African, Caribbean and Pacific Group of States

“Training for Regulatory Authorities, Businesses and Communities of the ARSO Members from EAC and SADC on Risk Management in Regulatory Frameworks: Towards a Better Management of Risks”

“ACP-EU TBT PROGRAMME”

(REG/FED/022-667)

Project code: TBT - 090-16

FINAL TECHNICAL REPORT

Date September-December 2016

Project implemented by Pescares srl

In consortium with Quality Africa

Table of contents

4 Meeting Report NAM 07 12 2016 Field Visits
4 Meeting Report NAM 08 12 2016 CA NIS
4 Meeting Report NAM 09 12 2016 Val workshop NSI WB
4 Meeting Report NAM 10 12 2016 Emilio Producer
4 Meeting Report NAM 12 12 2016 BC & NTF
4 Meeting Report NAM 12 12 2016 Val workshop Windhoek
4 Meeting Report NAM 15 12 2016 Val workshop MFMR Windhoek
5.1 Action plan for NAMIBIA
5.1 Copy of Annex II Timeline 6Y Namibia
5.1 Copy of Annex II Timeline 6Y Namibia_01
5.1 Copy of Annex II Timeline 6Y Namibia_02
5.1 Copy of Annex II Timeline 6Y Namibia_03
5.1 Table Activities Identification NAM 1
5.2 Action plan for Uganda V6 - GNC edit
5.2 Annex I Table Activities Id Uganda V4
5.2 Copy of Annex II Timeline 6Y Uganda
5.2 Copy of Annex II Timeline 6Y Uganda_01
5.2 Copy of Annex II Timeline 6Y Uganda_02
5.2 Copy of Annex II Timeline 6Y Uganda_03
6 Country Report UNECE Namibia
6 Country Report UNECE Uganda
7 List persons Namibia
7 List of person Uganda
8 Kit _basic_material_for_specialist-1
9 Interview Questionnaire outline-1
10 Mycotoxin in general-1

ABBREVIATIONS AND ACRONYMS

ARSO	African Organisation for Standardisation
ACP	African Caribbean Pacific
EU	European Union
CEFACT	CENTRE FOR TRADE FACILITATION AND E-BUSINESS
EAC	East African Countries
EEZ	Economic Exclusive Zone
FLUX	Fisheries Language for Universal eXchange
FAO	Food and Agriculture Organisation
IFDM	Integrated Fisheries Data Management
LVFO	Lake Victoria Fishery Organisation
IUU	Illegal Unreported Unregulated
NaFIRRI	National Fisheries Resources Research Institute
UNBS	Uganda National Bureau of Standard
NSI	National Standard Institutions
BTSF	Better Training for Safer Food
SADC	Southern African Development Community
SDG	Sustainable Development Goal
TBT	Technical Barrier to Trade
UN	United Nations
UNECE	United Nations Economic Council for Europe
GDP	Gross developed product

ACKNOWLEDGEMENT

The TBT Mission to Uganda and Namibia is indebted for support provided by EU and Pescares srl that enabled the seamless implementation of the Mission activities. Mr. Negroni as team leader and Dr. Wilson Mwanjia as key expert supported successfully the remote organization of the mission and the field work. The trainee's comments were very good. We are also grateful for the assistance and support extended by ARSO and its Member national standards organizations in Uganda and Namibia. In addition we received significant assistance from the Uganda National Bureau of Standards (UNBS) and the Namibia Standards Institute (NSI) respectively in receiving and working with the Mission supportively towards the achievement of set goals as outlined in the Terms of Reference. We want to thank our collaborators and logistics support persons in the two countries, Mr. Nadiope Eric and Mr. Kahuma Philip as collaborators supported by Mrs. Othieno Sarah as logistic person in Uganda, and Mr. John Scheffers as collaborator supported by Ms. Johaana Undjenu as logistic person in Namibia. We are especially grateful for the fisheries regulatory stakeholders in both countries from consumers, fishing communities, businesses to regulatory authorities for receiving us and accepting our requests for consultations and interviews as required in the terms of reference.

EXECUTIVE SUMMARY

This project, funded by the EU through the TBT Programme, is designed to assist the fishing industries in Uganda and Namibia improve their performance through the adoption of appropriate Risk Management and Mitigation activities. The economic contribution of the Fish Industry in both Uganda and Namibia is considerable and therefore conservation of fish stocks and quality assurance of fish products is essential if these industries are to continue supporting employment and generating national income.

The assignment allowed for comparison and understanding of the use of risk management in marine fisheries (Namibia) as compared to inland fisheries (Uganda). Although in many ways there are stark difference between the marine and inland aquatic ecosystems, the challenges and risk faced in the fisheries regulatory frameworks of the two countries were found to be in many respects similar perhaps only differing in scale. Key to the outcomes of this assignment will be tapping into the EU established support system for risk-informed regulations together with the use of "the EU Integrated Fisheries Data Management (IFDM) programme" aimed at establishing "an integrated European information system for fisheries management on the basis of the UN/CEFACT standard for the exchange of information on fisheries (FLUX)" by the ACP countries. This support for risk-informed regulations as well as support for understanding of use of the IFDM in fisheries related polices for ACP countries is considered critical for the IFDM programmes. Feedback from these countries on the FLUX system (The Fisheries Language for Universal Exchange) will assist in "improving the standard, particularly its applicability in developing countries". Improvement in the regulatory frameworks for the two countries using risk management approaches it is also believed will enhance the monitoring of wild stocks, which from the global perspective significantly contributes to the attainment of SDG 1 (ending poverty) and SDG 2 (ending hunger and achieving food security). This assignment was therefore about helping fisheries regulatory stakeholders in taking the appropriate actions under the increasing situations of uncertainty and limited resources. The ready acceptance and validation of the

Action Plans and other deliverables of this TBT-Mission is a testament to willingness of the two countries to implement changes in the structure of regulatory systems and frameworks" so "that the existing and new regulations contribute to manage uncertainty and achieving well-defined societal objectives" for optimum and sustainable benefit from the fisheries sectors.

UGANDA

In Uganda, the fisheries regulatory framework was assessed to have remained largely the same as that remaining from colonial times. The principals were set over 80 years ago and geared at managing known and predetermined aspects such as licensing, setting of gear types and size ranges, harvestable fish sizes, and conservation of stocks through a 'command and control system'.

Uganda as part of the Lake Victoria Fisheries Organization under the EAC has benefited from nearly Euro 40 million investment by the EU largely for improvement in regional management of Lake Victoria fisheries. The main focus has been on regular assessment of standing biomass and bringing primary producers (fishing communities) into the management of the fisheries since the mid-1990s. However, this very short period has been characterised by near collapse of the major fisheries (Nile perch and Nile tilapia) of Lake Victoria due to unforeseen growth in industrial fish processing and export capacity and growth in regional fish exports with a consequent increase in fishing effort and heightened fishing malpractices against the backdrop of drastic detrimental environmental changes (LVFO, 2012). Currently, the small pelagic (Rastrineobola argentea locally known as mukene) make up the bulk of the fish landings (about 70%) although mukene by value accounts for less than 20% (NaFIRRI, 2015). The change in fisheries with reduction in Nile perch landed has led to the closing of a number of fish processing factories with the remainder only operating intermittently and at less than 30% of their installed capacity.

Uganda has since the late 1990 also benefited from EU support towards development of quality and safety of fishery products system development as a requirement for continued access to the EU fish market. In addition, Uganda received from ICEIDA technical and financial support from 2007 to 2012 aimed at expanding involvement of fishing communities on other water bodies other than Lake Victoria in fisheries management; and to support improvements in the quality and safety assurance system for artisan fish processors and local traders.

NAMIBIA

Namibia is one of the leading fisheries nations in Africa with a per capita consumption of fishery products of 13.4 kg against a per capita fish supply of between 170 to 200 kg. The fisheries sector contributed about 6.2% of the National GDP and nearly 50% of the Agricultural GDP (FAO, 2007). With most of the produced fish processed for export to international markets, much of the existing regulatory framework is focused on maintaining continued access to the international market and very little on domestic and or regional markets. Although there has been reduced fish landings in the recent years, the stocks of over 20 major fisheries species in the Namibian EEZ are considered fair; with only the pilchard (Sardinops ocellatus) recorded to have reduced significantly due to "negative environmental circumstances between 1993 and 1995 (so-called 'Benguela-Niño') and the negative effects of over-fishing in the period before independence".

Namibia only claimed its 200 nautical miles of the EEZ after independence in 1990, prior to 1990 the zone was exploited by foreign fleets. The Government of Republic of Namibia (GRN) developed a white paper which put forward its long term perspectives for fisheries development and management. The cornerstone of the fisheries management in Namibia is considered to be the 1992 legislation which has since been replaced the 2,000 act known as the Marine Fisheries Act (2000) promulgated in 2001. The fisheries legislation for Namibia incorporates international best practices geared at sustainable utilization and conservation of the marine resources.

Regulatory Frameworks

Annex 1 includes a detailed Assessment of the Regulatory Frameworks for both Uganda and Namibia which in turn informs the drafting of the Action plans for both countries. The Action Plans constitute the most important output from this project and were developed through a bottom up consultative process involving all the major stakeholders in the two countries' fishing industry.

Action plans

Uganda: This Action Plan for integrating Risk Management in Fisheries Regulatory Framework for Uganda was developed by Uganda fisheries regulatory stakeholders and facilitated by experts from Pescares srl as part of this Consultancy.

The action plan was derived through a consultative process involving meetings and interviews with key fisheries regulatory stakeholders; training in integrating risk management in regulatory frameworks for the following Stakeholders:

- Technical managers from regulatory authorities
- Business managers from fish processing factories
- Fish producers for both capture and culture fisheries and aquaculture
- Consumer protection agencies and associations
- Market authorities and conformity assessors from central and local governments

The Final form of the Plan was validated by representative of all key stakeholders and will be spearheaded by a platform on fisheries regulatory framework coordinated by the fisheries agency – the Directorate of Fisheries Resources of the Ministry of Agriculture, Animal Industry and Fisheries. The action plan is comprised of immediate (short term), medium term and long term activities and will initially be for 6 years at an estimated cost of EUR 6.10 Million and 220 man-months in Technical Assistance.

NAMIBIA

The Action Plan for integrating Risk Management in Namibia's fisheries regulatory framework was developed to create a more responsive and robust way to handle increased uncertainties in the implementation of the fisheries regulatory framework. The Action Plan development was guided by the United Nations Economic Commission for Europe's (UNECE) work on integrating risk management in regulatory frameworks and was funded by the Technical Barriers to Trade Programme (TBT) Project as a result of Namibia's expressed interest in Risk Management as a priority in the development of its regulatory frameworks as part of effort in dealing with TBT issues. The Fisheries Risk Management

Strategic Action Plan for Namibia (FRISAN) was developed through a bottom up consultative process which included holding consultative meetings and interviews with key regulatory stakeholders including regulatory authorities, businesses and fishing communities that culminated into a three-day training workshop where the information generated was compiled by the participants into an Action Plan to actually integrate Risk Management in Namibia's fisheries regulatory framework. It is a six-year plan estimated to cost EUR 4,150,000 and require 210 man-months in Technical Assistance (national and international). A key innovation is to ensure successful coordination and guarantee a consultative implementation process as the requirement for establishment a platform where all fisheries regulatory stakeholders meet periodically and prioritize activities for implementation. Funding for the Action Plan is envisaged to come from Government of Republic of Namibia (GRN), Development Partners of Namibia, and Fisheries Businesses.

1 BACKGROUND

ACP EU TBT Programme (TBT 090-16), which is supporting the 'African Governments Organisation for Standardization' on behalf of Member States on Risk Management in regulatory Frameworks identified two countries, Namibia and Uganda (from SADC and EAC regional bodies respectively) to benefit from training in risk management for regulatory frameworks development in the fisheries sectors. The two countries were chosen as a result of their interest in the use of risk management approaches in regulatory framework development in the fisheries sector. In addition, the fisheries sector in the two countries contributes significantly to their national economies, accounting for 12% of Agricultural GDP and 2.6% of the National GDP in case of Uganda (Mwanja & Signa, 2013); and 3% of the National GDP for fisheries compared to 4.1% for Agriculture and Forestry in case of Namibia (Namibia at Glance, FAO 2016). The risks highlighted in the fisheries sectors of the two countries including:

- Barriers to regional and international fish trade;
- Fishing malpractices such as the use of illegal and environmentally unsafe fishing gear;
- Excessive fishing pressure with consequences such as depletion of stocks and environmental degradation;
- Human exposure to hazards arising from environmental pollution;
- Poor quality and unsafe fish on the market through storage and other value chain problems;
- Natural calamities including those brought about by the increasingly erratic weather;
- Limited knowledge and information for users and managers in the fast changing natural and socioeconomic environment.

These factors provide a level of uncertainty that cannot be handled by existing regulatory regimes without incorporation of risk management approaches given the importance of the fisheries sector in the two countries. Incorporating risk management approaches will also help the two countries in predicting, detecting and controlling illegal, unreported and unregulated fishing. In addition adopting risk management based fisheries regulatory frameworks will assist the two countries in implementing the SDG (Sustainable Development Goals) 14 - "conserve and sustainably use the oceans, seas and marine resources for sustainable development" by identifying and analysing potential risks, and putting in place prevention, containment or treatment plans for the risks in their fisheries ecosystems.

This assignment allowed for comparison and understanding of the use of risk management in marine fisheries (Namibia) as compared to inland fisheries (Uganda). Although in many ways there are stark difference between the marine and inland aquatic ecosystems, the challenges and risk faced in the fisheries regulatory frameworks of the two countries were found to be in many respects similar perhaps only different in scale. Key in this assignment will be tapping into the EU established support system for risk-informed regulations together with use of "the EU Integrated Fisheries Data Management (IFDM) programme" aimed at establishing "an integrated European information system for fisheries management on the basis of the UN/CEFACT standard for the exchange of information on fisheries (FLUX)" by the ACP countries. This support for risk-informed regulations as well as support for understanding of use of the IFDM in fisheries related polices for ACP countries is considered critical for the IFDM programmes. Feedback from these countries on the FLUX system (The Fisheries Language for Universal Exchange) will assist in "improving the standard, particularly its applicability in developing countries". Improvement in the regulatory frameworks for the two countries using risk management approaches is also believed to enhance the monitoring of wild stocks, which from the global perspective significantly contributes to the attainment of SDG 1 (ending poverty) and SDG 2 (ending hunger and achieving food security) in the "context of the coastal communities that rely on fisheries for economic survival and a dependable food source." This assignment was therefore about helping fisheries regulatory stakeholders in taking the appropriate actions under the increasing situations of uncertainty and limited resources. The ready acceptance and validation of the Action Plans and other deliverables of this TBT-Mission is a testament to willingness of the two countries to implement changes in the structure of regulatory systems and frameworks" so "that the existing and new regulations contribute to manage uncertainty and achieving well-defined societal objectives" for optimum and sustainable benefit from the fisheries sectors.

UGANDA

In Uganda, the fisheries regulatory framework was assessed to have remained largely the same as that remaining from colonial times. The principals were set over 80 years ago and geared at managing known and predetermined aspects such as licensing, setting of gear types and size ranges, harvestable fish sizes, and conservation of stocks through a 'command and control system'. Efforts to bring in other stakeholders in management of the fisheries starting in the 1990s were based on guidelines that technically and legally are not anchored by the principal fish act. This together with the compounding factors such as increased levels of poverty, higher value of fish, increased local, regional and international trade in Uganda fish, and lack of readily accessible information and knowledge by the stakeholders, has increased the level of uncertainty and exposed the fisheries to unprecedented levels of harvesting leading to real fears that key fisheries like Nile perch may be collapsing. In 2000 the Fish Act was revised to drop the inclusion of crocodiles from the law, as it had been moved to wildlife, without any change in substance. In 2013 the Fish Act was revised only to revert licensing from the Local Governments to the Central Government, and retain levies and fees from fisheries enforcement to the Central Government as well.

Uganda as part of the Lake Victoria Fisheries Organization under the EAC has benefited from nearly Euro 40 million investment by the EU largely for improvement in regional management of Lake Victoria fisheries. The main focus has been on regular assessment of standing biomass and bringing

primary producers (fishing communities) into the management of the fisheries since the mid-1990s. However, this very short period has been characterised by near collapse of the major fisheries (Nile perch and Nile tilapia) of Lake Victoria due to unforeseen growth in industrial fish processing and export capacity and growth in regional fish exports with a consequent increase in fishing effort and heightened fishing malpractices against the backdrop of drastic detrimental environmental changes (LVFO, 2012). Currently, the small pelagic (Rastrineobola argentea locally known as mukene) make up the bulk of the fish landings (about 70%) although mukene by value accounts for less than 20% (NaFIRRI, 2015). The change in fisheries with reduction in Nile perch landed has led to the closing of a number of fish processing factories with the remainder only operating intermittently and at less than 30% of their installed capacity.

Uganda has since the late 1990 also benefited from EU support towards development of quality and safety of fishery products system development as a requirement for continued access to the EU fish market. The funds were used in building the human resources capacity for inspection and certification of fishery products and production value chain, setting up of a safety and quality assurance laboratory, and support to fish processing and exporting establishments in putting in place fish safety and quality control systems. In addition, Uganda benefited from ICEIDA technical and financial support from 2007 to 2012 to expand involvement of fishing communities on other water bodies other than Lake Victoria in fisheries management; and to support improvements in the quality and safety assurance system for artisan fish processors and local traders.

NAMIBIA

Namibia is one of the leading fisheries nations in Africa with a per capita consumption of fishery products of 13.4 kg against a per capita fish supply of between 170 to 200 kg. The fisheries sector contributed about 6.2% of the National GDP and nearly 50% of the Agricultural GDP (FAO, 2007). With most of the produced fish processed for export to international markets, much of the existing regulatory framework is focused on maintaining continued access to the international market and very little on domestic and or regional markets. The proposed activities of the Action plan are meant to look at risks and barriers to growth of the domestic and regional markets for Namibia fisheries products. The focus on international trade and in meeting needs of such markets has had some unwanted consequences such as the reduction in landings in recent years and depletion of key stocks such as those of orange roughy for which a moratorium on fishing has been placed to allow for recovery, and pilchard which has had a significant reduction in available biomass. Although there has been reduced fish landings in the recent years, the stocks of over 20 major fisheries species in the Namibian EEZ are considered fair; with only the pilchard (Sardinops ocellatus) recorded to have reduced significantly due to "negative environmental circumstances between 1993 and 1995 (so-called 'Benguela-Niño') and the negative effects of over-fishing in the period before independence" (FAO, 2007). The key fisheries species targeted for export are mainly the hake (Merluccius capensis and M. paradoxus) and the horse mackerels (Trachurus capensis).

Since attaining independence in 1990 Namibia has benefited from financial and technical assistance from a number of donor countries including:

- Norwegian Agency for Development Cooperation (NORAD) - used to review the Economic

Model Database for the Namibian Ministry of Fisheries and Marine Resources

- Icelandic International Development Agency (ICEIDA) - used in acquisition of technical assistance for review of economic model database
- European Union - used for acquisition of equipment (computers and motor vehicles) and renovation of buildings for the Namibian Fisheries Institutions
- Government of Cuba and Government of Malawi - Technical Assistance in Aquaculture Development
- Regional Government of the Xunta de Galicia - used for providing financial assistance to the fishermen's cooperative of Henties Bay, technical assistance for aquaculture development, and support to Namibia Fisheries Institutions.

EU provided support for the following two fishery projects:

- ECOFISH (Development of ecological sustainable fishery practices in the Large Benguela Current Ecosystem)
- The Community-based management of river and floodplain fisheries in Namibia, Zambia, and Botswana, contributing to environmental conservation and to improve socio-economic benefits and food security, especially for women, children and the rural poor through capacity building and the development of regional and international networking platforms.

Namibia only claimed its 200 nautical miles of the EEZ after independence in 1990, prior to 1990 the zone was exploited by foreign fleets. The Government of Republic of Namibia (GRN) developed a white paper which put forward its long term perspectives for fisheries development and management. The cornerstone of the fisheries management in Namibia is considered to be the 1992 legislation which has since been replaced the 2,000 act known as the Marine Fisheries Act (2000) promulgated in 2001. The fisheries legislation for Namibia incorporates international best practices geared at sustainable utilization and conservation of the marine resources.

Other key legislation for the fisheries sector include:

- The Marine Resources Regulations (2001),
- Namibia's Marine Resources Policy (2004) and Territorial Sea and Exclusive Economic Zone of Namibia Act (1990),
- Policy statement on granting of right of exploitation to utilize marine resources and on the allocation of fishing quotas.
- The Inland Fisheries Resources act (No.1 of 2003), which governs inland fisheries.
- The Aquaculture Act (No.1 of 2002), Aquaculture policy of 2001.

By independence in 1990, the Namibia fisheries was characterized as completely marine based with unevenly distributed stock; largely overexploited stocks of the commercially valuable species (i.e. hake, pilchard and anchovy); serious shortage of skilled workforce; and an industry dominated by foreign companies which captured almost all the economic rent from the fisheries. This led to development of a fisheries management framework geared principally to the rebuilding of depleted fish stocks and the development of a national fishing and processing industry. The empowerment of previously disenfranchised segments of Namibia population in the sector and Namibianisation of the fisheries industry was aimed at supporting their involvement.

Recent Developments

In the recent times there have been significant achievements as well as challenges in the fisheries sectors of the two countries. Both countries have realized increased value for their fisheries resources but with reduced production. Uganda has witnessed increased participation of fishing communities in the management of fishing activities, while Namibia has realized increased ownership of fishing craft and participation in fishing activities by citizens who previously were not engaged in the sector. Over the same period Uganda has witnessed heightened fishing pressure with near collapse of the key fisheries species and significant decline in fisheries production which consequently led to closure of nearly 50% of the existing 21 fish processing and exporting establishments. Likewise Namibia has witnessed reduced fish landings with changing and alternating economic importance among the 20 plus fisheries species. This is despite the national and donor support in the development and management of the respective fisheries sectors.

These occurrences can be attributed largely to the focus of existing fisheries management and regulatory frameworks on the known and certain factors, with limited or lack of focus on the uncertain and or unknown occurrences or risks that arise causing the depletion of the fisheries resources in the two countries. Although most of these problems faced seem obvious now, such as increased value and demand for fish, increased fishing pressure, growth in fishing malpractices, increase in IUU fishing, and environmental degradation, these factors were not appropriately planned for and could not be rightly addressed using the existing regulatory frameworks due to the high level of uncertainty at the time.

1.1 Project Fundamentals

This assignment's objective is quite clear and is about integrating risk management approaches into the review of the regulatory frameworks and development action plans for the respective fisheries sectors. The assignment is expected to enhance the capacities of the two countries to adopt and utilize risk management approaches in management of the fisheries resources of the two countries following successes registered elsewhere using the United Nations Economic Council for Europe (UNECE) model. It is also intended to increase awareness among stakeholders of the role that risk management approaches play in dealing with increased level of uncertainty and risks in the fish industry all along the value chain.

The assistance provided to the two countries targeted a wide spectrum of stakeholders, from primary producers, vessel owners, processors and traders, to public managers and authorities in the fisheries sectors. The assistance was in the form of training rather than through direct consultancy, allowing not only building of local capacity but a clear focus on providing practical solutions with examples from countries already using such approaches. The training generated National Action Plans to review and update fisheries regulatory frameworks using risk management approaches. As such the training targeted a wide representation of the fisheries regulatory stakeholders so as to generate viable consensus on activities within the respective National Action Plans with perspectives from a wide view of the respective fisheries sectors. Efforts were made to inculcate use of risk management approaches throughout the training and development of the Action Plans looking at all areas from fish production to fish processing, fish trade as well as regulation of these and all related activities.

1.2 Identified Needs

The *overall objective* of the project is to build capacity for ensuring sustainable local communities' income from the fisheries and aquaculture sectors while protecting consumers of fishery and aquaculture products at both the local and global levels. This assignment reviewed the best practices and provided guidance to selected participants in the use of risk management approaches in establishing and updating fisheries and aquaculture regulatory frameworks needed to manage risks faced by local and global consumers, citizens and communities involved with fisheries and aquaculture sectors. Participants were introduced to the risk management approach as a critical and central aspect in the developing and updating of regulatory frameworks in fisheries and aquaculture sectors that should be espoused at all levels from citizens to policymakers, where the outcomes can ably protect the health and safety of consumers and workers, ensure ecological and environmental integrity and most importantly eliminate or avoid unnecessary barriers.

The purpose of this exercise is to develop the capacities of Uganda and Namibia, two ACP members, for increased promotion of coordination of regulatory actions in the fisheries sector in a way that allows sustainable exploitation of fisheries resources and efficient marketing of their fishery and aquaculture products within their respective borders and abroad. The two countries were selected as part of the programme because of the significant contribution of fisheries sectors in their respective national economies.

The *specific purpose* of the project is as follows:

According to the ToRs there are three key objectives to be achieved by this assignment, including:

Result 1 - Assessment and Analysis of the existing regulatory framework and tools available for reducing barriers to regional and international trade in African fisheries products with the these outputs:

- Output 1 - Country Assessments of the existing regulatory framework and tools are developed for reducing barriers to regional and international trade in African fisheries products.
- Output 2 - Tailored training materials are prepared for conducting sessions on "Risk Management in Regulatory Frameworks - Towards a Better Management of Risks".

Result 2 - Stakeholders in each country better understand risk management methodology and its application to developing regulatory systems and processes, with these outputs:

- Output 3 - Capacity building training in relation to risk management processes by conducting introductory training course (developed by the UNECE) and a series of workshops on risk management "Risk Management in Regulatory Frameworks - Towards a Better Management of Risks" and UN/CEFACT standard for the exchange of information on fisheries (FLUX).

Result 3 - Risk management improved through development of National Action Plans and two Country Reports to the UNECE Working Party Annual Session, with these outputs:

- Output 4 - Development of national long- and short-term plans on enhancing the existing regulatory framework based on its evaluation against the risk management best practice.
- Output 5 - Two Country Reports on the results of the activities undertaken to be presented to the UNECE Working Party Annual Session.

1.3 Mission ToR comments and adjustment

The ToRs demanded an important list of activities based on the strict collaboration of the two requesting ARSO members: Ugandan National Bureau of Standard (UNBS) and National Standard Institutions (NSI). These institutions have as mission to produce regulatory standard and/or to manage some part of the fishery regulatory framework.

Fishery management has to contend with uncertainty, it occurs from production (capture fishery or aquaculture) through marketing and eventual consumption. It is possible to reduce uncertainty from production by adapting risk analysis theory to the full management process through to decision making, implementation, control and compliance.

The mission, although very successful, initially faced some difficulties. The beneficiary institutions mentioned above were not as prepared as they could have been as it appeared that the ToRs for the project had not been fully understood. Their role in the project was unclear to them and so it was necessary to make some of the arrangements on an ad hoc basis such as bringing the fisheries stakeholders on board in time and reviewing their own role in light of the suggested risk management based fisheries regulatory framework. A summary of the difficulties faced included:

- Low institutional (UNBS, NIS) communication with fishery stakeholders
- Need of more fishery "reality" by UNBS and NIS.
- Low resources available for fishery risk management
- Absence of use of risk management in the regulatory framework
- Regulatory agency personnel not well informed about the fishery risk management
- Some key representatives of key stakeholders had already taken their Christmas holidays in December
- NIS, UNBS personnel and Fishery stakeholders difficulties to understand the Risk Management in UNECE official publications, needs a specific fishery risk publication
- NIS, UNBS and fishery stakeholders easy application of basic risk cycle applied to their day to day reality
- It was not possible to obtain upgraded data from the fishery authorities and from other ARSO projects (Nigeria, Malawi ARSO old risk management projects and Cameron ARSO project) and UNECE training material (utilisation of web published risk management publication); despite several requests. Mission fishery data were provided through the experience of the consultant, by internet and by mission field visits.
- No specific training subjects were requested in advance by the beneficiaries, only the field experience of the consultants permitted identified enough subjects related to the fishery regulatory framework country needs (Examples: mycotoxin risk in Uganda and Bivalve mollusc accreditation in Namibia)

The above points are not a criticism for the mission development but a reality; they were handled by the mission dealing directly with the fisheries regulatory stakeholders and managing the budget for the training so as to ensure the right and highly interested stakeholders took part in the development of the action plans. The two action plans were developed through a bottom up approach with wide consultative process that gave the stakeholders and especially those that participated in the train

hands-on example of application of the risk cycle to the fishery sector. The mission completed all the requested ToR and logical framework requested tasks.

2 ACTIVITIES CARRIED OUT

This section includes a short description of all activities carried out during project implementation with related implementation period, scope, stakeholders involved. They are described following the ToR orders. All are referenced in the annexes as completed deliverables.

The field implementation period was from 23 November to 30 November in Uganda and from 01 to 16 December in Namibia.

Interviews were carried out in Uganda and Namibia to assess and validate the available data the proposed questionnaire outlines were presented in the Inception report and are detailed in Annex VIII as the Interview questionnaire. Some of the results of the interviews are presented in Annex IV, all are in the same template to provide clarity. The involved stakeholders represented the regulatory authorities, the rural communities and the fishery/aquaculture business operators.

2.1 Result 1 - Output 1 - Country Assessments of the existing regulatory framework

The two studies for Uganda and Namibia were facilitated by the consultants and are presented in Annex I. They contain the following main subjects:

- Detailed description of the fishery and aquaculture value chain situation in the countries,
- The legislative and regulatory framework,
- The last international projects,
- The stakeholder actors present in the country,
- The main risk the fishery sector faces in the country and some recommendations.

2.2 Result 1 Output 2 - Tailored training materials

Training materials in the form of several power points and a long list of bibliographical information about the fishery legislative framework, FLUX and risk management available UNECE literature were prepared for conducting sessions on “Risk Management in Regulatory Frameworks - Towards a Better Management of Risks”.

The Power Point Presentation titles are the following:

- Food safety risk management Part I
- Relevant legislation,
- General Requirements to surroundings and constructions,
- Construction requirements in areas where food is handled
- Specific criteria for fisheries products
- Application of Pre-requisite programs (12 chapters)
- Health Standards for fisheries products
- Application of HACCP Risks and the above subjects
- Food safety risk management Part II-III-IV

- Fishery/Aquaculture risk management in Regulatory framework with detail in food safety, action plan
- ADDITIONAL ON FOOD MANAGEMENT SUIRVELLANCE, practical risk analysis
- Regulatory framework in food safety and risk management
- Landing site
- FLUX presentation
- Assessment of fishery regulatory framework
- Risk management approaches and process in a fisheries regulatory framework
- Crisis management within regulatory framework
- Integrating risk management in regulatory framework
- Goal and purpose of training

The list of PPT presentations is detailed in Annexe II. In addition, the Consultant prepared two field visit risk assessment grids for pre-requisite and HACCP risk analysis which are also found in Annexe II.

2.3 Result 2 Output 3 - Training and workshops

The training was in relation to risk management processes and was carried out by conducting an introductory training course (developed by the consultant in relation with UNECE available publications) and a series of workshops on risk management "Risk Management in Regulatory Frameworks - Towards a Better Management of Risks" and UN/CEFACT standard for the exchange of information on fisheries (FLUX).

The Consultant prepared a "Training concept" for a better logistics and accountability of the training activity. The Ugandan and Namibian Training Concept is detailed in Annex III. Every training concept summary includes the following table of contents:

1. **Training**
   - 1.1. Introduction to ARSO - Training for Regulatory Authorities, Businesses and Communities on Risk Management
   - 1.2. Training Agenda
   - 1.3. Training concept methodology
   - 1.4. Training operation guidelines
   - 1.5. Strategy definition for Training
   - 1.6. Certificate
   - 1.7. Training performance
   - 1.8. Training presence and kit sheet
   - 1.9. Trainees course evaluation sheets
2. **Material - Summary**
3. **Outputs**
4. **Communication plan for project diffusion & awareness& matrix**
5. **Training summary table**
6. **Training materials**
7. **On the job training, field visits**

8. **Training checklist**
9. **Scanned ID**

Annexes: Scanned attendance list signed for every training days, Commitment table, Action plan, and Trainees course summary evaluation.

It is interesting to note the high appreciation of trainees about the course demonstrated in point 1.7 Training Performance/Evaluation using the TBT template applied by the consultant. The training concept permits having the highest training accountability possible.

Workshops: Two workshops in Uganda and three in Namibia were executed to validate the Action Plan originating from the training activities and feedback. The workshop collected opinions from stakeholders. The workshops report is detailed in Annexe IV with all the other meeting reports of the mission.

Generally the workshops were well accepted and the Action plans validated by the stakeholders as their representative produced them with a good knowledge of the local situation. The results show the real country situation.

2.4 Result 3 Output 4 National Action plan

During the training the trainees stimulated by the consultant were accompanied in the drafting of their own action plan (one for each country) where the risk management principles were applied to their individual fishery situations to develop the national long, medium and short-term plans on enhancing the existing regulatory framework based on its evaluation against risk management best practice. The short term plan is intended for the first year, the medium term action plan for the 2-3 and 4th year and the long term action plan for the 5th and 6th year.

An Action plan guidelines were provide to the trainees and divided in four main section:

- Component 1: Legislation, regulation and standards
- Component 2: Training
- Component 3: Financial and support
- Component 4: Communication

Every component has one or more activities that were developed assessing, analysing, prioritising the risk and finding the best mitigation means. The trainees applied the presented risk cycle theory to their day to day working environment producing a high level national action plan. They really mastered the risk cycle and produced appreciable results.

You can find the Action plans in Annex V with two annexes, i.e. the budget for every action and the timeline where it is possible to appreciate the division in the three Action plan phases.
This work represents a high level document that can drive the country fishery activity for the next 6 years.

2.5 Result 3 Output 5 Two Country Reports

The fifth output of this chapter is the two Country Reports on the results of the activities undertaken to be presented to the UNECE Working Party Annual Session.
You can find in Annexe VI, the reports have the following summary:

1. Introduction
2. Background to the project
3. Namibia fishery sector context
   3.1. FLUX
4. Mission objective in Namibia
5. Results
6. Recommendations

Annex I - Namibian fishery country assessment
Annex II - Namibian training material
Annex III - Training concept
Annex IV - Interview in Namibia
Annex V - Fishery Risk Management Strategic Action Plan for Namibia (FRISAN)
Annex VI - List of meet person in Namibia

2.6 Comments on project schedule

The project schedules were respected as the smooth development of Uganda activities permitted the TL and the K2 to anticipate the trip to Namibia where the mission activities had more logistic problems. All the scheduled activities were executed satisfying the ToR. The Christmas holiday that start the first week of December provided less participation of the public sector stakeholders in Namibia, but the private sector were ready to replace the public to participate with good results.

2.7 Focus on beneficiaries' participation to project activities

The selected beneficiaries participated in all the projects activities particularly the training and the Action plan practical development. The consultant can testify that the all participants worked very hard in the risk management cycle training and its practical application. Their attitude was particularly impressive as they had no experience of analysing the use of risk in their day to day jobs.

2.8 Additional deliverables

In Uganda the stakeholders, in particular the UNBS, presented one of the future needs as research on mycotoxin in fish feed. As this request was made in good time the consultant prepared Annex X Mycotoxin to introduce the subject. Moreover the consultant noticed the need of sampling organisation and prepared a practical paper: Annex IX Inspection sampling Kit basic material. This last Annex is very useful for sampling and quantitative analysis of mycotoxins, swab test and pesticides. It is possible to use quantitative risk analysis to better monitor CA with a private analysis plan before continuing with a more sophisticated analysis in the accredited laboratories.

3. RESULTS ACHIEVED

3.1 Results achieved compared to initial expectations

The mission respected tightly the logical framework presented in the consultant methodology with the following satisfactory results:

- Project Assessment and Study Analyses of the existing regulatory framework and tools available for reducing barriers to regional (domestic) and international trade in African fisheries products
- Review of the existing fisheries sector and related regulatory frameworks: evaluation of existing risk management processes
- Country Assessment Reports.
- Conduct of a series of interviews aimed at evaluating how risk management practices are used in the regulatory system (methodological evaluation) and what can be improved
- Development of training materials for risk management approaches in regulatory frameworks for fisheries in Namibia and in Uganda
- Training manuals and modules for risk management approaches in fisheries regulatory frameworks
- Conduct an introductory training on “Risk management in Regulatory Systems - Towards the Better Management of Risk”
- Stakeholders in each country better understand risk management methodology and its application to developing regulatory systems and processes
- Training Concept Reports with Satisfaction Survey
- Draft action Plans
- Conduct a series of workshops with different regulatory stakeholders, aimed at implementing the risk management cycle. A list of common risks were presented, agreeing on the most important risks and choosing risk treatment strategies
- Risk management improved through elaboration of Action Plans and two Country Reports to the UNECE Working Party Annual Session
- Developing of national long- and short-term action plans on enhancing the existing fisheries regulatory framework using risk management approaches and best practice

3.2 To what extent results achieved are transformed into real changes for project beneficiary?

The complete assessment of the fishery sector and the following training and practical plans provided a very clear roadmap to the stakeholders about their fishery practical needs and solution of problems through risk mitigation. All stakeholders are committed to follow the action plan and it now depends on them as to whether they will really follow their own recommendations. If they implement the Action plan a large benefit will accrue to their fishery sector. The beneficiaries have demonstrated that they have a very good technical and political capacity to manage the fishery risks and needs of their country. They now have the opportunity by utilising the “platform” created by the Action Plan to develop a coherent Risk Management programme. The identifying of such risks at Ugandan and Namibian fishery national level, the management process will become more transparent, to the benefit of all stakeholders.

3.3 Training and capacity building

The significant experience of the consultant who has undertaken hundreds of training and capacity building courses permitted tailoring high quality Training Concepts in the two countries. The experience in adult knowledge transfer and exchange created the opportunity to capture the attention of the trainees over the three days of extremely intense training. The time allowed was, however, extremely short and concentrated in order to develop all the requested ToR training activities. The consultant did not interfere in any of the action plan discussions - even the title of the programme was decided by the trainees. Trainees is actually a misnomer as the participants were "local specialists" as they all were at a high level in their field from the functionaries to the community representative to the business operators. The work was really a bottom up exercise with high participation of the trainees. The Action Plan (one for every country) was divided in the following main areas:

- Introduction and rationale
- Legislative framework
- Training
- Financial and support
- Communication

The risk cycle was presented in a way that the fishery stakeholders could understand in a short time as a result they assimilated it very well and it should be easy to apply to their day to day activities in their respective fishery sector. In addition they have a very wide bibliography, in case they would like to study the risk cycle more deeply. The discussion points can be applied easily in their professional activity with significant benefit.

The selection of trainees were crucial to the training results, the consultant prepared the "Commitment table" (See Annex III of the Training Concept of Uganda and Namibia) to ensure an appropriate selection, trainees commitment and a defined exit strategy after the training event for every trainee.

3.4 Workshop and stakeholders comments

After the training the results were presented to stakeholders with 5 workshops. It was very good to see the validation of the Action plans as they were prepared by high level trainees. There were very few additions or criticisms as the Action plans presented the real needs of the country, generally all were in agreement. It was highlighted that the Action plan is a living instrument that can be changed when there is the appropriate occasion. The workshop highlighted the Action Plan stakeholders' ownership. A clear road has been created and could provide several important activities to increase the value of the fishery chain in the two countries.

During the workshops the participants agreed that the Action Plan content clearly respects the country situation and the proposed solutions could radically and positively influence the country fishery chain situation.

During the workshops *the legislative framework and standard* needs were analysed and risks highlighted to prioritise the most important activities. After the preparation of the new standards the stakeholders must be *trained* so that they are informed about the new standards and legislative

framework. The *Action plan financial and support* cost was a subject of discussion, in fact it costs only a tiny fraction of the large benefit that can be provided to the fishery industry of the two countries. The State or one donor partner can easily cover the Action plan costs in ever country. In fact many of the proposed activities can be solved domestically as the legislative national markets regulation and some standards for regional fishery products (smoked, salted, canned) without any international interventions.

During the workshops the stakeholders recognized *communication* as a very important part of the Action plan and mandatory to have some results in the sector, there is an absolute lack of information and communication in the fishery sector.

All mission results were concentrated in the final workshops. The mission communication, particularly in Uganda, was assured by a complete coverage of the press and the media with video on the public channel and press communications.

In Namibia, as the sector was more restricted, the communication went especially to the Walvis Bay private stakeholders where the training and one workshop were carried out and the capital public agencies for the other two workshops. Walvis Bay the fishery "capital" of Namibia was a small place and communication was easy as all is concentrated in the NIS offices and laboratories, the industry have a special area where all processing factories are concentrated.

All public and private stakeholders were present at the workshops in Walvis Bay and in Windhoek where the Action Plan was presented. The different stakeholders were present during the three workshops. The participants were free to make any comment and suggestion as detailed in Annexe IV Interview and workshop reports.

4 KEY FINDINGS AND RECOMMENDATIONS

4.1 Key project findings and lessons learnt

The mission, although tightly scheduled, developed all the requested ToR deliverables, but several lesson was learned in during this short missions in Uganda and Namibia.

It is possible to separate the findings into different groups: ARSO as NSI and UNBS, the stakeholders, risk management, and fishery sector structure.

- *ARSO* regulatory agencies as NSI and UNBS as already explained they were not really ready to receive this kind of "revolutionary" innovation, and must work to realise advances in the direction of risk management. The majority of NSI and UNBS officers know about the mission and the risk management. They have limited financial resources and these are required for other activities; they have problems supporting their own day to day mandate. They are static agencies and they are not structured to be agile, to be in contact with the fishery stakeholders and to propose change to the regulatory framework or new innovative fishery standards. They need specific personnel dedicated for this work.
- NSI and UNBS declare that they can act only when the private stakeholders ask for new standards or other requirements. The other stakeholders maintain they ask for very little obtain less (i.e., the Namibia bivalve mollusc accreditation for export to the EU requested in

2007 but not yet achieved for several reasons). Communication is very important.

- *Stakeholders* participated enthusiastically in the training, as soon they understood how to apply risk management to their day to day work. They proposed the best action plan for their country and responded appropriately to all the training inputs. The action plans produced therefore appropriately reflect the needs of the country. The risk cycle provide the best and most economical way for a better fishery in their countries. Several activities could be performed by the stakeholders themselves as they know in depth the fishery situation of their country but these need permission from the regulatory authorities.
- *Risk management*. Fishery risk management and its application to the fishery regulatory framework are indubitably great planning tools for the fishery sector. Its basic principles must be explained to the fishery sector stakeholders, they are very often practically minded and do not like theory. The training component of the Action Plan is there for that purpose.
- Very few stakeholders have heard about risk management and none apply in their day to day work. They react only when a crisis occurs as this is something they understand. Risk management training therefore opens new horizons to the private sector, they recognized this as a result of the training exercise. In the regulatory agency the situation is different, these organisations need more time and training for them to fully appreciate the use of risk management. The value of risk assessment, analysis and mitigation exercises were recognised by the participants in the two training courses and the Action Plan reflects this recognition.This training could provide great benefit if extended to other countries where the fish industry is considered important.

4.2 Recommendations for possible future actions to be put in place by the beneficiary

The recommendations can be summarised by the following points:

- Creation of the Platform as soon as possible with all stakeholders represented. Directorate of Fishery Resources in Uganda to take the lead, meanwhile the NSI to do the same in Namibia.
- Preparation of a specific fishery risk management booklet along the fishery value chain
- Plan of Action implemented with continuous upgrading in its four components.
- Plan of Action executed in line with the proposed timeline
- The training course must be repeated with more time available domestically, regionally and at international level

4.3 Recommendations for possible additional support interventions

The Action Plans are very clear in their activities; the supporting platform must start soon next year to organise and execute the four components and their activities. In the short term someone as promised must takes the lead and start the Action Plans activities. Stimulation must be provided to the stakeholders for the platform creation. TBT programme is completing its project cycle and will be closed soon. The government and/or the donor partners can provide the financial support required as it is not large in relation to large forecast benefits to the fishery sector.

Regulatory authority must be committed to use the risk cycle instrument in their work and to closely collaborate with the fishery stakeholders.

ANNEXES

Annexes are presented in a separate pdf file attached to this report.