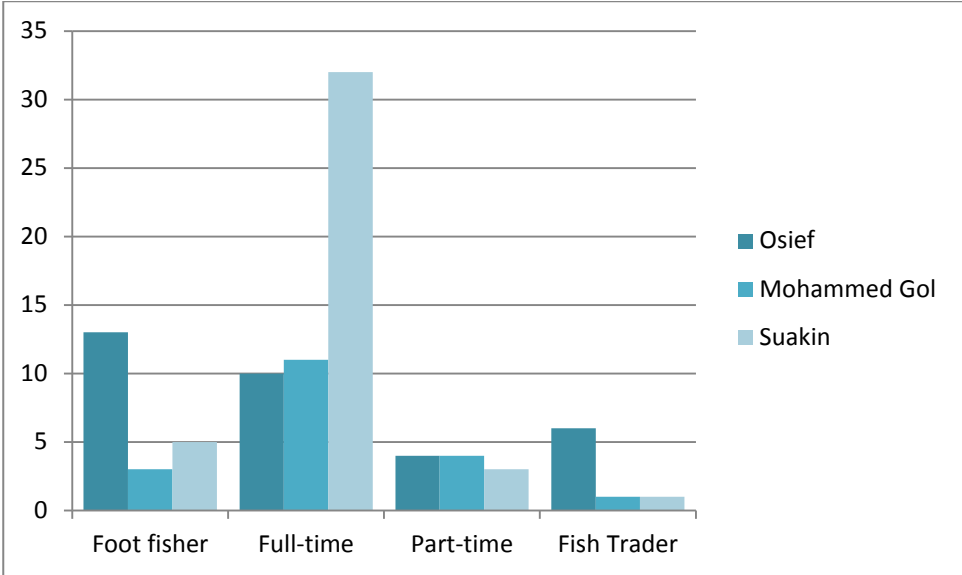
Part of the purpose of the RRS project evaluation in Sudan is to feed into and help shape the approach for a wider thematic evaluation of multiple post-crisis projects implemented by UNIDO. The intention is to help UNIDO shape its overall strategy in post-crisis settings, to further identify UNIDO's specific role and added value in supporting crisis-affected countries.

Based specifically on the findings of the RSS project evaluation it is recommended the thematic assessment pays due consideration to the following factors. These factors relate particularly to initial project formulation, effectiveness of implementation, impact and sustainability.

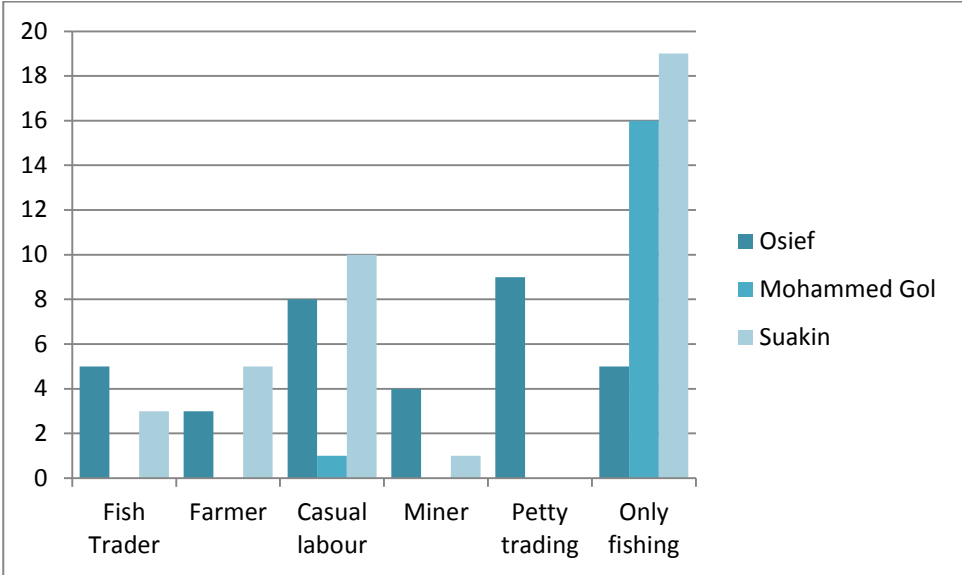
- Involving **all** partners interested in or affected by the development of the value chain is likely to enhance both ownership and the overall implementation of a project.
- A project may enhance its effectiveness, sustainability and impact if the traditional cultural norms and social and economic relationships are fully analysed and risks associated with challenging them are properly considered.
- Working with the entire community, particularly traditional leaders, can build a relationship of trust between the project and the beneficiaries.
- The role of women and the potential constraints they face as an integrated part of value chains needs to be analysed prior to the start of project activity.
- Increasing female economic opportunities may strengthen women's bargaining power within the household, leading to more cooperation among household members, potentially higher levels of welfare and indirect increases in their involvement in male business associations.

# Annex A: Additional Beneficiary Details

Type of Fishing (male)



Supporting activity to fishing (male)



# **Annex B: Project Evaluation - Terms of Reference**

**Independent final evaluation of the UNIDO-CIDA Project:  
“Recovery of Coastal Livelihoods in the Red Sea State of Sudan”**

**TF/SUD/09/002**

**Budget: US\$ 5,639,805**

**Donor: Canada (CIDA)**

**Period covered: March 2009 – November 2013**

## **1. INTRODUCTION**

In accordance with UNIDO TC Guidelines (which mandates independent evaluations for all projects over a €1 million threshold) an independent final evaluation of the Coastal Livelihoods recovery project is due before its planned completion in the final quarter of 2013.

In addition, this project evaluation was included in a wider thematic evaluation of UNIDO's post-crisis interventions due to its relevance to the theme. The thematic evaluation was mandated by the decision of the Programme Approval and Monitoring Committee (AMC) meeting on 10 December 2010 to cover a set of Japanese funded post-crisis interventions in 7 countries<sup>11</sup>.

What follows is the specific TOR for the project. It should be noted, however, that this TOR constitutes an annex to the wider post-crisis thematic evaluation TOR.

The evaluation mission is to be conducted during the final weeks of project implementation, in November 2013.

## **2. BACKGROUND AND CONTEXT**

The coastline of Sudan's Red Sea State (RSS) stretches for 750 kilometres and hosts the country's only port. The population of the RSS is approximately 1.4 million, of which just over half reside in the provincial capital city, Port Sudan. The majority of the population partake in agriculture and herding activities, while fishers in the RSS number roughly 2,000.

The project aimed to enhance the RSS' fishery sector, which remained under-developed.

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<sup>11</sup> The original list of countries was: DR Congo; Eritrea; Kenya; Liberia; Sierra Leone; Somalia; & Sudan. Later, Afghanistan was also added.

An Inception mission at the beginning of the project concluded that the main reasons for the under-development of the artisanal fishers sector and fishing communities as a whole is a combination of five main factors:

- (1) Weak organization of fishing associations
- (2) An absence of service providers to fishing associations:
- (3) Inadequate landing site and market site facilities:
- (4) Limited support from government institutions mandated to provide support to the fishing communities:
- (5) Limited knowledge regarding strategies of marketing fish products effectively and an absence of information concerning demand for fish products in Port Sudan and Khartoum.

The overall objective of the project is to increase incomes and improve livelihoods of the fishing communities in the RSS.

The main counterparts for the Project are the State Ministry of Industry; the RSS Ministry of Economic Affairs and Investment; and the RSS Ministry of Agriculture through the Marine Fisheries Administration. For collaboration on training projects, cooperation has been established with the Port Sudan Technical College and nationally recruited experts. In addition, the project cooperated with a wide range of associations and local government agencies.

### **3. PROJECT BUDGET**

Budget	USD 4,990,977.58
Total expenditure (as of end August 2013):	USD 4,657,827.35
Balance remaining:	USD 333,150.23

### **4. PURPOSE**

The main purpose of this project evaluation is two-fold:

1. Learning lessons in Port Sudan with a forward looking approach that can feed into future UNIDO cooperation with the State and Central Governments.
2. To identify best practices and lessons in UNIDO's post-crisis interventions.

The evaluation exercise will therefore help UNIDO shape its overall strategy in post-crisis settings with a comparative approach, and to further identify UNIDO's specific role and added value in supporting crisis-affected countries.

The report will be of interest to concerned UNIDO staff at HQ and the field, and UNIDO's Sudanese and Canadian counterparts.

## **5. METHODOLOGY AND SCOPE OF THE EVALUATION**

### **Methodology**

The evaluation will be carried out in keeping with agreed evaluation standards and requirements. More specifically it will fully respect the principles laid down in the “UN Norms and Standards for Evaluation” and Evaluation Policies of UNIDO.<sup>12</sup>

The evaluation will be carried out through analyses of various sources of information, including desk analysis, survey data, and interviews with counterparts, beneficiaries, partner agencies, donor representatives, programme managers and through the cross-validation of data.

While maintaining independence, the evaluation will be carried out based on a participatory approach, which seeks the views and assessments of all parties.

The evaluation team will consist of a national evaluation consultant and an international evaluator working under the guidance of the UNIDO evaluation manager in EVA/ODG.

### **Scope**

The evaluation will cover the full period of the project cycle, and include visits to all landing sites, the main cooperatives established, as well as key stakeholders in RSS and Khartoum.

The national and international consultants will be expected to visit the project sites and to conduct interviews with a wide range of stakeholders in the field before the end of November 2013, and to conduct representative sample surveys of beneficiaries over the main project locations including all 3 landing sites in RSS.

## **6. EVALUATION ISSUES AND KEY EVALUATION QUESTIONS**

An important area to focus on as part of the evaluation is the success of the project in altering a longstanding relation between fishers and traders, and how effectively the project design and interventions have supported the fishers reduce their dependence on local fish traders, and to find alternative production and market options to the traditional trader-fisher relationship. What were the challenges confronted when (attempting) to change the relationship?

A relevant question in the post-crisis context of the project is whether this approach of the project helps or hinders recovery efforts in the region with a ‘do no harm’ approach.

Similarly, the project had set ambitious gender targets that require close scrutiny for lessons learning, particularly as a mid-term review had provided positive assessments in this regard.

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<sup>12</sup> All documents available from the websites of the UN Evaluation Group: <http://www.uneval.org/>



The evaluation should focus on:

- the Associations as small-scale businesses;
- the material and financial benefits to members; and
- changes (if any) in the role of women (Association members) in relation to the sector and community as well as family.

The evaluation consultants will be expected to prepare a more targeted and specific set of questions and to design related survey questionnaires as part of the Evaluation Inception Report, and in line with the above evaluation purpose and focus descriptions.

The evaluation inception report should pay particular attention to the above two issues, and design and conduct specific surveys for the purpose.

In addition, crisis-related evaluation issues and questions are outlined in the main Thematic Post-Crisis TOR, to which this project evaluation TOR is an Annex.

As a general guide, the following issues and questions are expected to be included in the assessment:

#### Project identification and formulation

- The extent to which a participatory project identification process was applied in selecting problem areas and counterparts requiring technical cooperation support;
- Clarity and realism of the project's broader and immediate objectives, including specification of targets and identification of beneficiaries and prospects for sustainability within the context of a three-year 'crisis' framework;
- The feasibility of meeting the project's stated targets and objectives given its three-year duration;
- The extent to which lessons from earlier UNIDO projects in Sudan were taken on board in the formulation process including lessons and recommendations given on existing evaluation reports at the time;
- Relevance of the project to Sudan's post-crisis recovery priorities and needs including in the choice of beneficiary institutions and communities;
- Relevance of the project to the needs of target beneficiaries;
- Clarity and logical consistency between, inputs, activities, outputs and progress towards achievement of objectives (quality, quantity and time-frame);
- Realism and clarity in the specification of prior obligations and prerequisites (assumptions and risks);
- Realism and clarity of external institutional relationships, and in the managerial and institutional as well as security framework for implementation and the work plan;
- Likely cost-effectiveness of the project design, particularly within a 'UN joint project' framework;
- The appropriateness and relevance of UNIDO's foreseen role within a post-crisis country; and

- To what extent the project's design followed 'do no harm' principles, with an emphasis on assessing the project's impact on longstanding social and economic relations between fishers and traders.

#### Project ownership

- The manner in which beneficiaries were selected, and the extent of participation by the national counterparts and/or target beneficiaries;
- Whether the counterparts have been appropriately involved and were participating in the identification of their critical problem areas and in the development of technical cooperation strategies and are actively supporting the implementation of the project approach within a joint project framework;
- Counterpart contributions and other inputs have been received from the Government (including at the local level) as compared to the project document work plan.

#### Project coordination and management

- The extent to which the national management and overall field coordination mechanisms of the project have been efficient and effective;
- An assessment of crisis context-specific measures devised and put in place by UNIDO and the project managers, and related recommendations and lessons;
- The UNIDO-based management, coordination, quality control and input delivery mechanisms have been efficient and effective;
- Monitoring and self-evaluation has been carried out effectively, based on indicators for outputs, outcomes and objectives and using that information for project steering and adaptive management;
- Changes in planning documents during implementation have been approved and documented;
- Coordination envisaged with any other development cooperation programmes in the country has been realized and benefits achieved;
- Synergy benefits can be found in relation to other UNIDO and UN activities in the country; and
- The effect of and lessons from the institutional set-up on project implementation.

#### Efficiency of Implementation

Efficiency and adequacy of project implementation including: availability of funds as compared with budgetary inputs by both the donor and national component; the quality and timeliness of input delivery by both UNIDO (expertise, training, equipment, methodologies, etc.) and the Government as compared to the work plan(s); managerial and work efficiency; implementation difficulties; adequacy of monitoring and reporting; the extent of national support and commitment and the quality and quantity of administrative and technical support by UNIDO.

Assessment of whether the project approach represented the best use of given resources for achieving the planned objectives.

#### Effectiveness

The evaluation will include a full and systematic assessment of outcomes and outputs produced to date (quantity and quality as compared with work plan and progress towards achieving the immediate objectives.

This includes the relevance of the outputs produced and how the target beneficiaries use the outputs, with particular attention to gender aspects as well as capacity development plans and outcomes; as part of the outcomes, which have occurred or which are likely to happen through utilization of outputs.

The evaluation will also assess the contribution of the project to enhancing local recovery efforts in targeted regions.

#### Prospects for achieving the expected impact and sustainability:

Prospects for achieving the desired outcomes and impact and prospects for sustaining the project's results by the beneficiaries and the host institutions after the termination of the project, and identification of developmental changes (economic, environmental, social and institutional) that are likely to occur as a result of the intervention, and how far they are sustainable. This, inter alia, should include an assessment of local commitment at various levels to resource allocation for scaling up similar interventions, and an analysis of the impact of the project – and how these relate to and build on earlier UNIDO projects – in Sudan.

The likely impact that the project will have on the beneficiaries and the development of targeted value chains.

#### Recommendations for the next phase

Recommendations should include consideration of project sustainability, particularly with regard to the promotion of fishery sector, marketing of products and the development of targeted value chains within a crisis context.

It is expected that the report's recommendations would also cover pertinent issues such as management arrangements, procurement and financial procedures, timeliness of interventions, selection of beneficiaries, and prospects for sustainability in a crisis context.

Based on the above analysis the evaluation team will draw specific conclusions and make proposals for any necessary further action by the Government and/or UNIDO to safeguard a transition to sustainable development.

The mission will draw attention to any lessons of general interest in post-crisis settings, and in relation to the design and orientation of the aforementioned, planned thematic evaluation with a special emphasis on the gender aspects, results and lessons of the project.

## 7. MAIN DELIVERABLES AND TIMING

1. Presentation of preliminary results to project staff, counterparts and stakeholders in Port Sudan to collect feed-back;
2. Drafting of a final report with main findings, conclusions and recommendations for submission to UNIDO, which will be transmitted to all stakeholders and CIDA.

Activity	Location	Work days (International evaluator)	Work days (National Evaluator)	Deliverable
Desk study of project documents & relevant reports on the context & prepare inception report	Home- based	4	2	Inception report: comprising methodology, interview guidelines and survey questionnaires
Visit Vienna for preparatory meetings	Vienna	2	0	mission plan completed & agreed
Conduct field assessment including surveys	Khartoum (3 days) Red Sea State (12 days)	15	15	Presentation of preliminary findings for project counterparts and project unit
Debriefing and presentation of preliminary findings in UNIDO HQ	Vienna	2	0	Presentation on preliminary findings for UNIDO HQ
Detailed analysis of assessment results	Home- based	5	5	Draft survey report
Follow-up surveys & data analysis	Red Sea State	0	5	Final survey report
Preparation of first draft evaluation report & submission for UNIDO feedback	Home-based	12	10	First draft Report
Prepare second draft & submit to Evaluation Group to circulate report among stakeholders for factual verification & feedback	Home-based	5	2	Second draft Report
Finalization of report upon receipt of stakeholders' feedback and final presentation in Vienna	Home-based	1	0	Final draft Report
<b>Total</b>		<b>46</b>	<b>39</b>	

## **8. REPORTING**

The evaluation report shall follow the structure given in Annex 1.

Reporting language will be English.

Prior to the submission of the final report, a draft report will be submitted to all stakeholders for review and consultation. The consultation will also seek agreement on the findings and recommendations. The evaluation team will take the comments into consideration in preparing the final version of the report.

The evaluation will be subject to quality assessments by UNIDO Evaluation Group. These apply evaluation quality assessment criteria and are used as a tool for providing structured feedback. The quality of the evaluation report will be assessed and rated against the criteria set forth in the Checklist on evaluation report quality.

# Template of in-depth evaluation reports

## Table of Contents

Acknowledgements

Acronyms and Abbreviations

Glossary of Evaluation Terms

Map

Executive Summary

### 1. Introduction and background

#### 1.1 Introduction

1.2 Background (include a project factsheet, project formulation process, project structure, objectives, donors (and their specific requirements/objectives, e.g. the relevant fund's priorities and guidelines) counterparts, timing, cost etc – everything that is not an 'assessment' and provides background to make the reader understand what the project was/is about without delving into details of LogFrame design and management – the background to design and management should come under the assessment chapter.)

### 2. Evaluation purpose, scope and methodology

#### 2.1 Purpose

#### 2.2 Scope

#### 2.3 Methodology

#### 2.4 Limitations of the evaluation

### 3. Region/country/programme context

3.1 Overall situation and trends (national and regional context, especially as relevant to project area)

3.2 Government strategies and Policies (including local and regional, as relevant)

3.3 UN frameworks (talk about the UNDAF and where the project fits here)

3.4 Initiatives of international cooperation partners (describe relevant info on what other donors are doing)

### 4. Assessment

4.1 Design (include logframe assessment)

4.2 Management (include details of arrangements and make an assessment)

4.3 Relevance and ownership

4.4 Efficiency

4.5 Effectiveness (include a table giving actual status of Outputs and Outcomes against the project Logframe)

4.6 Sustainability

4.7 Impact

4.8 Crosscutting issues (gender, environmental sustainability, South/South cooperation, contribution to international development goals)

5. Conclusions, recommendations and lessons learned

5.1 Conclusions

5.2 Recommendations

5.3 Lessons learned

Annex A. Terms of Reference

Annex B. Organizations visited and persons met

Annex C. Bibliography

Annex D. Logframe

Annex E. Evaluation Matrix

Annex F. Interview Guidelines Etc.





## UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

### TERMS OF REFERENCE FOR PERSONNEL UNDER INDIVIDUAL SERVICE AGREEMENT (ISA)

<b>Title:</b>	Evaluation expert
<b>Main Duty Station and Location:</b>	Home-based
<b>Mission/s to:</b>	Sudan (Khartoum and the Red Sea State) & Vienna
<b>Start of Contract (EOD):</b>	1 Nov 2013
<b>End of Contract (COB):</b>	31 Dec 2013
<b>Number of Working Days:</b>	46 (over the above period)

#### **ORGANIZATIONAL CONTEXT**

In March 2009, the (then) Canadian International Development Agency (CIDA) and UNIDO signed a Grant Agreement for USD 4,687,240 for the development of the artisanal fishery sector in the Red Sea State of Sudan. The original planned duration of the project was 30 months. Two no-cost six-month extensions were provided to the project. The project will conclude 31 December 2013.

The project falls under the UNIDO Theme: Community empowerment, income generation and poverty alleviation, private sector development.

The main counterparts for the Project are the State Ministry of Industry; the RSS Ministry of Economic Affairs and Investment; and the RSS Ministry of Agriculture through the Marine Fisheries Administration. For collaboration on training projects, cooperation has been established with the Port Sudan Technical College and nationally recruited experts.

#### **Main duties**

The main objective of the final evaluation is to make an overall assessment of the effectiveness and efficiency with which the project has been implemented and, in particular, to provide a detailed assessment of the achievements made and overall results obtained. The evaluation shall specifically focus on comparing the actual outputs and outcomes of the project with the ones originally planned in the project document.

The consultant will work under the overall supervision and guidance of the UNIDO Evaluation Manager at ODG/EVA.

<b>Activity</b>	<b>Location</b>	<b>Work days</b>	<b>Deliverable</b>
Desk study of project documents & relevant reports on the context & prepare inception report	Home-based	4	Inception report: comprising methodology, interview guidelines and survey questionnaires
Visit Vienna for preparatory meetings	Vienna	2	Mission plan completed & agreed
Conduct field assessment including surveys	Khartoum (3 days) Red Sea State (12 days)	15	Presentation of preliminary findings for project counterparts and project unit
Debriefing and presentation of preliminary findings in UNIDO HQ	Vienna	2	Presentation on preliminary findings for UNIDO HQ
Detailed analysis of assessment results	Home-based	5	Draft survey report
Follow-up surveys & data analysis	Red Sea State	0	Final survey report
Preparation of first draft evaluation report & submission for UNIDO feedback		12	First draft Report
Prepare second draft & submit to Evaluation Group to circulate report among stakeholders for factual verification & feedback		5	Second draft Report
Finalization of report upon receipt of stakeholders' feedback and final presentation in Vienna		1	Final draft Report
<b>Total</b>		<b>46</b>	

## **MINIMUM ORGANIZATIONAL REQUIREMENTS**

### **Education:**

Advanced university degree in social science, economics, political science or evaluation, international development studies, project planning/management, or other relevant discipline

### **Technical and Functional Experience:**

At least 10 years of relevant working experience in international development projects including 2 years practical experience in the field of evaluation including experience at the international level involving technical cooperation in developing countries.

Exposure to the needs, conditions and problems in developing countries.

### **Languages:**

Fluency in written and spoken English is required.

Knowledge of Arabic an asset.

## **REQUIRED COMPETENCIES**

Core values:

1. Integrity
2. Professionalism
3. Respect for diversity

Core competencies:

1. Results orientation and accountability
2. Planning and organizing
3. Communication and trust
4. Team orientation
5. Client orientation
6. Organizational development and innovation



## UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

### TERMS OF REFERENCE FOR PERSONNEL UNDER INDIVIDUAL SERVICE AGREEMENT (ISA)

<b>Title:</b>	National evaluation consultant
<b>Main Duty Station and Location:</b>	Home-based
<b>Mission/s to:</b>	Sudan (internal travel to Khartoum and/or the Red Sea State)
<b>Start of Contract (EOD):</b>	1 Nov 2013
<b>End of Contract (COB):</b>	31 Dec 2013
<b>Number of Working Days:</b>	39 (over the period above)

#### **ORGANIZATIONAL CONTEXT**

In March 2009, the (then) Canadian International Development Agency (CIDA) and UNIDO signed a Grant Agreement for USD 4,687,240 for the development of the artisanal fishery sector in the Red Sea State of Sudan. The original planned duration of the project was 30 months. Two no-cost six-month extensions were provided to the project. The project will conclude 31 December 2013.

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The main counterparts for the Project are the State Ministry of Industry; the RSS Ministry of Economic Affairs and Investment; and the RSS Ministry of Agriculture through the Marine Fisheries Administration. For collaboration on training projects, cooperation has been established with the Port Sudan Technical College and nationally recruited experts.

#### **Main duties**

The main objective of the final evaluation is to make an overall assessment of the effectiveness and efficiency with which the project has been implemented and, in particular, to provide a detailed assessment of the achievements made and overall results obtained.

The evaluation approach and other details are given in the project evaluation TOR, to which this Job Description is an annex.

The evaluation shall specifically focus on comparing the actual outputs and outcomes of the project with the ones originally planned in the project document.

The consultant will work closely with and report to an international evaluation expert to be recruited by the UNIDO Evaluation Manager at ODG/EVA, and will work under the latter's overall supervision and guidance.

<b>Activity</b>	<b>Location</b>	<b>Work days</b>	<b>Deliverable</b>
Desk study of project documents & relevant reports on the context & prepare inception report	Home-based	2	Inception report: comprising methodology, interview guidelines and survey questionnaires
Conduct field assessment including surveys	Khartoum (3 days) Red Sea State (12 days)	15	Presentation of preliminary findings for project counterparts and project unit
Detailed analysis of assessment results	Home-based	5	Draft survey report
follow-up surveys & data analysis	Red Sea State	5	Final survey report
Preparation of first draft evaluation report & submission for UNIDO feedback		10	First draft Report
Prepare second draft & submit to Evaluation Group to circulate report among stakeholders for factual verification & feedback		2	Second draft Report
<b>Total</b>		<b>39</b>	

#### **MINIMUM ORGANIZATIONAL REQUIREMENTS**

**Education:** Advanced university degree in social science, economics, political science or evaluation, international development studies, project planning/management, or other relevant discipline

**Technical and Functional Requirements and Experience:**

- Sudanese national
- Experience in evaluation or work with UN projects

- Experience in project surveys, monitoring & evaluation
- Good report writing skills

**Languages:**

- Native Arabic speaker. Knowledge of the *Bija* language is an asset.
- Fluency in written and spoken English

**REQUIRED COMPETENCIES**

Core values:

1. Integrity
2. Professionalism
3. Respect for diversity

Core competencies:

1. Results orientation and accountability
2. Planning and organizing
3. Communication and trust
4. Team orientation
5. Client orientation
6. Organizational development and innovation

## Annex C: Project Logical Framework

(Developed from: Project mid-term review report of Oct 2012 by René Fréchet)

Goal/Purpose/Output (from the original log frame)	Original Deliverables (from the original log frame)	Re-assessed Deliverables (Oct 2011)	Justification	Situation as of Oct 2012
<p><b>PROJECT GOAL</b></p> <p>Improved community-based recovery programs and local development capacities of coastal people of Red Sea State (RSS) in the Sudan.</p>	<p><b>PERFORMANCE INDICATORS</b></p> <p>Minimum of 20% increase in family incomes of the beneficiaries</p>	<p>A minimum of 60% of direct and indirect beneficiaries report a significant improvement in:</p> <ul style="list-style-type: none"> <li>- Income and / or</li> <li>- Work based capacity and/ or</li> <li>- Artisanal sector development</li> </ul>	<p>The new deliverables better reflect the goal and objectives of the project.</p>	<p>To be determined at the conclusion of the project.</p>
<p><b>PROJECT PURPOSE</b></p> <p>Improved and sustainable harvesting and marketing of fisheries</p>	<p><b>PERFORMANCE INDICATORS</b></p> <p>Production and marketing of fresh and processed fish increased to 1600 tons per annum from the current level of maximum 600 tons per-annum</p>	<p>No change</p>		<p>Only one LS (Suakin) started to process approximately 100 kg per day, with a slight increasing trend.</p>
<p><b>Output 1</b></p> <p>Cooperatives, consisting of a) fishermen and b) micro and small scale informal enterprises, organized and qualified in business management and legally</p>	<p><b>Performance indicators</b></p> <p>Minimum of 18 cooperatives with minimum 1200 members established or strengthen organizationally and operate as a business enterprise</p>	<p>3 major, focal fishing cooperatives, with 500 members established or strengthened organizationally and operating as a business enterprise</p> <p>8 other satellite fishing communities /</p>	<p>Project management and dynamics of situation</p>	<p>3 major fishing coops established. Total membership of 362.</p>

Goal/Purpose/Output (from the original log frame)	Original Deliverables (from the original log frame)	Re-assessed Deliverables (Oct 2011)	Justification	Situation as of Oct 2012
registered as business enterprises.	Minimum of 200 of the members of management of the cooperatives are trained in the management of the cooperatives and group dynamics and effectively manage the cooperatives as business enterprise	<p>groups received basic organizational training to link to focal points.</p> <p>Minimum of 150 of the members of management of the fishing cooperatives are trained in the management of the cooperatives and group dynamics and effectively manage the cooperatives as business enterprise</p> <p>3 Women's business development associations are established in focal fishing communities with 300 members and are established or strengthened organizationally and operating as a business enterprise</p> <p>Minimum of 150 of the members of the micro-enterprises are trained in business management of the associations and group dynamics and effectively manage the associations as business enterprise</p>	suggest the need to de-aggregate project document figures	<p>8 other??</p> <p>58 members have received a training course on management of the fishing cooperatives and group dynamics</p> <p>3 Women's Business Associations are established and are operational in focal fishing communities.</p> <p>579 members<sup>13</sup> have been trained in business management of the associations and group dynamics and effectively manage the associations as business enterprise</p>

<sup>13</sup> The number is based on the number of participants in each training. The same individual may have attended more than one training course.



Goal/Purpose/Output (from the original log frame)	Original Deliverables (from the original log frame)	Re-assessed Deliverables (Oct 2011)	Justification	Situation as of Oct 2012
<p><b>Output 2</b></p> <p>The capacity of the staff (extension and outreach workers) counterpart institutes in the RSS built to continuously train and provide support to the cooperatives enhanced</p>	<p><b>Performance indicators</b></p> <p>A minimum of 20 dedicated extension workers are selected in participatory way</p> <p>A minimum of 20 extension workers/ trainers can provide organizational, technology and marketing and sustainable fishing services, including the environment and marine resources conservation and training to the community continuously</p>	<p>No change</p>		<p>41 extension workers/ trainers have been trained by the project in various fields relevant to the project, such as organizational, technology and marketing and sustainable fishing services.</p>
<p><b>Output 3</b></p> <p>Members of the cooperatives are qualified in different fisheries resources utilization, appropriate technology, entrepreneurship, hygienic and food safety issues and other auxiliary activities of their area of interest</p>	<p><b>Performance indicators</b></p> <p>At least 1600 members of the cooperatives can perform different activities in the cooperatives for sustainable, profitable production and marketing of fisheries resources for local and regional markets</p>	<p>At least 700 fishermen are trained in hygienic and food safety issues (including on-board) and employ new knowledge</p> <p>At least 350 auxiliary activity actors trained in their area of interest</p>	<p>Project management and dynamics of situation suggest the need to de-aggregate project document figures. With 1,300 fishermen</p>	<p>??</p>

Goal/Purpose/Output (from the original log frame)	Original Deliverables (from the original log frame)	Re-assessed Deliverables (Oct 2011)	Justification	Situation as of Oct 2012
			registered, original figures are unrealistic.	
<p><b>Output 4</b></p> <p>Three model cooperatives are upgraded in terms of appropriate and environmentally sound technology such as cold store, refrigerated truck etc.</p>	<p><b>Performance indicators</b></p> <p>Equipment installed and operating and hands-on training to the cooperative members provided.</p>	<p>No change except in provision of cold storage aspects</p>	<p>Trucks already provided by government</p>	<p>3 cooperatives have been established and LS are operational.</p>

Goal/Purpose/Output (from the original log frame)	Original Deliverables (from the original log frame)	Re-assessed Deliverables (Oct 2011)	Justification	Situation as of Oct 2012
<p><b>Output 5</b></p> <p>Micro and small enterprises service providers (individual businesses) are organized trained and upgraded to provide services for the cooperatives such as ice production, cold store maintenance service, fish salting, drying and packaging, maintenance of fishing boats and motors and waste recycling and disposal such as using fish waste digesters and compost production systems</p>	<p><b>Performance indicators</b></p> <p>At least two small or micro enterprises per activity such as ice production, maintenance services, fish drying, salting, transport and marketing etc. are established and are able to link with fishing cooperatives and provide their services and products to the local and regional market.</p>	<p>Activities identified</p> <p>Appropriate number (based on demand and markets) of SMEs are established per activity and operating</p>		<p>Various micro-enterprises have been established, mainly under the Women's Associations.</p> <p>15 individuals have received marine engine repair/maintenance and small-business operation training.</p> <p>9 individuals have received fish trap construction training.</p>
<p><b>Output 6</b></p> <p>Market infrastructure such as landing sites and new market places are established or upgraded.</p>	<p><b>Performance indicators</b></p> <p>Market infrastructure in place and operational</p>	<p>No change</p>		<p>3 landing sites have been constructed and fully equipped.</p>

## Annex D: Progress Report against the CIDA PMF

The following section is based on the outcomes established by the CIDA PMF and their associated targets. Targets of the CIDA PMF have been harmonised with the project deliverables of the UNIDO LF. Figures provided have been updated where possible from the progress report to the PSC of June 2013 and the findings of both the MTR and the independent evaluation.

### **ULTIMATE OUTCOME (Long term): Improved community-based recovery programs and local development capacities of coastal people of Red Sea State in the Sudan.**

**Target:** *A minimum of 60 per cent of direct and indirect beneficiaries report a significant improvement in:*

- *Income and/or*
- *Work based capacity and/or*
- *Artisanal sector development*

**Current Result:** Until a full survey of all direct and indirect beneficiaries is undertaken this target will remain immeasurable. Additionally the term “significant” cannot be quantified. However, from the findings of the independent evaluation both men and women reported increases in income and work based development. All women interviewed indicated their capacity to undertake small businesses was greater than before the project.

Interviews with Ministries and project partners all indicated a positive development of the Artisanal sector with a professionalization and modernisation of the fisheries sector. This was a result of training, study tours, new equipment and the construction of new infrastructure.

### **INTERMEDIATE OUTCOMES (Medium term) 1: Strengthened market-oriented human resource base that can utilize fisheries resources in a sustainable manner and minimize post-harvest losses.**

**Target:** *Minimum of 20 per cent increase in family incomes of the beneficiaries.*

#### **Result:**

Just under 61 per cent of male fishers reported their income had increased specifically because of the UNIDO project and 23 per cent indicated an increase of more than 50 per cent. A broad overview of the figures provided by women indicated their incomes had either doubled or tripled well in excess of the 20 percent target. More than 90 per cent of women interviewed had increased their income. Although increases in exact household incomes would need to be measured against a baseline, female contribution to household expenditure had increased for food, health, and education. The largest category reported they were reinvesting money in their business.

### **INTERMEDIATE OUTCOMES (Medium term) 2: Improved market infrastructures for fisheries products developed through establishment of profitable small and micro fishing, processing, and marketing and other support businesses.**

**Target:** *Three landing sites established and used by the community and 1,600 tonnes per annum of fresh and processed fish.*

**Result:** Three modern landing sites have been established and basic market infrastructure has been developed in the landing sites and at Sigala market. According to the MTR based on interviews at the Sigala market, about 1,090 tonnes per annum is taken from the Red Sea. Of this, about 42 tonnes passed through the Suakin landing site in six months. It would appear the target of 1,600 tonnes is unreasonably high as it exceeds the total caught for the entire red sea.

According to latest available figures provided to the PSC as of May 2013, 127 tonnes of fish had been landed through the LS. If the MTR figures are used, the LS account for just less than 12 per cent of the entire catch for the whole fisheries industry of the RSS.

Additional support businesses, such as ice production have been created and are profitable.

### **INTERMEDIATE OUTCOMES (Medium term) 3: More equitable access by women to the productive sector.**

**Target:** *200 female beneficiaries reporting increased participation in productive sector.*

#### **Result:**

Five women's business associations have been created including 533 members in total. All have received small scale business management related training. Women are involved in the association-operated businesses that are doing very well in each community

### **IMMEDIATE OUTCOMES (Short term) 1.1: Established/ strengthened ability of fishing cooperatives and micro and small scale enterprises to participate as new market actors.**

#### **Target:**

- *3 cooperatives established*
- *Minimum of 150 members trained in cooperative management.*
- *Bylaws are drafted for each cooperative and members demonstrate knowledge of bylaws.*
- *At least 20 members of management of the cooperatives are trained in the management of the cooperatives and group dynamics and effectively manage the cooperatives as business enterprises.*

**Result:** based solely on targets, the targets have been mostly met. The model cooperatives have been established, 58 members have received a training course on management of the fishing cooperatives and group dynamics and bylaws have been drafted.

Despite initial constraints in the operation and membership services provided by the cooperatives the situation has improved. Cooperatives are in some cases providing revolving funds to their members (Suakin), renting equipment and purchasing fish from foot fishers. The development of a small ice making business in Mohammed Gol has helped to consolidate the Cooperative.

**IMMEDIATE OUTCOMES (Short term) 1.2: Enhanced capacity of 20 staff (male and female, extension and outreach workers) counterpart institutions in the Red Sea State to continuously train and provide support to the cooperatives.**

*Target: 20 extension workers trained*

Result: the project has trained government staff from the MFA, Ministry of Health and municipal employees. 41 extension workers/ trainers have been trained by the project in various fields relevant to the project, such as organizational, technology and marketing and sustainable fishing services. This has included study tours and study courses abroad. The MFA is utilising the knowledge and skill gained during training and will be participating in a related marine resource assessment. Additionally, MFA staff are permanently based at each landing site and share office space with the landing site managers. Data collection sheets for cooperative tonnage landed are in use.

**IMMEDIATE OUTCOMES (Short term) 1.3: Increased ability of 18 fisheries business associations (and cooperatives) to undertake different fisheries resources utilization, fish processing and preservation technology, entrepreneurship, hygienic and food safety issues and other auxiliary activities of their area of interest.**

*Target:*

- *3 major, focal fishing cooperatives, with 500 members are established or strengthened organizationally and operate as a business enterprise.*
- *8 satellite fishing communities/groups receive basic organizational training to link to focal points.*
- *Minimum of 150 of the management of the cooperatives received management training and help effectively manage the cooperatives as business enterprises.*
- *3 women's business associations are established in focal fishing communities with a minimum of 300 members total. They should operate as business enterprises.*
- *A minimum of 150 micro-enterprise owners are trained in business management of the association and group dynamics and effectively manage the associations as business enterprises.*

**Results:** Three fishers associations created with 755 members in total. According to their records there are 160 registered in Osiaf, 200 in Mohamed Gol and 395 in Suakin. 1,175 trainings in management and technical training have been provided. No satellite cooperatives were established although some women's associations are providing services related to the fisheries sector.

Five women associations have been established with a total registration of 533 women. 921 trainings have been provided related to group management, financial management and micro-enterprise operation.

**IMMEDIATE OUTCOMES (Short term) 2.1: Increased ability of three model associations to face new market demands and solve common problems.**

*Target: Three model associations established*

**Results:** Three cooperatives were established.

**IMMEDIATE OUTCOMES (Short term) 2.2: Increased capacity of 12 micro and small enterprises services providers (individual businesses to provide service such as ice production, cold store maintenance service, fish salting, drying and packaging, maintenance of fishing boats and motors, in an environmentally friendly way.**

**Target:** Each landing site and /or cooperative creates demand for at least 3 micro-enterprises.

**Result:** The ice factory is operational in Mohamed Gol, covering its costs, employing two people and contributing profit to subsidizing the landing site. Ice Factories in Suakin and Osief are under construction. They will be owned by the LS, but operated as a separate business. Cold store facilities are being constructed in Port Sudan and are planned for each LS. These will also be owned by the LS, but operate as separate businesses.

Women from the association in Suakin purchase fish from the landing site and sell it to people in the area of the association. Plans for a small goods shop and a marine engine repair shop at each site remain outstanding and will be the responsibility of the Association.

**IMMEDIATE OUTCOMES (Short term) 2.3: Increased access to new market places in 3 different urban areas.**

**Target:** Retail market sales are available at each of the landing sites.

**Result:** As reported in the MTR, retail fish sales still occur at the Suakin landing site and the focus remains on wholesale. Fish that is not part of a larger consignment is sold to local consumers. Fish is also available at the Osief landing site, although the distance from the town city limits the people being able to buy fish there more often. In Mohamed Gol, fish is sold almost entirely to fish traders.

**IMMEDIATE OUTCOMES (Short term) 3.1: Increased access by women to skills, training and employment opportunities.**

**Target:**

- *3 women's business associations are established in focal fishing communities with a minimum of 300 members in total. They should operate as business enterprises.*
- *A minimum of 150 micro-enterprise owners are trained in business management of the association and group dynamics and effectively manage the associations as business enterprises.*

**Result:** Five women associations have been established: Suakin, Mohammed Gol, Osief, Dunganab Bay and Arkayai. The total number of women who have registered is 533. 921 trainings have been provided in total. All associations received multiple training courses on group management, financial management and micro-enterprise operation, received tools and equipment and created micro-enterprises. Funds were independently supplied by the UK Embassy to initiate a revolving loan scheme for each association for members to establish home-based micro-enterprises. According to the women's associations they operate as business enterprises and are now capable to operate independently.

## Annex E: List of individuals interviewed

Name	Job title/Position in company/organisation	Name of company/organisation
<b>Vienna</b>		
Dejene Tezera	Programme Manager, RSS Project	UNIDO Vienna
Andrew Goodwin	Consultant, RSS Project Agri-Business Development Branch	UNIDO Vienna
Cristobal Vignal	International Consultant	Vienna
Massoud Hedeshi	Evaluation Officer, UNIDO Evaluation Group	UNIDO Vienna
<b>Khartoum, Sudan</b>		
Khaled El Mekwad	UNIDO Representative Sudan - Djibouti - Yemen	UNIDO Sudan
Ahmed Gamer	Administration & Finance Officer	UNIDO Sudan
Aazabadri Abdalla	National Liaison Project Officer	Ministry of Industry (UNIDO Sudan)
Dominique Rossetti	Charge d'Affaires	Canadian Embassy Sudan
Natalie Boucly	Head UN Coordination Support Office	UNDP Sudan
Limyaa Elnur	Director, Department of External Relations	Ministry of Industry
<b>Red Sea State, Sudan</b>		
Wigdan Al Qassy	Chief Technical Advisor	UNIDO RSS Project
Yasir Elfiel	National Project Consultant	UNIDO RSS Project
Afaf Hamid Nour	Gender Consultant	UNIDO RSS Project
Sayed Dabaloub	Associations Development Consultant	UNIDO RSS Project
Zainab Mohamed Osman	National Consultant	UNIDO Evaluation Group
Ahmed Hadal	Landing Site Manager, Osief	UNIDO RSS Project
Ahmed Adau	Landing Site Manager, Mohamed Gol	UNIDO RSS Project
Ahmed Taher	Director (Project Focal Point)	General Dept. of Industry
Ibrahim Abu- Fatima abdu allah	Minister	Ministry of Agriculture
Osman M Ahmed	Minister	Ministry of Economic Affairs and Investment
Abdallahman Baled	Minister of Health	Ministry of Health
Ahmed Ali Ali	Chairperson Suakin	Leginet al Ishraf (LAI- Supervision Committee of the



Name	Job title/Position in company/organisation	Name of company/organisation
		Landing Site
Mohamed Ali	Chairman Suakin fisheries association	LAI
Jelani Mohamed Abuali	Head of Suakin cooperative	LAI
Mohamed Halieb	Osief, community leader	LAI
Hassan Moneep	Fisheries representative	PSC
Said Jumaa	Director	Marine Fisheries Administration
Hammad Tokulia	Deputy Manager	Marine Fisheries Administration
Abdalla Osman Ahmed	Head of Aquaculture	Marine Fisheries Administration
Dia Abdelsalam Yousuf	Fisheries Inspector	Marine Fisheries Administration
Alsha Fia Bahloul	Fisheries Inspector	Marine Fisheries Administration
Mohammed Mirghani Attia	Fisheries Inspector	Marine Fisheries Administration
Khalid Hamid Ahmed	Fisheries Inspector	Marine Fisheries Administration
Mohammed Ohay Mohammed	Fisheries Inspector	Marine Fisheries Administration
Maghoub Ali Babaker	Dean of College	Port Sudan Technical training College
Mustafa Babekir Eltaieb	Trainer, Mechanical Department	Port Sudan Technical training College
Ali Beraw	Independent Fish trader	Sagala market
60 males*	Suakin	Suakin Fishing Cooperative **
47 females	Suakin	Friends of fisheries, Women Development Association
17 males	Mohamed Gol	Mohamed Gol Fishing Cooperative
27 females	Mohamed Gol	Friends of fisheries, Women Development Association
12 males	Osief	Osief Fishing Cooperative
33 females	Osief	Friends of fisheries, Women Development Association

\*Beneficiaries and participants in FGDs were too numerous to mention by name

\*\* Members of the fishing cooperatives included additional representatives of the oversight committee, the LAI

## Annex F: Questionnaires and guide for FGD for beneficiaries

### Questionnaire for Fishers (men associations)

Information about You		
1. How old are you?		
2. Level of education?	<input type="checkbox"/>	No formal education
	<input type="checkbox"/>	Formal Primary School Education (6-14 years)
	<input type="checkbox"/>	Formal Secondary Education (15-18 years)
	<input type="checkbox"/>	Formal Tertiary Education (University)
3. What type of fisher are you?	<input type="checkbox"/>	Foot fisher
	<input type="checkbox"/>	Full-time
	<input type="checkbox"/>	Part-time
	<input type="checkbox"/>	Fish trader
4. If you have another job as well as fishing what is it?	<input type="checkbox"/>	Fish Trader
	<input type="checkbox"/>	Farmer/agriculture
	<input type="checkbox"/>	Casual labour
	<input type="checkbox"/>	Mining
	<input type="checkbox"/>	Petty trading
	<input type="checkbox"/>	No other job
About Your Situation before the UNIDO Training		
5. Did you receive any other vocational training before the UNIDO/ Training?	Yes	<input type="checkbox"/>
	No	<input type="checkbox"/>
6. What was your job before the landing sites were	Fisher/ Trader	<input type="checkbox"/>

built?	Farmer/agriculture	<input type="checkbox"/>
	Casual labour	<input type="checkbox"/>
	Mining	<input type="checkbox"/>
	Petty trading	<input type="checkbox"/>
	No job	<input type="checkbox"/>
<b>Training</b>		
7. What type of UNIDO training did you receive? <i>You may tick more than one box</i>	Fish handling	<input type="checkbox"/>
	Fishing Techniques	<input type="checkbox"/>
	Food Safety	<input type="checkbox"/>
	Engine Maintenance	<input type="checkbox"/>
	Cooperative Management	<input type="checkbox"/>
	Fish Marketing	<input type="checkbox"/>
	Landing Site Management	<input type="checkbox"/>
	Other please specify	<input type="checkbox"/>
8. If you received training were you satisfied	Very Satisfied	<input type="checkbox"/>
	Satisfied	<input type="checkbox"/>
	Not Satisfied	<input type="checkbox"/>
9. If NOT SATISFIED STATE WHY		
10. How would you rate the trainers' ability to teach you?	Very Good	<input type="checkbox"/>
	Good	<input type="checkbox"/>
	Not Good	<input type="checkbox"/>
<b>About Your Situation after the Landing Sites</b>		
11. Has the training you received so far improved the quality of your skills	Big improvement	<input type="checkbox"/>
	Medium improvement	<input type="checkbox"/>
	small improvement	<input type="checkbox"/>
	No improvement	<input type="checkbox"/>
12. Do you believe your new skills help you integrate better in your local economy?	Yes	<input type="checkbox"/>
	No	<input type="checkbox"/>
	Don't Know	<input type="checkbox"/>
13. Do you think you can train other people with the skills you have learned?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
14. Has the training helped to reduce your post	Yes <input type="checkbox"/>	No <input type="checkbox"/>

post-harvest losses?	
15. Do you think more people are fishing since the landing sites were completed	Yes <input type="checkbox"/> No <input type="checkbox"/>
<b>NEW OR IMPROVED FACILITIES</b>	
16. Did your income from fishing increase specifically because of the Landing site and other facilities?	Yes <input type="checkbox"/> No <input type="checkbox"/>
17. Has your post-harvest loss decreased as a result of the new landing site	Yes <input type="checkbox"/> No <input type="checkbox"/>
18. If your income increased because of the UNIDO project, please estimate by how much more?	<input type="checkbox"/> 0-10% more than before <input type="checkbox"/> 11-25% more than before <input type="checkbox"/> 26-50% more than before <input type="checkbox"/> 51-75% more than before <input type="checkbox"/> 76-100% more than before
19. When you land your fish, what percentage of your money earned do you have to pay back to the trader (for boat rental etc)	<input type="checkbox"/> 0-10 <input type="checkbox"/> 11-25% <input type="checkbox"/> 26-50% <input type="checkbox"/> 51-75% <input type="checkbox"/> 76-100%
20. Are you selling your catch at a higher price since the landing sites were built	Yes <input type="checkbox"/> No <input type="checkbox"/>
21. If you are selling your catch at a higher price since the landing sites was built please indicate why. <i>You can tick more than one box</i>	<input type="checkbox"/> Higher quality <input type="checkbox"/> More demand for fish <input type="checkbox"/> Bigger catch <input type="checkbox"/> Reduced expenditure (e.g. transport)
<b>NEW OR IMPROVED FACILITIES</b>	
22. How useful do you think the new landing sites and other facilities are to the fishery sector?	Essential <input type="checkbox"/> Very useful <input type="checkbox"/> Partially useful <input type="checkbox"/>

	Not useful at all <input type="checkbox"/>
23. How do you sell your fish?	<input type="checkbox"/> Association <input type="checkbox"/> Directly to restaurants <input type="checkbox"/> Trader/wholesaler <input type="checkbox"/> Local market <input type="checkbox"/> To markets (outside RSS) <input type="checkbox"/> Fish Exporter

Questionnaire for Women (cooperatives/micro enterprises)

<b>Information about You</b>	
1. How old are you?	
2. What are your current activities (retailing/business/biscuit making)?	
3. What association are you in?	
4. Level of education?	<input type="checkbox"/> No formal education <input type="checkbox"/> Formal Primary School Education (6-14 years) <input type="checkbox"/> Formal Secondary Education (15-18 years) <input type="checkbox"/> Formal Tertiary Education (University)
<b>About Your Situation before the UNIDO Training</b>	
5. Did you receive any other vocational training before the UNIDO Training?	Yes <input type="checkbox"/> No <input type="checkbox"/>
6. What was your work before the UNIDO training?	<input type="checkbox"/> House-based work (House wife) <input type="checkbox"/> Self-employed business <input type="checkbox"/> public sector employee <input type="checkbox"/> Private sector employee <input type="checkbox"/> handicraft <input type="checkbox"/> No work
7. What type of <u>technical</u> training did you receive?	Food processing <input type="checkbox"/> Handicraft <input type="checkbox"/> Net making <input type="checkbox"/>
8. What type of <u>business</u> development training did you receive?	Microcredit <input type="checkbox"/> Business feasibility <input type="checkbox"/> Business Management <input type="checkbox"/> Strategic planning <input type="checkbox"/> Nutritional health care <input type="checkbox"/>

Fund raising	
9. How many days was your training?	
10. Were you satisfied with your training?	Very Satisfied <input type="checkbox"/>
	Satisfied <input type="checkbox"/>
	Not Satisfied <input type="checkbox"/>
11. If NOT SATISFIED STATE WHY	
12. How would you rate the trainers' ability to train you?	Very Good <input type="checkbox"/>
	Good <input type="checkbox"/>
	Not Good <input type="checkbox"/>
About Your Situation after the Training	
13. Has the training improved the quality of your skills?	Yes <input type="checkbox"/> No <input type="checkbox"/>
14. Do you believe your new skills help you to integrate better in the local economy?	Yes <input type="checkbox"/>
	No <input type="checkbox"/>
	Don't Know <input type="checkbox"/>
15. Do you believe you have more business opportunities since the training?	Yes <input type="checkbox"/> No <input type="checkbox"/>
16. Have you found more business as a result of the training?	Yes <input type="checkbox"/> No <input type="checkbox"/>
17. Do you think you can train other people with the skills you have learned?	Yes <input type="checkbox"/> No <input type="checkbox"/>
18. Did you receive a small loan for starting your own personal small business?	Yes <input type="checkbox"/> No <input type="checkbox"/>
19. Did you receive any start up assistance from UNIDO	Yes <input type="checkbox"/> No <input type="checkbox"/>
20. If yes, what assistance?	Financial <input type="checkbox"/> Training <input type="checkbox"/> Equipment <input type="checkbox"/>
21. Did the income from your cooperative/ business increase specifically because of the UNIDO TRAINING you received	Yes <input type="checkbox"/>
	No <input type="checkbox"/>
22. What was your personal income before the project	SDP
23. What is your personal income after the project?	SDP
24. Have hygiene and sanitary standards increased because of your training?	Yes <input type="checkbox"/> No <input type="checkbox"/>
25. What do you use your income on? You can tick all the boxes that apply to you	<input type="checkbox"/> Handed over to male relative
	<input type="checkbox"/> Invest in education (school uniforms/books etc.)
	<input type="checkbox"/> Invest in health
	<input type="checkbox"/> Additional food
	<input type="checkbox"/> Additional clothing

	<input type="checkbox"/> Travel to visit family members <input type="checkbox"/> Re invest in the business <input type="checkbox"/> Building additional rooms in your house Other (please specify
26. Do you believe your cooperative can continue after UNIDO leaves?	Yes <input type="checkbox"/> No <input type="checkbox"/>



## Guide for Focus Group Discussions (FGDs)

### FGD with Extension workers

The theory of change is that fishermen will change their behaviour and successfully reduce their dependence on traders (middlemen) and thereby improve their profits. This will 'do no harm' and will contribute to the overall recovery process.

- Have fishermen been able to reduce their dependence on local fish traders?
  - If so in what ways?
- How effective was the project design in achieving this?
- Which interventions have been the most important in changing fishers' behaviour?
- Have fishermen been able to find alternative production and market options to the traditional trader-fisher relationship. If so;
  - What alternative production options
  - What alternative market options
- What is the immediate and long term effect/impact of changing the relationship between fishers and traders
  - What are the positive aspects to this?
  - What are the negative aspects?
- What were the challenges confronted when trying to change this relationship
- Is the project changing local market and broader socio-economic relationships and if so how?
  - Are there any negative aspects to this?
- How does the project positively contribute to recovery efforts in the region?
- Are there any aspects of the project that could conceivably negatively impact the recovery process? For example beyond just traders, have any traditional ethnic/tribal/political/ social relationships been impacted.

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