

5 Sources of Marine Information for Research and Management



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Relevant information delivered in a timely manner is necessary for the successful implementation of research and management activities. The Ocean Data and Information Network for Africa ODINAFRICA has strived to facilitate better access to reliable information for management of coastal and marine resources and environment in Africa to a wide community of stakeholders. By developing and facilitating networking between 25 marine information centres in the African coastal states, ODINAFRICA have enabled them to produce products and services, and improve the understanding of ocean processes and conditions.

The marine information centres have improved access to data and publications accessible by developing online catalogues. These include specialised collections, regional repositories enabling preservation and access to research findings in full text publications, and digitised collections of difficult to find studies. Within this chapter we review the resources developed by African institutes in collaboration with ODINAFRICA, as well as other global resources of marine related information available through IODE partners.

Resources from ODINAFRICA

ODINAFRICA has developed several catalogues and databases to achieve its objective. These include:

Union Catalogue of libraries of marine institutions in Africa (AFRILIB) AFRILIB is the distributed library holding database of all marine partner libraries in Africa with about 14 000 bibliographic citations. One of the objectives of AFRILIB was to build a global access point to local resources from all marine information centres in Africa in order to facilitate information access to the wide community of users from Africa and out side.

AFRILIB, which is hosted at the UNESCO/IOC Project Office for IODE as a central database, has assisted the marine information centres in displaying their local resources to regional and international audience by responding to the information requests from a wide community of users. The user friendly web interface of AFRILIB has enabled information access and exchange and sharing of resources. The database contains resources such as articles, journals, books, multimedia, and maps.

Some of the national marine libraries also provide access to the national catalogues through their institutional or NODC websites.

**For more information on AFRILIB visit
<http://www.odinafrica.org>**

Electronic repository of marine related publications from or about Africa

The electronic repository of marine related publications - OceanDocs (www.oceandocs.net) is a web-based platform for storing, preserving and distributing digital documents. The ODINAFRICA librarians have developed the African component of Ocean Docs. They also maintain it and add documents regularly to ensure that it remains a useful source of literature on marine science and oceanography in Africa, especially those published by scientists affiliated to the ODINAFRICA institutions. OceanDocs provides the opportunity to African researchers to reduce publishing costs, allowing them to self-publish and giving higher visibility to their work.

Ocean-Doc-Africa contains preprints, published articles, technical reports, working papers, conference proceedings, theses and valuable grey literature on African marine and related issues. Each publication contains information including title, author, abstract, publication year etc, and full-text documents, which can be freely downloaded. Copyright issues and publishers policies also are addressed at the repository management level. The OceanDoc initiative is the basis for the Aquatic Commons project which aims to provide wider access to aquatic science publications.

**For more information on Ocean-Docs visit:
<http://www.oceandocs.net/>**

AFRICAN OCEAN PORTAL

The African Ocean Portal is one of the major information sources, which contributes to the understanding and management of the oceans, coastal environment and marine resources in Africa. The portal is designed as a high-level directory of ocean data and information related web sites.

The web interface enables easy information access for specialised users on the following topics:

- Capacity Building
- Coastal Ecosystems and Processes
- Endangered and Invasive Species
- Fisheries and Aquaculture
- Institutions and Organizations
- Large Marine Ecosystems
- Legislation and Conventions
- Management and Conservation Programmes
- Marine Pollution
- Marine Protected Areas
- Maritime Activities
- Non-Living Resources
- Tourism
- Access by Countries
- Newsletters



Figure 1. Ocean-Docs-Africa editorial team enter records in the repository.

Information on countries can be obtained through the “Access by Countries” link. These include maps, population, and natural resources.

The portal already had more than 5,000 knowledge objects in 290 topics at the end of 2008.

**For more information on the African Ocean Portal visit:
www.africanoceans.net**

The Directory of Marine and Freshwater Professionals - OceanExpert

OceanExpert is a global directory of marine and freshwater professionals developed in 1997 under the auspices of the IODE’s Group of Experts on Marine Information Management. The information in the directory includes names, addresses, institutional affiliation, specialization and bibliographic information on publications of the experts. The librarians of the ODINAFRICA institutions maintain the African records in the

OceanExpert. It is a tool for scientists, policy makers and anyone who needs to contact a marine or freshwater professional in Africa.

**For more information on OceanExpert visit:
<http://www.oceanexpert.org>**

OTHERS SOURCES OF MARINE RELATED INFORMATION

Several initiatives have been launched by various organizations and programmes to assist researchers and resource managers get the information that they require for their work. Many of these can be accessed either free of charge or at reduced costs. Below we provide information on some of these initiatives.

Aquatic Sciences and Fisheries Abstracts (ASFA)

ASFA is a bibliographic database covering the world's literature on the science, technology, management, and conservation of marine, brackish water, and freshwater resources and environments, including

Figure 2. Librarians participating in OceanDoc's training in December 2005.



Figure 3. AFRILIB demonstration at the ODINAFRICA Seminar in 2006.

their socio-economic and legal aspects.

ASFA contains more than a million references, with coverage since 1971. About 3,200 new bibliographic references are added each month to the database. Each record contains information on: title, author, abstract, publication type, publication name, year, etc. Links are provided to the full text article where it is available electronically.

Though ASFA is a commercial database, institutions from Low Income Food Deficient Countries (LIFDC) are eligible to benefit from free access to ASFA via the internet or on CD-ROM. This initiative, which was started in 1999, currently covers 38 institutions in Africa and 13 from other regions. You can get information on how to apply for free access from ftp://ftp.fao.org/fi/asfa/faq/faq9_e.pdf.

**For further information on ASFA visit:
<http://www.fao.org/fi/asfa/asfa.asp>**



Figure 4. Marine Information Management training, September 2005.

International Association of Marine Science Libraries and Information Centres (IAMS LIC)'s Z39.50 distributed libraries

IAMS LIC facilitates international resource sharing among aquatic and marine science libraries and information centres. IAMS LIC is an international organization dealing with recording, retrieval and dissemination of knowledge and information in all aspects of aquatic and marine sciences, and allied disciplines.

The website provides a full range of resources including the Z39.50 online catalogue and the union list of marine and aquatic serials. The IAMS LIC Z39.50 is a distributed library that enables users to identify publications from libraries in order to request them via interlibrary loan. Even information from libraries that do not have online catalogues can be searched via Z39.50.

The Union List contains information for more than 15 000 serial titles, largely from worldwide journals on aquatic and marine sciences.

Besides this, several regional lists of serials are also available such as the one of the Africa Regional Group of the International Association of Aquatic and Marine Science Libraries and Information Centres (AFRIAMS LIC Union list): <http://library.csumb.edu:80/iamslic/africa/unionlist/search.php>.

This database provides information on journal holdings from African institutions participating in IAMS LIC, and allows free access and provision of electronic journal articles to users among the regional and international network. ODINAFRICA has subscribed all participating institutions in Africa, enabling them to participate in the IAMS LIC initiative and utilise this global network of aquatic and marine information providers.

**For more information on IAMS LIC visit:
<http://www.iamslic.org>**

Figure 5. Ocean Docs training in February 2005.



Open Science Directory

The Open Science Directory is a federated search tool for open access and reduced cost directories and online journals. It is being developed through the joint effort of the Intergovernmental Oceanographic Commission of UNESCO, Hasselt University, and EBSCO Publishers.

After registration, African institutions can access many of the major journals on marine science and oceanography, and other related topics and issues.

Figure 6. Oceandoc Africa regional coordinators.



Table 1. Programmes and collections providing access to online journals through the Open Science Directory.

AGORA -
Access to Global Online Research in Agriculture
<http://www.aginternetwork.org>

This program provides free or low cost access to major scientific journals in agriculture and related biological, environmental and social sciences, to public institutions in developing countries.

Led by the Food and Agriculture Organization (FAO) of the United Nations, the goal of AGORA is to improve the quality and effectiveness of agricultural research, education and training in low-income countries, and in turn, to improve food security. Through AGORA, researchers, policy-makers, educators, students, technical workers and extension specialists have access to high-quality, relevant and timely agricultural information via the Internet.

OARE - Online Access to Research in the Environment
<http://www.oaresciences.org>

This is an international public-private partnership that provides developing nations access to one of the world's largest collections (1300 journal titles) of natural and environmental science research with the possibility to download complete articles from the publishers' websites.

DOAJ - Directory of Open Access Journals
<http://www.doaj.org/>

Operated by Lund University Libraries, DOAJ provides access to more than 2000 scholarly and scientific open access journals, and aims to include all open access publications, that use peer review or editorial control standards. The objective is to improve the visibility and access to open access publications and to increase their use and impact in the research and education community.

PERI - Programme for the Enhancement of Research Information
<http://www.inasp.info>

PERI is implemented by the International Network for the Availability for Scientific Publication (INASP). PERI offers free or affordable access to research literature, access to full-text online journals, document delivery from more than 20 000 journals, dissemination and promotion of local research, Information Communication Technology (ICT) training, publishing management and production training, and a publishing partnership programme. The aim is to further the acquisition of international knowledge and information, and the awareness and use of ICT's. Subscription costs are set according to the GDP and/or the HDI of the country.

AJOL - African Journals Online
<http://www.ajol.info/>

Offers free access to scientific journals published in Africa, and includes more than 175 English and French-language publications from 21 African countries. Emphasis is on agriculture, science and technology, health, and social science journals. The aim is to increase awareness and use of indigenous African research around the world, and support journal publishing in Africa. Registration is open to individuals and organizations worldwide.

**For more information on the Open Science Directory visit:
<http://www.opensciencedirectory.net>**