



INSTITUTO NACIONAL DE HIDROGRAFIA E NAVEGAÇÃO - INAHINA
CENTRO NACIONAL DE DADOS E INFORMAÇÃO
OCEANOGRÁFICOS - CENADO



Compiled reports on the implementation of ODINAFRICA Project
From 2003 to 2008

Activities supported by IOC and the Government of Flanders



Maputo, 2008

YEAR 2002/2003

Within the scope of the scope of the ODINAFRICA project, the CENADO – Mozambique was committed to undertake the following activities:

- Collect data and information from relevant sources to up-date the national coastal and oceanic database;
- Prepare a catalogue of the library holdings and avail the database to merge in the ODINAFRICA database;
- Provide data and information products, services and publicize their availability at the Centre through the Internet, brochures, etc.
- Prepare two reports from the following studies:
 - ✓ Analysis on the physical and environmental conditions, their geographical and temporal variations and their potential impacts on the development of sustainable tourism industry in Mozambique (between Save and Zambezi Rivers)
 - ✓ Automatic observation and transmission of sea level data from the Mozambique Tide Station, located along the coast.

THE DATA CENTRE

The main activities of the Data Centre consisted on the dissemination of the centre. In this context, the following lectures were given at different institutions:

- In September 2002, three lectures were organized in Mozambique Island, Nampula city (Nampula province) and Pemba (Cabo Delgado Province) aiming to divulge the objectives of CENADO and establish a linkage between marine resources and activities for water quality monitoring.
The lectures were attended by marine professional, secondary school students and the interested public

- In November 2003, two lectures that held at Maputo (Eduardo Mondlane – Faculty of Physics and Nautical School) congregated marine professionals and finalist students of Meteorology and Oceanography also to discuss .

Services and Products

a) In the year 2002, the contract was signed by September and the funds were available on the fall of the year. This situation has contributed for several delays in the implementation of the work plan.

b) Human Resources

In the Data Centre, was allocated one person, which is a Data Manager. Until September of 2002, this technician was working at full time. In October he had to live the institution for 6 months of special vacation. In his substitution, INAHINA indicated another technician, which has worked for 3 months.

In spite of all mentioned problems, INAHINA is willing to continue the necessary efforts to host and give support for running CENADO. Scientific studies are carried out by the new trained technicians to conclude the studies

Remedial Training Course on Data Management

To solve the problem related to human resources, that affected the performance of CENADO during this period, INAHINA, the host institution and ODINAFRICA organized a remedial training course on Data Management held in Maputo, in August 2003. Ten (10) people attended the course. They were from INAHINA, IIP (Instituto de

Investigação Pesqueira), UEM (Universidade Eduardo Mondlane) and INAM (Instituto Nacional de Meteorologia).

The initiative of involving others institutions on the project aimed to have more staff with the necessary knowledge in order to facilitate the implementation of the project and cover all the subjects.

From the participants one was contracted to work full time at CENADO, however, a working group, composed by the institutions representatives, were formed to steering the activities.

The course consisted essentially on basis for the establishment of a NODC and managing the data. As result of the course the institutions representatives are now working on collecting and updating data from their subjects of activity.

Center is updating its web page with link to the INAHINA's one that will be available soon. The page will contain information about the project objectives, relevant activities of CENADO.

Annexes:

1. map of expenses
2. report of lectures

THE INFORMATION CENTRE

Mission

Within the scope of the ODINAFRICA project, the information center should acquire, catalog and avail information to its users and also avail the database for inclusion in the merged ODINAFRICA database.

Information Center background

To run the activities the IC has one part-time staff that benefited of the training courses organized by the project and received all the equipped mad available for all institutions, in order to make them capable to respond to the project necessities.

The librarian is following high school education for degree in Linguistics, so that can continue her professional development. The studies are supported by INAHINA.

Activities

The IC developed the following activities:

- Conversion of the manual catalogue into electronic format using INMAGIC
 - About 246 records were added to the merged database, however, six hundred more records are available.

- Establishment and strengthening of partnership for interlibrary exchanges and loans;
 - Contacts with libraries of three more institutions involved on the project were contacted for partnership. From IIP relationship is related to bibliographic/informative bulletins exchanges and professional issues such as cataloguing and classification.

- Development of techniques to compose and to scatter the collection in electronic formats.
 - ✓ Hosting metadata of the collection and the bibliographic catalogue of new acquisitions on CENADO web page and promote consultation of the web site (not finalized).
 - ✓ Search and avail lists of providers of free of charge and payable electronic information.

- ✓ Stimulate the use of electronic information, particularly journals, given that they shut in recent information.
- Establishment of a electronic collection of information.
 - ✓ Some producers/editors of electronic information were identified and subscriptions were made with the PERI PROGRAM and ELSEVIER. From them, the IC receives monthly contents alert messages of the recent publications.
- Public awareness.
 - ✓ One lecture was organized for initialization of the partner libraries on INMAGIC. The lecture consisted on demonstrating how the software works, its advantages and disadvantages.

Services and products

The offers services of *local consultation* for the general public, *loans* for scientists of the institute and *selective dissemination* for a restrict number of users.

To publicize its services the library conceived a *brochure of the library*, a quarterly *informative bulletin* that contains a list of entries and a *DSI* (a booklet) that contains titles and abstracts of the publicized issues. It also developed a *directory of potential users* with information regarding their interests and titles of their productions.

YEAR 2003/2004

Within the scope of the ODINAFRICA Project – WP 3, Mozambique NODC activities were concentrated on the routine tasks and some new initiatives aiming at awaking the interest of the collaborating institution and also the general public. In this context, a national workshop was organized to overview the NODC performance and discusses the ways to bring the centre to the expectations of the Project.

DATA MANAGEMENT CENTER ACTIVITIES

The Data Center activities were situated in the domain of the maintenance, as follows:

- Updating of the metadatabase, based on information provided by some Institutions like IIP, INAM, Department of Physics of the UEM;
- Routinely updating of the website;
- Collection of useful information several cruises in the Mozambique channel as FRS Algoa from south Africa in August of 2002 and July of 2003; R/V Mirai from Japan in December of 2003.

The data that was given still need a control quality using standardized softwares. Meanwhile the data manager is under training courses to manipulate those softwares with more competence.

INFORMATION MANAGEMENT CENTER ACTIVITIES

The Info Center developed routine activities such as:

- Updating of the library electronic catalogue: about 125 new records were added to the merged database.
- Updating of the directory of marine professionals
- Improvement of the DSI services. The DSI booklets comprises websites addresses

- Development of techniques to compose and to scatter the collection in electronic formats.
 - ✓ Hosting metadata of the collection and the bibliographic catalogue of new acquisitions on CENADO web page and promote consultation of the web site (not finalized).
- Establishment of electronic collection of information.
 - ✓ Some producers/editors of electronic information were identified and subscriptions were made with the PERI PROGRAM and ELSEVIER. From them, the IC receives monthly contents alert messages of the recent publications.

This has
- Public awareness.
 - ✓ One lecture is scheduled for INMAGIC demonstrating for a new partner institution.
 - ✓ Libraries representative meeting will be organized for a focused overview and for a joint work plan drawing

Services and products

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1. Strategic/Action plan for the implementation of ODINAFRICA programmes;
 - a. Composition of working groups on fields to be identified;
 - b. Discussions about the necessity for regular/review meetings
2. Strategies for strengthening partner institutions' collaboration.
 - a. Level/method of participation of the collaborating institutions.

The workshop was focused on the point two, given that it was concluded that whatever activities scheduled can only be executed under institutions approval. In this regard, the plenary recommended a meeting at the head of institutions level to decide what parameters will the collaboration be based on.

YEAR 2005

INFORMATION MANAGEMENT CENTER ACTIVITIES

Within the sphere of the accomplishment of the activities planned for the year 2005, the Information Centre of the Mozambique National Oceanographic Data Centre – CENADO concentrated its attention on assisting one partner library on the compilation of its holdings, with INMAGIC database. In accordance with this, a preliminary meeting was held in January with the library staff to coordinate the actions that may be carried out. The next step will comprise the upgrade of the database to *version 8* and input of data.

Regarding international cooperation, evidence is made to the adherence to the IAMISLIC discussion and resources sharing lists and also to ASFA partnership. These affiliations were preceded by participations on 31st International Conference and ASFA Bord Meeting- 2005, respectively.

Routine activities were also fulfilled, with emphasis to upgrading/updating of the database/library catalogue. Efforts are being undertaken to bring into the scientists' consciousness the need for collaborating on the OdinPubAfrica.

YEAR 2006

During the year 2006 the MIC was concentrated on the routine activities, namely:

- Updating of the library catalogue: about 47 new records were added;
- Updating of the directory of marine professionals;
- Improvement of the DSI services. The DSI booklets comprises websites addresses;
- Development of techniques to compose and to scatter the collection in electronic formats:
 - ✓ Hosting metadata of the collection and the bibliographic catalogue of new acquisitions on CENADO web page and promote consultation of the web site (continued).
- Collection of abstracts for inclusion in the ASFA database
- Provision of free information available online.

➤ Public awareness.

Was done through *selective dissemination, brochure of the library, a quarterly informative bulletin.*

Some initiatives, as mentioned bellow, were scheduled however, were not materialised due to poor collaboration of the partner institutions. Nevertheless, efforts are being undertaken for their materialization.

3. Strategic/Action plan for the implementation of ODINAFRICA programmes;
 - a. Composition of working groups on specific fields;
 - b. Discussions about the necessity for regular/review meetings
4. Strategies for strengthening partner institutions' collaboration.
 - a. Level/method of participation of the collaborating institutions.

YEAR 2007

During the year 2007 the main activities of the information centre were concerned to cataloguing and spreading information. Special attention was given to collection of bibliographic references from partner's libraries for inclusion in the databases INMAGIC, ASFA and OceanDocs.

As a result of the work done, 38 different documents on subjects such as Marine Biology, Marine Chemistry and Coastal Engineering and general Oceanography, 10 BSc and Master thesis were identified.

The diffusion of information was done through selective dissemination (SDI) and bibliographic bulletins and covered new incomes of the library and also information availed online by Agora programme.

Efforts were made and some work was done aiming at arousing the scientist's sensibility for the need of depositing their works, particularly in the ODINAFRICA electronic repository. The results are not satisfactory, however encouraging, given that a considerable number of them is collaborating, having given some texts to be included in OceanDocs.

YEAR 2008

WORK PACKAGES IMPLEMENTATION

Under the framework of the (i) Coastal Observing System (ii) Data and Information Management Product Development and (iii) End-User Communication and Information Delivery System various activities were carried on during 2007:

(i) WP2. The Coastal Observing System

To make the observed sea level useful for decision-makers especially for the Indian Ocean Tsunami Warning Earning System, in 2007, INAHINA in collaboration with POL, have upgraded the existing ORBCOMM transmission system to an OTT HDR system. The equipment was provided by IOC. And now data is transmitted near-real time, every minute. These data can be visualized in ODINAFRICA web site. Nowadays, CENADO's efforts is being done on continuing with the deep measurement to effectively reduce the observed data to a reference system related to the mean sea level.

Constraints and need for capacity building

In the middle of 2007, due to the Inhambane Port reconstruction, the sea level measurements were interrupted in this station contributing thus to increase of gaps in the sea level time series. Re-installation of the tide gauge is planned to July 2008. There is still a need to continue on deep measurements to have the observed data already referred to mean sea level. Once the data are available, it seems that it is worth it to capacity the INAHINA staff on using sea level data to study the processes such as annual and inter-annual variability of the sea level.

We also think that it would be worth it if the project considers the systematic training for the local technicians on the following fields:

1. Precision levelling and GPS.
2. Data transmission in real time.

3. Quality control and management of data.
4. Handle of OTT hydras 3 and Logosens software, etc.

(ii) WP3. Data and Information Management

About the data collection, in 2007, the centre CENADO, increased the collection with of data from national cruiser measured in Pemba bay, Quelimane estuary and Maputo bay, in situ parameters (sea level, temperature and salinity).

In the end of 2007 we produced a newsletter, *Lwandle*, with information about activities that we, CENADO partners Institutions, did. We also, give training in data and information, about ocean teacher and ODIN web based information sources, namely *OceanDocs* and *Afrilib* to Oceanography students of Escola Superior de Ciências Marinhas of Eduardo Mondlane University in Quelimane, Mozambique.

Concerning the website it is not complete, still to update more information because of some difficulties that we found in manage the system.

We noted some evolution in our data center, nevertheless we still need some training/interaction, in interpret image in remote sensing and GIS, to do more and better.

(iii) WP4. Product development

Objectives

- End-users communication and information delivery