THE ROLE OF STANDARDS IN PROMOTING SUSTAINABLE AGRICULTURE AND FOOD SECURITY IN AFRICA – 21ST ARSO GENERAL ASSEMBLY
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Introduction

Sierra Leone is located on the West Coast of West Africa;
It is bordered on West, North and Northeast by Republic of Guinea; and
Southeast by Republic of Liberia;
SL covers a total area of about 71,740km2 with a coastline of about 560 km;
Coastland is characterized by extensive flora of mangrove plants,

A number of estuaries and rivers that are navigable for short distances.

Fisheries sector has great potential to make significant contribution to food security;

Nutritional view: fish is a major source of animal protein for Sierra Leoneans;

Fish contributes 8% of SL GDP;

It is largest single source – supplying about 80% of total animal protein for consumption;
Factors influencing Quality of Fish during Capture, Handling and Processing

• Canoe registration,
• fishing methods and fish quality in standardization,
• The Fishing Gear- Nets, Line and traps,
• The fishing Time,
• Damage from the nets, hooks,
• Time spent in the fishing vessel,
• Equipments, Containers and
• Human contamination,
• Washing,
• and Packaging
Artisanal & Industrial Fishing Activities

SL practise a small scale:

- Artisanal fishery - source of employment;
- Industrial fishery - highly capital intensive venture;

Employ about 1000 people;

Contributes about 20% of total fish production;

Fish production is about 20,000 million tons and this comprises:
- shrimps, and other shellfish,
- SLeonean waters have rich fishing grounds for high value species: shrimps, lobsters, cuttlefish, breams and snappers.
ARTISANAL AND INDUSTRIAL FISHING ACTIVITIES
Main Constraints

- Inadequate fishing gear and craft,
- Inadequate extension services to fishermen,
- Poor handling and Processing,
- Management of fish products,
- Inadequate data and analyses on fishing catch,
- Inadequate infrastructural facilities and storage facilities,
- Lack of automatic temperature recording devices,
- Lack of official control system and
- Lack of monitoring plans for test of freshness & water/ice, etc.
Present Situations

• SL has a ban - not exporting fish and fisheries to EU and international markets,
• Reasons: - SL does not comply with EU Regulations,
  - Regulations relating to hygiene of food and feed and official controls,
• SL Fishing Company only fulfils the requirements,
• Food and Veterinary Office had a mission in 2009,
• The mission identify some lapses in the fish production chain,
• Lapses need to be corrected.
Food and Veterinary Office's (FVO) mission identified the following Problems:

- Implementation of Official Inspection
  - Lack of procedures
  - Lack of Official Controls
  - Lack of training of inspectors
  - Lack of monitoring from the central body
  - Lack of monitoring of chemicals (heavy metals),
  - Documentation not sufficient,
  - Laboratory analysis not sufficient,
  - Existing laboratory not accredited,
  - Organoleptic examination.
EU Requirements

EU enacted fish legislation that applied to imports and export. These includes:

- Health conditions,
- Freshness;
- Restrictions on veterinary medicines,
- Introduce of Hazard Analysis Critical Control Point, (HACCP) in fish processing companies,
- Cooling facilities from catch to processing,
- Official controls systems
- Processing establishments and Cold rooms
- Monitoring plans for test of FP and Water/ice and vessels etc.
Legal & Regulatory Framework

- Govt. enacted Fisheries Policy
- Fisheries Act and Product Regulations was also passed in Parliament,
- Regulations is presently been reviewed by Ministry of Fisheries,
- The Food Unit of the Ministry of Health and Sanitation identified as the Competent Authority for fish,
- Govt. drafted a Food Safety Law and to establish a Authority.
- The Standards Bureau has adopted the CODEX Standards that regulates the production of Food and Codes of Hygiene and Sanitary practices,
Legal & Regulatory Framework Cont.

Draft National Standards for fish products will be published to meet the EU requirements.

Dutch Company: Precon’s support to facilitates the export of fish and fisheries product,

EU and UNIDO support to establish accredited Laboratories: - on going,

National Standards Laboratory to perform analyses,

Assessment of staff competency,
Recommendations Of The FVO Mission

Ensure official controls for fish products intended for the EU market includes:

- Organoleptic checks,
- Freshness indicators,
- Conduct histamine analysis,
- Conduct microbiological tests,
- Carry out analysis on contaminants including heavy metals, Dioxins, PCB’s and poisonous FP.
- Official controls for water and ice,
- Conduct appropriate training for water quality laboratory.
Recommendations Continues

- Compliance of fishing vessels.
- Establishments involved in the EU fish production chain.
- Supervision by Ministry of Fisheries & CA.
- CA is to provide guarantee:
  - establishments and fishing vessels
  - compliance with the EU Regulations
  - identified List of authorised establishments to export fish to the EU
Achievements

Despite the ban:
- positives achievements:
  - Development of Standard Operating Procedures.
  - Development of Hygiene Guides.
  - Development of Quality assurance programmes for sustainable exports.
  - Hygiene conditions at landing sites improved.
  - Capacity to analyse fish/fish product samples has upgraded,
  - Environmental Monitoring Plans established.
  - product testing conducted from different fishing grounds with a Traceability plan.
  - Collaborative approach in fish management and development with other Agencies sought.
Role of SLSB - NSB

- SLSB- NSB- statutory body established by an Act of Parliament and operates on two (2) Acts,
  - Standards Act No. 2 of 1996: provide for standardization of commodities and products,
  - Weights and Measures Act 5 of 2010, repealed Weights & Measures Act, 1961- Authorise and validate the use of the Metric System (SI unit)

- SLSB has an oversight shared responsibility between Minister-MTI and a Council – NSC

- Memberships: - Codex, Codex Contact Point,
  - Corresponding Member – ISO, OIML,
  - Affiliate Member to IEC.
Activities

Responsibilities:

- Publication of all Sierra Leonean standards,
- Establishing and managing the National Metrology Institute;
- Provision of Testing and Certification services related to standards on request to industry and authorities.

- Demonstrating compliance; and
  - Provide conformity assessment services.

Development of NQP

- approval by Cabinet - October, 2012,
Activities Continue

Objective - NQP:

- Re-engineer the National Quality Infrastructure;
- Improve international competitiveness
- Ensure that goods and services are accepted;
- Raise the quality consciousness and
- Provide technical framework for the establishment of conformity assessment service providers;
- Implement technical regulation and SPS measures;

National Quality Infrastructure is in place,
- Limited in the services it can offer.
- Fragmented,
- Test reports and certificates not accepted internationally;
- S/L need a well established NQI in place,

NQI: is made up public and private sector, guided by NQP
Government Funding

- Govt. Subvention & Development funds:
  - Does not cover the total cost of the entity: (earmarked for specific activities). Membership subscriptions, Standards Development process, infrastructural Building etc).

Other Sources:

- import & export inspection;
- verification of weighing and measuring instruments for consumer protection.

- Metrology Building: - Constructed,
- Improve competitiveness of the export sector and enhance international trade;
Standards: - Technical Committees established, SLSB operates TCs - ISO/IEC Directives, WTO/TBT agreement and ECOSHAM;

Standards reviewed, withdrawn, adopted and published: 133 standards - 35 are mandatory while the others are voluntary.
SLSB Conformity Assessment Systems

Conformity Assessment Systems: (ISO/IEC 17000)
- National Standard Laboratory for Food products established:
  - Microbiology and Chemical Laboratories;
  - Technical Manuals & in accordance to ISO/IEC 17025;
  - systems and assurance established;
- Personnel are partially trained in the use of the equipment, local and international;

Microbiology: Test parameters such as:
- Coliform, Salmonella, Total Plate Count, Yeast & Moulds, E-Coli and Staphylococcus
Chemical Laboratory

Procurement of Two Scientific equipment: High Pressure - Liquid Chromatograph (HPLC) & Atomic Absorption Spectrometer (AAS);

- HPLC, test Histamine in fish; vitamins, and Micro toxins: Aflatoxins, etc.
- AAS, test heavy metals in fish and waters (rivers, artificial lakes cause by mining companies – impact

Aim: Protect health and safety of the general public;
- Against unsafe and counterfeit products

Also Conduct tests: - Water Analysis, Food colours, Fats, Moisture, Ash and Protein etc.
HPLC, test Histamine in fish; vitamins, and Micro toxins: aflatoxin etc.
AAS, test heavy metals in fish and water.
CHALLENGES – SLSB Lab

Accreditation:
- Facilitate independent attestation of technical capabilities of service provider;
- Satisfy local and international markets in line with best practices;
- Certificate & Test Report issue recognise internationally;

Staff have been introduced to FAPAS – 2014 Proficiency Testing Scheme, based in United Kingdom;

Bureau to participate in this year 2014/15 scheme with known parameters for microbiology and chemical;
Challenges in EU Certification Procedures

Govt. has undertaken a number of initiatives to lift the ban,
- Get full (List 1) approval for the export of fish to the EU,
- Amendment of the legal and regulatory framework,
- Control procedures to be established for the approval of plants for export to the EU,
- Insurance of health certificates,
- Compliance of the code of hygiene practice: handling, processing, and storage of fish, (export and domestic market),
- Harmonization of SL hygiene requirements with EU,
- Implementation of Sanitary and Phytosanitary requirements.
I THANK YOU ALL