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(of UNESCO)

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IODE NATIONAL REPORT FOR KENYA

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1. Name of Data Centre:

Kenya Marine and Fisheries Research Institute

2. National IODE Coordinator:

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3. Data Center Address:

Same as above

4. Data Center URL:

5. IODE Data Center Designation Date:

1996

6. Roles and Responsibilities of the Data Centre:

- Archive oceanographic data for future use

Data collected by individual scientists and international ocean observation programs are always at risk of being lost either due to negligence or reluctance by the individual investigators to release them for secondary use. The KeNODC recognizes the important role of encouraging originators to store the data correctly.

- Carry out data exchange with other NODCs
- Provide data products

The Data Center would develop databases to enhance availability of information contained both at the center and held by other people.

In addition the Data Center would play the role of identifying data and information needs for coastal zone management by organizing national workshops and advertising available data and information.

- Carry out data rescue

Historical oceanographic data sets stretching from a few years to several years are kept in various government departments, mostly in paper form. Once resources become available, the datasets would be decoded where necessary and digitized.

7. Activities:

7.1 National Data Management Workshop

The Kenya National Oceanographic Data Center (KeNODC) in collaboration with KIDACE (Kisumu Data Center for inland waters) conducted a 3 day training workshop on management of existing aquatic datasets using some widely recognized tools and techniques recommended by the Intergovernmental Oceanographic Commission's (IOC) committee, the International Oceanographic Data and Information Exchange (IODE).

The main aim of the workshop was to promote the use of aquatic data in decision-making, and therefore contribute to the process of Integrated Management of natural resources. The main strategies adopted here included data archiving; dissemination of information and user feed backs.

The following broad areas were covered: meta-data, sources of data, tools for data analysis, internet, and information management.

7.2 Provision of Basemaps GIS Data for Planning

KeNODC continues to take an active role in promoting GIS as a computer-based tool that can assist in display and analysis of mapped information as well as data derived from remote sensing concerning the coastal area of Kenya.

To this end we maintain a wide range of GIS data files that serve various individuals for analyzing environmental situations as well as cartographic work.

The following work was carried out during 2002

- Ungwana Bay fisheries stock assessment research carried out to determine optimal fishing grounds. KeNODC plotted the various sampling positions as well as deriving iso-planes for various factors.
- GIS work for use in environmental profile for the Diani-Chale marine reserve and the surrounding terrestrial area to assist in drawing up a management plan for coastal resources, within the framework of Integrated Coastal Zone Management.
- Various individual requests

7.3 National Oceanographic Data Sets

Vast quantities of oceanographic profile data exist from a number of ocean observation programs. These include research cruises, ships of opportunities, voluntary observer ships, and satellite imagery. The data is originally stored in various formats in digital and paper reports.

IOC has organized shipments of a selection of about 40 of some very useful global marine data and satellite data CD-ROMs. Murray Brown coordinates this under the ODINAFRICA-II project.

The task of Kenya National Oceanographic Data Center (KeNODC) is to render such data sets usable to the wide community of scientist, policy makers and the public by digitizing and/or reformatting such datasets and making them available in public domain.

In the last Intercessional period, KeNODC extracted national data sets from the WOCE datasets, World Ocean Atlas 2001, and the NOAA AVHRR datasets. The results are available in print form and electronic report, and gridded data sets.

The patterns and various statistics demonstrated in this work would be useful in comparative studies as well as explaining oceanographic phenomena in various parts of the Kenyan coast.

7.4 Bibliographic databases

AFRIPUB

The database currently contains 6,500 records, which can be requested for. These are publications about the Western Indian Ocean, Western Atlantic and the Mediterranean Seas.

AFRILIB

It is a Databases for Library collections including requested reprints. Currently the database contains over 12,000 records.

INMAGIC

2000 records have been entered into the INMAGIC Library database.

8. Results

The following products and services have been accomplished:

- Updating directory of publications about the Western and Southern Indian Ocean, Western Atlantic Ocean, and the Mediterranean Sea
- Updating the meta-database of the Kenyan coastal data sets
- Archiving the oceanographic data sets of the Kenyan waters
- Digitizing various maps into GIS form
- Providing data and base maps for various management programs
- Publication of KeNODC brochure
- Training of selected persons in data management
- Training of KMFRI librarians in use of INMAGIC software

9. Perspectives:

Some of the recommendations made during IOCCINCWIO –V including:

- Setting up a modelling group to work on various datasets from WOCE, JGOFs etc
- Setting up human resource pools and equipment to utilize remote sensing and GIS
- Continued training of existing manpower

These would contribute immensely to contribution of KeNODC in interdicted management of Kenya's coastal resources.

Contribution of ODINAFRICA project played key role in setting up the Data Centre, and it is hoped that the next phase of the project will build on these gains.