



**TRAINING WORKSHOP ON CAPACITY BUILDING FOR FISHERIES STATISTICAL
DATA COLLECTION ANALYSIS AND UTILIZATION OF SCIENTIFIC DATA FOR
INFORMED DECISION-MAKING IN FISHERIES AND AQUACULTURE**



**Training Workshop on Capacity Building for fisheries
and Fisheries Management Course.**

Date: 5th - 9th September, 2016, @ Chelsea Hotel Abuja

I. INTRODUCTION

1. A training workshop on "capacity building for fisheries statistical data collection analysis and utilization of scientific data for informed decision-making in fisheries and aquaculture" was jointly organized by the African Union Interafrican Bureau for Animal Resources (AU-IBAR) and the NEPAD Agency in collaboration with the Federal Ministry of Agriculture and Rural Development of the Federal Republic of Nigeria with support from the European Union from 05-09 September 2016 in Abuja, Nigeria.
2. The overall objective of this exercise was to equip African fisheries experts and officials with enhanced skills and knowledge with respect to their ability to collect, analyse and interpret fisheries data so as to better inform fisheries management decisions. The specific objectives were to:
 - Understand what kinds of data that can be collected, where and how data can be collected and stored, and also the common problems associated with data collection and storage.
 - Create awareness on the importance or relevance of various types (bio-statistical, economic, social, environmental etc.) data for sound management of fisheries resources.
 - Strengthen the capacity for fisheries statistical data collection, analysis and utilization of scientific data.
 - Build skills on the use of data to support evidence-based policy and rational management measures with regards to fisheries resource exploitation in African context.
3. The training was attended by **35 participants** from the following **African Union Member States (AU MS)**: namely Angola, Benin, Cameroon, Cote D'Ivoire, Democratic Republic of Congo, Egypt, Ghana, Guinea, Kenya, Liberia, Mozambique, Nigeria, Republic of Congo, Sao Tome and Principe, Senegal, Sierra Leone, Sudan, The Gambia and Tunisia; **Regional Economic Communities (RECs)**: ECOWAS and UEMOA; **Training resource person** and **International experts** as well as **AU-IBAR** staff members.
4. The opening ceremony was marked by two statements from the representatives of AU-IBAR and Federal Ministry of Agriculture and Rural Development, Federal Republic of Nigeria:

Dr Simplicie Nouala, Chief Animal Production Officer gave welcome remarks on behalf of Prof. Ahmed A. Elsayalhy the Director of AU-IBAR. He highlighted that fisheries management decisions are often taken with difficulty and without reference to the status of exploited stocks in the EEZs of coastal countries. This has been attributed mainly to absence of relevant information to inform policy and management decisions and also inadequate capacity to interpret and utilize research data even where such data is available. The availability of reliable data is one of the prerequisites for informed decision making in fisheries and aquaculture. Thus, the AU-IBAR developed a training manual to enhance capacity of AU member States in interpretation and utilization of fisheries (and ecosystem) scientific data/information for rational fisheries management. The overall objective of this document is to equip the African fisheries decisions makers, experts

and/or administrators with the necessary skills and knowledge for enhancing their ability to successfully know and appreciate what kind of data could be analyzed to help understand the dynamics of fisheries for rational and sustainable management actions. He thanked the Government and People of the Republic Federal of Nigeria for accepting to host this important event.

Dr Shehu M.U Ahmed, Permanent Secretary of the Federal Ministry of Agriculture and Rural Development, Federal Republic of Nigeria made opening remarks at the training workshop on behalf of the Chief Audu Ogbeh, Honorable Minister of Agriculture and Rural Development. He alluded to over-fishing as being caused by the weak capacities of fisheries administrators with respect to adequately interpreting and utilizing research data for informed management decisions. This training serves as a stepping stone towards addressing this area capacity deficiency on the continent.

II. THE TRAINING

a. Setting the scene;

- i. Fisheries management systems (targets) in Africa-Setting the scene presentation and the background, objective and expected outcomes of the training workshop.

b. Technical presentations;

The main technical facilitator was AU-IBAR Consultant, Dr. Pete Fielding, from the OLRAC SPS. The course content was largely based on the Training manual for Senior Fisheries Managers developed by OLRAC for AU-IBAR.

- i. Marine environment of the African coast-LMEs and the freshwater aquatic environment of Africa
- ii. Water model-Illustration of population dynamics
- iii. Introduces the issue of sustainability – what is it?
- iv. Sustainable populations and overfishing
- v. The effects of unsustainable fishing and the status of African fisheries
- vi. Overview of fishing operations – the stages of a fishing operation
 - The complexity of fishing operations - vessel and gear properties, vessel movements, gear deployment, environmental dynamics, fish movement and dynamics
 - Broad overview of data that can/should be collected at the different stages
 - The issue of standardization of units in data collection
- vii. Overview and discussion of different fisheries management options–Setting management objectives and targets – biological/economic/social
- viii. How are fish caught – types of fishing gear
- ix. Overview of different data capturing technologies
- x. Indicators relevant to fisheries management: Biological (age structure, size at maturity, etc.); Economics (unit prices, revenue, value profitability); Social (fishers, settlements, etc.) and Operational indicators, etc.
- xi. Why manage fisheries? Biological, Ecosystem, Economic and Social consequences of not managing fisheries- Tragedy of the commons

- xii. Why collect data - the role of data in fisheries management
- xiii. Data collection strategies - Brief overview on complete enumeration; sampling; routine data collection and Ad hoc data collection
- xiv. Catch and effort data and the relevance to fisheries economics and management- Defining Fishing Effort - the need to standardize Effort. FAO Effort Fishing effort and fishing (fishing gear limitations, sea days, fishing seasons, minimum size, marine protected areas, other examples)
- xv. To bring other perspectives to fisheries management, the workshop, the participants were introduced to relevant economic and social issues in fisheries management as well as international principles. The presentation were done by the following resource persons:
 - Economics fisheries management targets by Dr Andrew Baio
 - Social consideration and fisheries management targets by Prof Paul Onyango
 - Managing fisheries in an international context – compliance issues by Prof Ben Satia
- xvi. Presentation of experiences by selected member states: current fisheries management practices and challenges;
 - Ghana (Western Africa region)
 - Cameroon (Central Africa Region)
 - Kenya (Eastern Africa Region)
 - Mozambique (Southern Africa Region)
 - Tunisia (Northern Africa Region)
 - Nigeria (Western Africa region)

c. Training exercises and case studies based on group activity and discussion;

The exercises were undertaken in the form of group work and discussions on the following:

- i. Complexities and standardization issues in fisheries data collection
- ii. Fisheries of the African continent – who are the resource users, the scale and type of fisheries and the problem issues
- iii. Biological, social and economic indicators
- iv. Fisheries resources management with examples on the Lobster fisheries – scenarios for data analyses and interpretation for management decision
- v. Exercises on application on international instruments, combating IUU
- vi. Exercises on catch, effort, catch per unit effort, price, revenue and costs and quota allocation mechanisms
- vii. Exercises on the international law and regional fisheries management organization aspects of fisheries data, collection, usage and management
- viii. Data requirements for aquaculture development policy making

III. OUTCOMES OF THE MEETING

The meeting among others came up with the following outcomes;

- i. The Fisheries Managers were adequately equipped with the concept of data collection, analysis and interpretation of scientific data (biology, economic, social and legal) for informed decision making;

- ii. There is a need to ensure that the data collected in the coastal states (national boundary) water is the same as the high seas fisheries particularly for the straddling stocks i.e. harmonisation of standards for data collection;
- iii. The fisheries managers were equipped with the necessary tools and knowledge on international instruments and their relationship and influence to different type of fisheries, hence what instrument they could consider when making management decisions at national, regional or international level.

IV. CONCLUSIONS AND RECOMMENDATIONS

- i. There was a general agreement on the need to allocate more days for the training to allow for increased understanding on the techniques and skills for data analyses and interpretation for rationale fisheries management
- ii. The member states should implement primary data collection on biological, economics and social issues to support decision-makers
- iii. Research institutions need to be strengthened and linkages fostered between research institutions and the institutions in charge of fisheries management and aquaculture development
- iv. The member states should continuously train Enumerators on the importance of accurate data collection and methodologies
- v. Increased support to data collection to support informed decision-making
- vi. There is need to establish regional or sub regional collaboration for data collection and harmonization of systems
- vii. Strategies and MTC (e.g. Vessel day Approach)
- viii. The member states should implement provisions of continental and international fisheries and aquaculture instruments and increase compliance with RFMOs
- ix. Fisheries management plans and regimes to be supported by appropriate data
- x. There is a need for countries to implement scientific and compliance observer programmes. There is need to have provision for observers to be taken in charged by the fisheries exploiting country to insure effective data collection and observation of the fishing activities at high sea
- xi. The fisheries managers should be guided by the FAO species and zone code when collecting data in their fisheries

V. ADOPTION OF THE COMMUNIQUE

The communique was adopted by the meeting

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