



*Chapter 30*

## **Efficient Use of Digital Library Resources for Fisheries Research**

**T. Silaja**

Central Institute of Fisheries Technology,  
Matsyapuri P.O., Cochin - 682 029  
*E- mail: silajat@gmail.com*

### **1.0 Introduction**

Growing digital resources and emerging network technologies have brought significant changes in the ways we access and make use of information. Large repositories of scientific information make it possible to beneficially exchange digital resources worldwide. Today's researcher seems to be comfortable with using a wide variety of sources for information in the digital form. Most adopt a google search or a visit to the website of a trusted archive or a collection of personal digital content. When looking for specific information on Internet, one may encounter a lot of information that is irrelevant. For finding specific and relevant information, one may require special skills in the use of digital information resources.

Effective use of electronic information sources for retrieving needed information will have a profound impact on the learning and the quality of research output. By providing detailed information about relevant resources in a field, researchers will hopefully be in a much better position to locate resources in the first place without spending much time searching web resources. Quite a lot of information on fishes and fisheries, fishing, post-harvest handling, marketing is available globally in digital form through internet. There are many online databases, institutional repositories, e-journals, websites and other e-portals which share a wide range of fisheries information. A brief review of such digital resources available in the field of fisheries and aquaculture is given in this paper.

## **2.0 Online Databases**

### **2.1 Aquatic Science and Fisheries Abstracts (ASFA)**

Aquatic Science and Fisheries Abstracts (ASFA), the premier database in the field of aquatic resources, is an abstracting and indexing service covering world literature on the science, technology and management of marine and freshwater resources and environment. It is a cooperative information system supported and maintained by several United Nations agencies and a network of information centres in member countries of these agencies. CIFT acts as an input centre of ASFA and have online access to the ASFA database. CIFT Library offers literature search service free of charge to those interested in any branch of aquatic science.

URL: <http://www.csa.com/>

### **2.2 International Information System for the Agricultural sciences and Technology (AGRIS)**

The AGRIS open archives and bibliographical databases cover the many aspects of agriculture, including forestry, animal husbandry, aquatic sciences and fisheries, and human nutrition, extension literature

URL: <http://agris.fao.org/>

## **3.0 Open Online databases**

### **3.1 FishBase**

FishBase is a global information system which provides significant amount of information about fishes. FishBase was developed at the World Fish Center in collaboration with the FAO and many other partners.

URL: <http://www.fishbase.org>

### **3.2 TrawlBase**

Many countries in the Asian region have been collecting fisheries data from trawling in their territorial waters since the 1920s. World FishCentre is now the custodian of the TrawlBase, which currently contains species abundance data from over 21,000 locations in the coastal waters of South and Southeast Asia.

URL: <http://trawlbase/worldfishcenter.org>

### **3.3 ReefBase**

ReefBase provides free and easy access to data and information on the location, status, threats, monitoring and management of reef resources in over 100 countries and territories

URL: <http://www.reefbase.org>

### **3.4 Ocean Biogeographic Information System (OBIS)**

OBIS strives to document the ocean's diversity, distribution and abundance of life. Created by the Census of Marine Life, OBIS is now part of the Intergovernmental Oceanographic Commission (IOC) of UNESCO, under its International Oceanographic Data and Information Exchange (IODE) programme.

URL: <http://www.iobis.org/>

### **3.4 FAO GLOBEFISH**

GLOBEFISH is a fisheries regional marketing information network developed by FAO

URL: <http://www.globefish.org>

## **4.0 Environmental, Legal and Conservation oriented Organizations**

### **4.1 The Marine Stewardship Council (MSC)**

MSC is an independent non-profit organization that promotes responsible fishing practices.

URL:<http://www.msc.org>

### **4.2 The Marine Conservation Society (MCS)**

MCS is a UK charity dedicated to protecting the marine environment and its wildlife.

URL:[http:// www.mcsuk.org](http://www.mcsuk.org)

### **4.3 The WorldFish Center**

The WorldFish Center bring out publications and news about fisheries worldwide.

URL: <http://www.worldfishcenter.org>

### **4.4 Law of the Sea**

Entire text of United Nations Convention on the law of the Sea is available at URL: [http://www.un.org/Depts/los/convention\\_agreements/](http://www.un.org/Depts/los/convention_agreements/)

### **4.5 International Collective in Support of Fishworkers (ICSF)**

ICSF is an international Non Governmental Organisation working for the interests of small-scale artisanal fishworkers and has a collection of fisheries legal instruments.

URL: <http://www.icsf.net/>

## **5.0 FAO and Aquaculture Department**

The Fisheries and Aquaculture Department of FAO aims to promote sustainable development

of responsible fisheries and aquaculture and to contribute to food security and is an important sources of information on fisheries and aquaculture, on global and regional scale related to fisheries statistics & information, ecosystems, fishery resources, fisheries technology, utilization and trade and fisheries governance.

URL: <http://www.fao.org/fi/>

The State of World Fisheries and Aquaculture (SOFIA) is the flagship publication of the FAO Fisheries department and is available at URLs: <http://www.fao.org/fishery/sofia/en> and : <http://www.fao.org/fishery/topic/426/en>

FAO fisheries and aquaculture global statistical collections are available at: [www.fao.org/fishery/statistics/en](http://www.fao.org/fishery/statistics/en)

## **6.0 Institutional Repositories**

### **6.1 OceanDocs**

OceanDocs provides publications in Marine Science in digital form, including preprints, published articles, technical reports, working papers and more.

URL: <http://www.oceandocs.net/>

### **6.2 Aquatic commons**

The Aquatic Commons is a thematic digital repository covering the natural marine, estuarine/ brackish and fresh water environments . It includes all aspects of the science, technology, management and conservation of these environments, their organisms and resources, and the economic, sociological and legal aspects.

URL: <http://aquaticcommons.org/>

### **6.3 DSpace at Mote Marine Laboratory**

This site contains full-text technical reports produced by Mote staff and other Florida researchers, and various historical materials.

URL: <https://dspace.mote.org/dspace/>

### **6.4 Eprints Soton Oceanography**

The site is hosted by University of Southampton UK

URL: <http://eprints.soton.ac.uk/view/subjects/GC.html>

### **6.5 Woods Hole Open Access Server (WHOAS)**

A repository for the Woods Hole Scientific community

URL: <https://darchive.mblwhoilib.org/>

#### **6.6 Marine & Ocean Science ePrints Archive @Plymouth**

Marine & Ocean Science ePrints Archive @ Plymouth is a digital archive providing access to papers produced by the staff of the Marine Biological Association of the United Kingdom, Plymouth Marine Laboratory and the Sir Alister Hardy Foundation for Ocean Science. It is also an historical archive containing digital copies of early papers from the Journal of the Marine Biological Association of the United Kingdom.

URL: <http://sabella.mba.ac.uk/>

#### **6.7 IBSS Institutional Repository**

Repository preserves and distributes digital collections including: IBSS serials, theses, research reports, preprints, papers, image collections etc.

URL: <http://repository.ibss.org.ua/dspace>

#### **6.8 Eprints@CMFRI**

Eprints@CMFRI is the open access Institutional Repository of Central Marine Fisheries Research Institute. Research outputs of CMFRI, Journal papers, conference papers, reports, these, patents etc. are uploaded/self-archived by CMFRI scientist who do research on fisheries and related areas.

URL: <http://eprints.cmfri.org.in/>

#### **6.9 DRS at National Institute Of Oceanography**

Digital Repository Service of National Institute of Oceanography (CSIR) India. DRS@nio collect, preserve and disseminate different institutional publications (journal articles, conference proceeding articles, Technical reports, thesis, dissertations, etc).

URL: <http://drs.nio.org/drs/index.jsp>

#### **6.10 SEAFDEC/AQD Digital Repository**

Southeast Asian Fisheries Development Center, Aquaculture Department Institutional Repository (SAIR) is the official digital repository of scholarly and research information of the department. It enables the effective dissemination of AQD researchers' in-house and external publications for free and online. It will also provide free access to all in-house publications of SEAFDEC/AQD. Full-text digitized copies of fish farmer-friendly materials like books, handbooks, policy guidebooks, conference proceedings, extension manuals, institutional reports, annual reports (AQD Highlights), and newsletters (SEAFDEC Asian Aquaculture, Aqua Farm News, Aqua Dept News and AQD Matters) can be retrieved and

downloaded.

URL: <http://repository.seafdec.org.ph/>

## **7.0 E-journals and Consortia of E-resources**

Online journals are digital versions of print journals that allow to read the full text on the Internet. Online journals are also called e-journals. The advantages of online journals are as follows:

- ▶ papers can be accessed on the Web before publication of the printed edition.
- ▶ It is easier to find individual papers in online editions than in printed editions.
- ▶ It is often possible to search for papers based on words in the full text.
- ▶ With some online journals, it is possible to access the full texts of cited papers directly from the bibliography.
- ▶ An increasing number of paper discovery tools, provide links to the full texts of papers
- ▶ Online journals are accessible anytime from campus terminals

### **7.1 E-journals subscribed by CIFT**

Some of the important e-journals subscribed by CIFT library on Aquatic Science and Fisheries are listed below:

- i. Fisheries Research  
<http://www.sciencedirect.com/science/journal/01657836>
- ii. Fisheries Science  
<http://www.springer.com/life+sciences/animal+sciences/journal/12562>
- iii. Aquaculture Nutrition  
[http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1365-2095](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1365-2095)
- iv. Asian Fisheries Science  
<http://www.asianfisheriessociety.org/modules/library/>
- v. Indian Journal of Fisheries  
<http://epubs.icar.org.in/ejournal/index.php/IJF>
- vi. Fishery Technology  
<http://epubs.icar.org.in/ejournal/index.php/FT>

- vii. Journal of Applied Ichthyology  
[http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)14390426/](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)14390426/) issues
- viii. Fisheries Management and Ecology  
[http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1365-2400](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1365-2400)
- ix. Fisheries Oceanography  
[http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1365-2419](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1365-2419)
- x. Journal of Fish Biology  
[http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1095-8649/issues](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1095-8649/issues)
- xi. Fish and Fisheries  
[http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1467-2979](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1467-2979)
- xii. Indian Journal of Geo-Marine Sciences (IJMS) <http://www.niscair.res.in/sciencecommunication/researchjournals/rejour/ijms/ijms0.asp>

#### **7.2 Consortium of E-resources on Agriculture (CeRA)**

CIFT Library is also part of Consortium of E-resources on Agriculture (CeRA) which provides 2000+ e-journals in agricultural science including fisheries.

#### **8.0 IAMSLIC Union List of Serials**

The Union List of Marine and Aquatic Serials is a volunteer project to facilitate interlibrary loan programs among marine science libraries by providing a list of which libraries own specific journals. The journals themselves are not available here, only the names of libraries who own them. CIFT library is a member of IAMSLIC and part of resource sharing programme.

URL: <http://library.csumb.edu/iamslic/unionlist/index.php>

#### **9.0 E-books**

E-books are digital versions of books that allow you to read the full text on the Internet. The availability and access to titles is quicker and more convenient to the readers. But there are certain issues in purchasing e-books for libraries. The pricing model is different from publisher to publisher and the administrators are reluctant to pay for e-books since they do not make part of the shelves. Open Access model of E-books are available in any topic of interest.

#### **10.0 Wikipedia**

The Wikipedia is a free online encyclopedia hosted by Wikimedia Foundation, a non-profit organization, which is continuously updated. Started in 2001, it currently contains over 4 million articles including articles related to fisheries and aquaculture.

URL: <http://www.wikipedia.org/>

### **11.0 Digital library@CIFT**

Digital library@CIFT is an e-portal provided by the library which lists databases, online journals, and e-books that CIFT subscribes to as well as useful Web sites. The portal hosts research publications of CIFT with full text link. Selecting digital resources matching the topic of interest is a key to finding information through digital resources. E-Resource Portal lists digital resources making it easier for users to locate the information needed from the massive volume of digital resources. Use of subscription digital resources is limited to CIFT community. Some digital resources have further user restrictions, due to contractual obligations. Because some digital resources place limits on the number of simultaneous accesses, users must make sure to click the Logout or Exit button when searching is finished.

### **12.0 Conclusion**

The wide ranging changes that occurred over the past few years in the information communication technology and increased access to digital resources and services have made the research activities more efficient and productive. The information service culture itself has changed as librarians moved from providing traditional services within the Library, to assuming roles of information analysts. Today, librarians proactively gather information and disseminate them as value added deliverables to the clients.