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SUSTAINABLE FISHERIES MANAGEMENT PROJECT (SFMP)

Report of the Training in Biological Fisheries Sampling and Data Management



2015

THE UNIVERSITY OF RHODE ISLAND
GRADUATE SCHOOL OF OCEANOGRAPHY
CRC
COASTAL RESOURCES CENTER

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Cover photo: Participants at the Training from the Fisheries Commission (Photo courtesy Bitá)

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OVERVIEW

The Senior Fisheries Advisor conducted a second training for the Fisheries Commission's staff from March 21 to 24, 2016 in Dodowa on biological sampling and use of MS Access to create and manage fisheries databases.

The purpose of the training is to enhance skills and knowledge of the Fisheries Commission, FSSD in biological sampling and data management. The trainees had the opportunity to go through a series of lectures on biological techniques supported by hands on exercises. The training provided an overview of sampling techniques, measuring lengths, weights and collecting age and growth information. This was followed with a training in database systems and database development using MS Access.

At the end of the training, the trainees acquired a good working knowledge of MS Access, basics and intermediary. Each one created a database from scratch and managed to do queries and develop reports by end of the training. All fisheries databases of the Fisheries Commission are developed in MS Access.



Figure 1 Participants at the biological fisheries sampling and databases workshop.

A full-day session was dedicated to present existing fisheries data collection systems, canoes, inshore, trawls, and tuna fisheries by FSSD staff responsible for these programs. Together they discussed and developed a vision for way forward and laid goals and targets for data collection improvements. The group discussed several issues and challenges preventing the advancement of staff with modern techniques in fisheries data collection. They identified the following issues and opportunities for the way forward:

Table 1 issues and challenges preventing the advancement of staff with modern techniques

Strength	Weaknesses
<ul style="list-style-type: none"> • Experienced senior personnel • Data center (WARFP in progress) • Fisheries training school (in progress) • Collaboration with other institutions <ul style="list-style-type: none"> ○ Training ○ Logistics ○ Infrastructure 	<ul style="list-style-type: none"> • Inadequate technical capacity • Inadequate zonal officers • Lack of clear roles and responsibilities (Divisions not well-structured) • Limited material resources • Weak structured database • Limited infrastructure (building, equipment etc.) • Limited logistics (vehicles, equipment) • Lack of research vessel • Low paid data collectors • Lack of in-service training for enumerators.
Opportunity	Barriers
<ul style="list-style-type: none"> • Fisheries management plan in place to help the value of data collection. • Operationalize the fisheries management plan. • Collaboration with institutions (SFMP, ICCAT, FAO, Local Universities, etc.) • Training • Financial support • Logistics • Infrastructure development (landing sites) 	<ul style="list-style-type: none"> • Political interference • Unstable power supply • Government freeze on hiring • High cost of data collection

AGENDA

Table 2 Day 1

DAY 1 – March 21, 2016	TIME
SESSION 1 (TOPICS) <ul style="list-style-type: none"> • Biological data collection • Sampling catch at the port/beach. What is the right sample size • Basic statistics • Tabulate data and graphing. Hands on exercise in excel 	08:30AM – 10:30AM
TEA/COFFEE BREAK	10:30AM – 10:50AM
SESSION 2 (TOPICS) <ul style="list-style-type: none"> • Introduction to stock assessment • ACCSP program • Introduction to Fisheries management • Group exercise – Improving your data fisheries system. 	11:00AM – 01:00PM

Table 3 Day 2

Day 2 - March 22, 2016	Time
SESSION 1 (TOPICS) <ul style="list-style-type: none"> • Introduction to databases • Creating a database • Hands-on exercise 	8:30 AM – 10:30 AM
TEA/COFFEE BREAK	10:30AM – 10:50AM
SESSION 2 (TOPICS) <ul style="list-style-type: none"> • Field Properties • Manipulating Tables & Records • Primary Keys and Indexing • Filtering • Sorting • Searching 	11:00 AM – 1:00 PM

Day 2 - March 22, 2016	Time
LUNCH BREAK	1:00PM – 2:00PM
SESSION 3 (PRACTICE AND ASSIGNMENTS) <ul style="list-style-type: none"> • Hands-On Exercises Supervised by MS Office Certified Trainer 	2:00 PM – 4:30

Table 4 Day 3

Day 3 – March 23, 2016	Time
SESSION 1 (TOPIC) <ul style="list-style-type: none"> • Forms 	8:30 AM – 10:30 AM
TEA/COFFEE BREAK	10:30AM – 10:50AM
SESSION 2 (TOPIC) <ul style="list-style-type: none"> • Queries 	11:00 AM – 1:00 PM
LUNCH BREAK	1:00PM – 2:00PM
SESSION 3 (PRACTICE AND ASSIGNMENTS) <ul style="list-style-type: none"> • Hands-On Exercises Supervised by MS Office Certified Trainer 	2:00 PM – 4:30 PM

Table 5 Day 4

Day 4 – March 24, 2016	Time
SESSION 1 (TOPIC) <ul style="list-style-type: none"> • Reports 	8:30 AM – 10:30 AM
TEA /COFFEE BREAK	10:30AM – 10:50AM
SESSION 2 (TOPIC) <ul style="list-style-type: none"> • Managing Switch Boards • How to Export from Access to Excel- Vice Versa 	11:00 Am – 1:00 PM

Day 4 – March 24, 2016	Time
<ul style="list-style-type: none"> • Printing 	
LUNCH BREAK	1:00PM – 2:00PM
SESSION 3 (PRACTICE AND ASSIGNMENTS) <ul style="list-style-type: none"> • Present Certificate to Participants 	2:00 PM – 4:30 PM

DETAIL COURSE OUTLINE

DATABASE CONCEPTS

- What is a database?
- Database Examples
- What is a relational database?
- What is a table?
- What is a record (row)?
- What is a field (column)?
- What is data?
- The difference between data and information
- Data types
- Common uses of large-scale databases
- Keeping data discrete
- Each field should contain only one item
- Database designers, database administrators and database users

OPENING A DATABASE & SECURITY ISSUES

- Opening a database within your samples folder
- Trusted Locations – Using the Trust Centre
- Setting the default folder location within Access
- Closing the Access program

TABLES: FIELDS AND FIELD TYPES

- Creating a new blank database
- Adding fields and setting the field type
- About Access Data Types
- Closing and naming a table

TABLE NAVIGATION & MODIFICATION

- Opening a table within a database
- Switching between ‘Datasheet View’ and ‘Design View’
- Adding records to a table
- Saving changes made to a table
- Navigating through records within a table

- Adjusting column width
- Automatically resizing a column with to fit contents
- Moving a column to rearrange the column order

FIELD PROPERTIES

- Field Properties
- Input Masks
- Validating Numbers
- Validating Dates
- Data Entry Required / Not Required
- Field Properties – Reference Materials
- Field Properties – Logical Operators
- Field Properties – Validation Rule Examples
- Field Properties – General
- Field Properties – Format
- Field Properties – Input Mask Characters
- Field Properties – Input Mask Examples

MANIPULATING TABLES & RECORDS

- Renaming a table
- Editing data within a record
- Deleting data within a record
- Using the Undo command
- Deleting a single record
- Deleting multiple records
- Using Save As to backup the database using a different file name
- Deleting a table

PRIMARY KEYS AND INDEXING

- Defining a Primary Key

FILTERING

- Text Filters
- Applying a single filter
- Clearing a single filter
- Creating multiple filters
- Clearing multiple filters

SORTING

- Sorting Records A-Z
- Sorting records Z-A
- Removing a sort
- Sorting on multiple fields

SEARCHING

- Searching through records

RELATIONSHIPS

- Table relationships

- One-to-many relationship
- Many-to-many relationship
- One-to-one relationships
- Creating relationships between tables
- About Referential integrity
- Enabling Referential Integrity
- Cascade options
- Cascade update related fields
- Cascade delete related records
- Enabling cascade options
- Deleting relationships

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