



Final Report on:

The development of methodologies and guidelines for orientation and training on standards and the implications on policy and market access

2nd November 2017

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Abbreviations and Acronyms

AUC	African Union Commission
AU	African Union
ARSO	African Organization for Standardization
UNCTAD	United Nations Conference on Trade and Development
PFRS	Policy Framework and Reform Strategy for Fisheries and Aquaculture
AEM	African Eco-labelling Mechanism
COMESA	Common Market for Eastern and Southern Africa
EAC	East African Community
WTO	World Trade Organization
TBT	Technical Barriers to Trade
SPS	Sanitary and Phytosanitary
ICLARM	International Centre for Living Aquatic Resource Management
AES/ARS	African Eco-Labeling Standards/African Standard
OIE	World Organization for Animal Health (<i>Office International des Epizooties</i>)
CACBT	Compliance Assessment for Cross-Border Trade

1. Introduction

On 15th November 2015 the International Centre for Living Aquatic Resource Management (ICLARM) (WorldFish) and the African Organisation for Standardisation (ARSO) signed a Memorandum of Agreement aimed at achieving the following objectives:

- (i) Based on the outcomes of the first MOA, to develop methodologies and guidelines for training/orientation of non-standards experts, including policy-makers, fisheries managers (from Ministries/Departments of Fisheries), processors and traders in order to help them understand the implications of standards on fish trade and management of fisheries and aquaculture policy. This could include the potential a High Level Awareness of Fish Standards at the EAC Parliament in 2016;
- (ii) To develop methodologies and conduct training/orientation of the students who are working on standards and well as support them with design and implementation of their research work, including access to the African Standards databank;
- (iii) To develop the Compliance Assessment for fish trade and support countries to use it on a pilot cross-border trade facilitation, using the COMESA-CABI Breaking Barriers Project, in partnership with East African Community (EAC) and Lake Victoria Fisheries Organizations (LVFO) (on Uganda-Kenya Border);
- (iv) To develop a Road Map for rolling out of the African Eco-labelling Mechanism (AEM) standards, as a model for testing "Trade-For-Sustainability" using Kenya aquaculture as a pilot, in collaboration with the Department of Fisheries.

2. Contract Description and Deliverables

- (1) By 17th November 2015, prepare an inception report on the development of methodologies and guidelines for orientation and training on standards and the implications on policy and market access, including sample sites and rationale for conducting test sessions for high and middle level officials as well as students
- (2) By 7th December 2015, prepare a preliminary report on the training and orientation of students from partner universities (as well as operationalisation of the cross-border compliance assessment
- (3) By 20th January 2016, prepare preliminary report on the development of a Road Map and the implementation of a pilot project on the

African Eco-labelling Mechanism (AEM) standards, as a model for testing "Trade-For-Sustainability"

- (4) By 7th March 2016, prepare updated reports on (i) methodology and guidelines for training and orientation on standards among officials and students; (ii) compliance assessment and cross-border trade facilitation; and (iii) implementation of the Africa Eco-labelling Mechanism (AEM)
- (5) By 7th May 2016, to prepare and submit final reports on the items above, containing a clear outline of the policy issues and implications at national and regional levels.

3. Implementation Methodology

The implementation methodology included the following activities:

- (i) Development of modules and training guidelines for orientation of non-standards experts on the governance, technical and trade environments of fisheries;
- (ii) Coordinate and conduct training and orientation of students from partner universities;
- (iii) Development of a compliance assessment and cross-border trade facilitation guidelines; and
- (iv) Development of an auditing manual for use in rolling out the African Eco-labelling Mechanism for (AEM) for fisheries

4. Deliverables under the Contract

The deliverables of the contract are outlined under the subtitles below. The training and orientation modules are developed from authoritative references and can be adapted for presentations flexibly.

4.1 Methodologies and Guidelines for Training/Orientation of Policy Makers

The guidelines for this group of stakeholders focuses on those aspects which require policy and legislative intervention. Political leadership is often necessary although many African countries tend to relegate most of these issues to technocrats. The following topics are covered:

- (1) The World Runs on Standards: The Chaos and Disorder in a World without Standards

- (2) The Role of the Quality Infrastructure in Facilitating Industrialization, Trade, Development and Regional Integration
- (3) Fisheries and Aquaculture Resource Endowments of Africa: A Review
- (4) The WTO and Food Trade: Impacts of the TBT and SPS Agreements
- (5) The Politics of Food Safety and Food Security Indicators
- (6) The Political Economy of Undernutrition/Malnutrition
- (7) The Politics of International Food Standards
- (8) Poverty Reduction and Rural Development: Fisheries and Aquaculture as Strong Contenders
- (9) The Case for an Enhanced Regional Fish Trade Framework
- (10) Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa
- (11) Securing Africa's Fisheries Resources for Development: Marine and Shared Water Resources (Stopping the Looting)
- (12) Ecosystems for Water and Food Security: Security of Watersheds

4.2 Fisheries Managers (from Ministries / Departments of Fisheries)

- (1) Fisheries and Aquaculture Resource Endowments of Africa: A Review
- (2) The Role of the Quality Infrastructure in Facilitating Industrialization, Trade and Development
- (3) Standards for Fisheries and Aquaculture: Identification of Standardization Needs, Stakeholders and Networks
- (4) Standards and Conformity-Oriented Value Addition in Fisheries and Aquaculture
- (5) Sustainability Practices in Fisheries Resource Management
- (6) Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa
- (7) Introduction to ARS/AES 02:2014, *Fisheries — Sustainability and Eco-Labeling — Requirements*

- (8) Public and Private Standardization Systems for Fisheries and Effective Articulation of National Position and Interests
- (9) The Rules-Based Nature of Fish Trade: Implications of the WTO TBT and SPS Agreements — The national Obligations Under the OIE and WTO Fish Trade Facilitation Regimes
- (10) Standards and Food Safety Regulations: Exploring the Intersections
- (11) Utilization of Standards for Regulation
- (12) Regulation for Development in the Fisheries and Aquaculture Sector
- (13) The Politics of Food Safety and Food Security Indicators: The Politics of International Food Standards
- (14) The Politics of International Food Standards
- (15) The Case for an Enhanced Regional Fish Trade Framework
- (16) The Political Economy of Undernutrition: Bringing Fisheries and Aquaculture to Bear
- (17) Best Practices in Securing and Enforcing of Fisheries Resource Instruments
- (18) Securing Africa's Fisheries Resources: Marine and Shared Water Resources
- (19) Ecosystems for Water and Food Security: Security of Watersheds and Hinterlands

4.3 Fish Processors and Traders

- (1) Fisheries and Aquaculture Resource Endowments of Africa: A Review of Opportunities and Challenges
- (2) The Rules-Based Nature of Fish Trade: Implications of the WTO TBT and SPS Agreements — The National Obligations Under the OIE and WTO Fish Trade Facilitation Regimes
- (3) Exploration of Standards and Regulations Applicable to Fisheries and Aquaculture
- (4) The Central Concern of Standards and Regulations

- (5) Value Addition: Product Development and Innovation in Fisheries and Aquaculture
- (6) Preview of Processing Technologies and Innovation of Fish Products
- (7) Packaging and Labelling as the Weak Link in Fisheries Marketing
- (8) Eco-Labelling and Sustainability Standards for Fisheries
- (9) Introduction to ARS/AES 02:2014, *Fisheries — Sustainability and Eco-Labelling — Requirements*
- (10) Regional Trade Arrangements and Mutual Recognition of Standards and Conformity Assessment
- (11) Hygiene and Food Safety in Fisheries and Aquaculture
- (12) Compliance with Standards and Certification as a Tool for Market Access

4.4 University Students Working on Standards and Research Work

- (1) Fisheries and Aquaculture Resource Endowments of Africa: A Review
- (2) The Role of the Quality Infrastructure in Facilitating Industrialization, Trade and Development
- (3) Standards: Their Nature, Types and Applications
- (4) Standards and Food Safety Regulations: Exploring the Intersections
- (5) The Process of Standards Development: African Standards Harmonization Model (ASHAM), the National and International Processes
- (6) Standards as Products of Scientific Knowledge and Research
- (7) Standards as Catalysts for Research and Innovation
- (8) The Socioeconomic Impact of Standardization: Impacts, Networks and State of Play
- (9) Value Addition and Product Development and Innovation in Fisheries and Aquaculture: Role of Standards and Conformity Assessment
- (10) Conformity Assessment for Fisheries Products: Quality Assurance, Testing, Inspection and Certification

- (11) Standards for Fisheries and Aquaculture: Identification of Standardization Needs, Stakeholders and Networks
- (12) Utilization of Standards for Regulation
- (13) Sustainability Practices in Fisheries Resource Management
- (14) Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa
- (15) Introduction to ARS/AES 02:2014, *Fisheries — Sustainability and Eco-Labeling — Requirements*
- (16) Packaging and Labelling as the Weak Link in Fisheries Marketing
- (17) Biotechnology in Fisheries and Aquaculture: Opportunities and Challenges
- (18) The Rules-Based Nature of Fish Trade: Implications of the WTO TBT and SPS Agreements — The National Obligations Under the OIE and WTO Fish Trade Facilitation Regimes
- (19) The Politics of Food Safety and Food Security Indicators: The Politics of International Food Standards
- (20) The Politics of International Food Standards
- (21) Public and Private Standardization Systems for Fisheries and Effective Articulation of National Position and Interests
- (22) The Political Economy of Undernutrition: Fisheries and Aquaculture Intervention
- (23) Poverty Reduction and Rural Development: Fisheries and Aquaculture as Strong Contenders
- (24) Regulation for Development in the Fisheries and Aquaculture Sector
- (25) The Case for an Enhanced Regional Fish Trade Framework
- (26) Best Practices in Securing and Enforcing of Fisheries Resource Instruments
- (27) Ecosystems for Water and Food Security: Security of Watersheds and Hinterlands

- (28) Securing Africa's Fisheries Resources for Development: Marine and Shared Water Resources (Stopping the Looting)

4.5 Compliance Assessment for Pilot Cross-Border Trade

This Compliance Assessment for Cross-Border Trade (CACBT) in fish products was prepared to address the existing barriers in fish trade among African countries, and specifically the regional blocks of the East African Community (EAC) and the Common Market for Eastern and Southern Africa (COMESA) both of which have established the Simplified Trade Regime (STR) as legal instruments to facilitate and mainstream small scale cross-border trade among their Member States. The CACBT utilized the internationally recognized standards from the Codex Alimentarius Commission (CAC) to establish a simplified certification system for fish products intended for marketing nationally and across the borders. This CACBT forms the basis for rapid official certification of the products to access markets across borders and hence forms part of the official documentation complying with the simplified trade regimes currently existing in the EAC and COMESA.

The CACBT is expected to promote better understanding, increased active participation and improved business decisions, resulting into increased fish supply, incomes, food security, fish consumption, nutrition and livelihoods.

This CACBT has been presented as a piloting tool in the EAC and in ECCAS for cross-border fish trade.

4.6 Piloting AES 2:2014 Eco-Labeling Certification as a Test Model for Trade-For-Sustainability

ARSO coordinated the development and adoption of the African Eco-labelling Standard for fisheries ARS/AES 02:2014, *Fisheries — Sustainability and eco-labelling — Requirements*. Under the current contract, ARSO was tasked with developing an audit manual which could be used to pilot eco-labelling certification in collaboration with fisheries and aquaculture authorities. The African standard incorporates international best practices codified in the *FAO Code of Conduct for Responsible Fisheries* and its specialized support technical bulletins to achieve a comprehensive audit manual for sustainable capture fisheries.

Certification to sustainability standards is an important tool for market access as well as attesting to the sustainability of the fisheries resources, the environment and the livelihoods of the stakeholders. It is an assurance to the consumers that they are consuming food from resources which can sustain the supply, fair business practices are deployed and that their food is safe. Increasingly, consumers are demanding these assurances for goods and services across all sectors of the economy making the development of sustainability standards a necessary component of standards development by national, regional and international standardization bodies.

The audit manual is based on the eight principles incorporated in AES/ARS 2: 2014:

Principle 1: Legal compliance

Principle 2: Respect human rights

Principle 3: Respect labour rights

Principle 4: Maintain fisheries resources and rebuild depleted fish stocks

Principle 5: Maintain ecosystems integrity

Principle 6: Contribute to the mitigation and adaptation to the detrimental effects of climate change.

Principle 7: Responsible waste management

Principle 8: Efficient use of resources

The audit manual recommends the classification of certification levels into four levels based on the scoring levels based on their performance: (1) Bronze; (2) Silver; (3) Gold; and (5) Platinum.

4.7 Training and Orientation of University Students

Objectives

The primary objective of the training was to undergo orientation in the formulation of standards in order to equip students in their on-going research. The training was also designed to establish a firm foundation for participating students to develop basic skills of approaching fisheries and aquaculture with high level of understanding the quality infrastructure necessary to support a sustainable fisheries and aquaculture nationally and regionally.

The specific objectives of the training include:

- (i) To introduce university students into the processes involved in standardization, trade facilitation, the real-world state of play in fish trade.
- (ii) To understand the application of standards in research and innovation and the development dimensions of fisheries and aquaculture.
- (iii) To relate fisheries and aquaculture resources to standards, regulations and conformity assessment as market access tools and socioeconomic development.

Accomplishment of the training

Three (3) students participated in the week long training. The names of the participants, institutions and country of origin is presented in the table below.

Name of Participant	Institution	Country
Ms. Bernice Avorgbedor	University of Ghana	Ghana
Ms. Ziona Makawa	Lilongwe University of Agriculture & Natural Resources (LUANAR)	Malawi
Ms. Flora Uwamahoro	University of Dar es Salaam	Tanzania

Training Team

Members of the training team included consultants and a number of resource persons who schooled the participants on the standards for fisheries and aquaculture. The resource persons on fish trade and standard as well as their institutions is presented in the table below.

Resource Person	Position	Institution
Reuben Gisore	Technical Director	ARSO
Mildred D. Eboi	Quality Assurance officer	Kenya Bureau of Standards
Immaculate Odwori	Manager Agro-chemical	Kenya Bureau of Standards
Willis B. Makokha	Research Scientist & Head of Energy Division	Kenya Industrial Research And Development Institute
Vincent Ogwang	Officer	State Department of Fisheries and Marine Resources-Kenya
Robert M. Kilonzo	Head, Food Safety Unit	Ministry of Health, Nairobi, Kenya

Summary of Proceedings

The mode of presentation was in PowerPoint. Participants were also furnished with training materials. On the 27th to 29th of April 2016, a high level delegate meeting was held with the ARSO Technical Harmonization Committee on Agriculture and Food Products. The meeting had drawn representatives from various African and EU countries. The primary objective of the meeting was to come to a consensus in the international harmonization of standards. The participating students were in attendance on the first day of the consortium on the 27th of April, 2016 where we observed the process of standards harmonization.

To appreciate and understand the concepts, participating students were assessed by way of a presentation on the standards of a specific product.

Subsequently, the participating students visited the Kenya Bureau of Standards (KEBS) food and agricultural products laboratory. The students witnessed series of tests on agriculture and foods products being to determine food nutrients, microbiological limits, pesticide residue limits and heavy metals in accordance with specific standards.

5. Procurement

As a service contract, no goods were anticipated for procurement apart from payments made to the experts who provided training services. The payments were made in terms of sessions as indicated in the table below:

Resource Person	Institution	Pay (USD)
Mildred D. Eboi	Kenya Bureau of Standards	100
Immaculate Odwori	Kenya Bureau of Standards	200
Willis B. Makokha	Kenya Industrial Research And Development Institute	100
Vincent Ogwang	State Department of Fisheries and Marine Resources-Kenya	150
Robert M. Kilonzo	Ministry of Health, Nairobi, Kenya	50
Total		600

Copies of payment vouchers are attached in the annex.

The rest of the funds were utilized in the preparation of the training modules covering time and administrative overheads. ARSO Secretariat staff payments are handled through staff procedures.

6. Incorporation of Deliverables in Certification Schemes

As a commitment to improving intra-African trade in fish and aquaculture products, the ARSO Secretariat incorporated certification of sustainable fisheries and aquaculture in the ARSO Conformity Assessment Programme (ACAP) Schemes A2 and F as indicated in the diagram below.

The wild catch of fish and other sea water/ fresh water species sustainability certification scheme can operate as single fishery or group fishery fleet units willing to certify their products according to AES/ARS 2:2014.

The ARSO Conformity Assessment Committee (ARSO CACO) made a decision in October 2017 to use the GlobalGAP Aquaculture Module (2017) as the basis for the aquaculture certification scheme. This will be benchmarked with the Aquaculture Stewardship Aquaculture Standards for species of strategic interest to Africa such as Tilapia and Catfish.

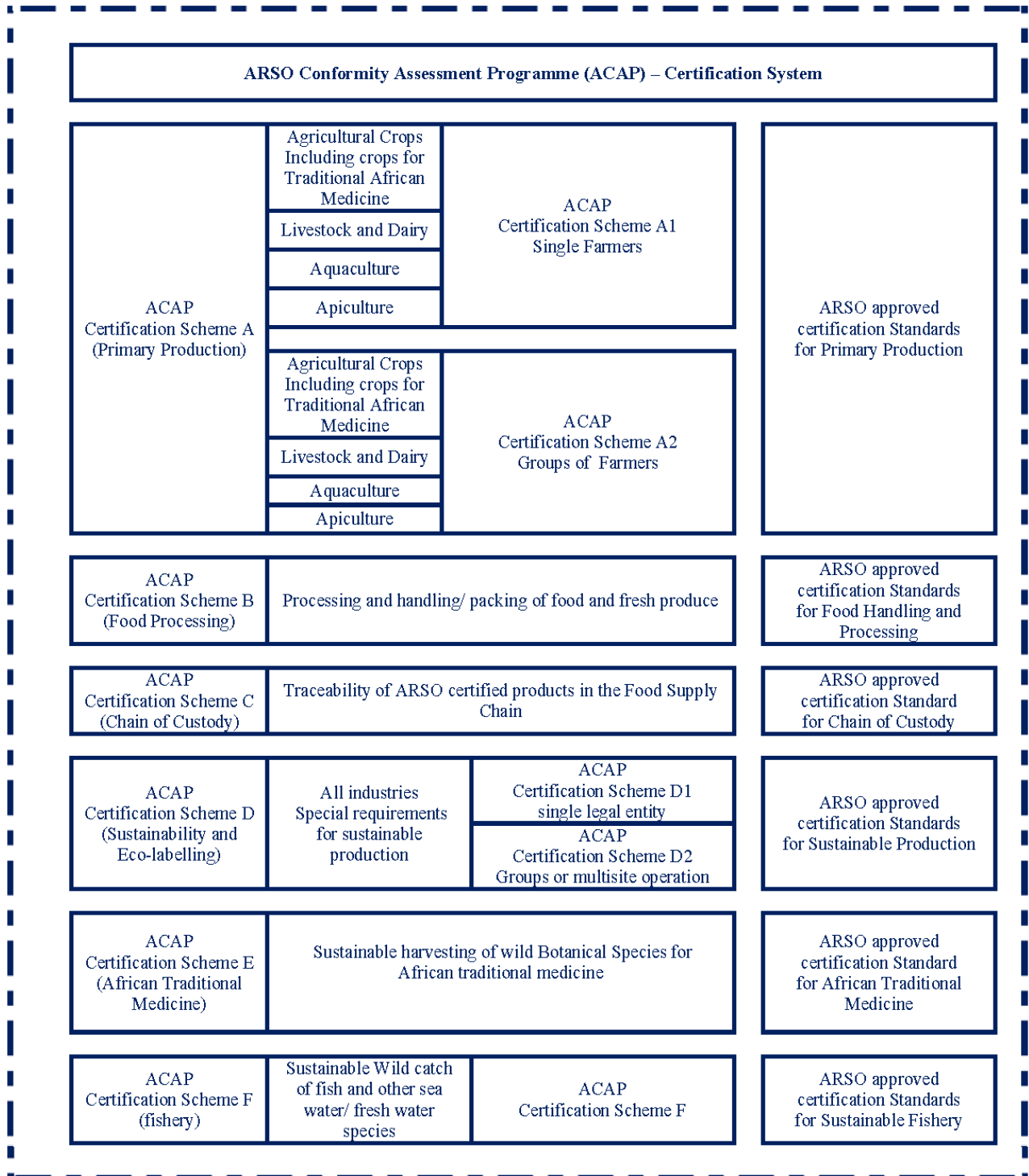


Figure 1: ACAP Certification Schemes including Fisheries and Aquaculture

Annex A

Registration of Students

Annex B

Payment Vouchers for Trainers