INTRODUCTION
With the growth of aquaculture industry, the need for disseminating technical information on aquaculture is also increasing. The National Information Centre for Marine Sciences (NICMAS) located in the National Institute of Oceanography (NIO) can assist those in aquaculture by providing information on various aspects of their requirements.

ABOUT NICMAS
The NICMAS is one of the sectoral information centres of National Information System for Science & Technology (NISSAT), an organ of the Department of Science & Technology, Government of India. The centres recognised by this system, in India, are providing information to the personnel and industry of very specialised areas. The recognition of the centres is based on availability of basic resources with them and the services they provide to the community. The aim is to search and provide information to the user.

DATABASES

Databases compiled by NICMAS
Large number of databases are compiled by the European and American agencies on various aspects. Unfortunately, we hardly have anything of our own. The Marine science sector is not an exception to it. Therefore NICMAS decided to compile the databases on the items of our geographic area. The databases compiled by NICMAS are explained briefly in the following paragraphs. All these databases would soon be available on the Indian National Oceanographic Internet Server (INOIS) being set up at NIO.

INDOCEAN
The oceanographic studies in Indian Ocean waters date back to 18th century. Large number of research papers have been published on the Indian and adjacent waters since then. This information has been compiled and constantly being updated on a database called 'INDOCEAN'. Aquaculture literature forms part of the database. The records being entered on the database are without any chronological boundaries. Therefore, one can even map the developments in one's subject interest in this geographic area.
The reliability of the information on this database is very high as the additions are
effected only after obtaining the original document. The abstracts are edited or re-
written if found longer or written by the subject specialists. The database uses all
international standards and tools of Aquatic Sciences & Fisheries Information Sys-
tem (ASFIS) to make this database internationally competent.

Copies of the required primary literature noted on this database can be obtained, of
course, by adhering to copyright regulations.

NIOPUB
National Institute of Oceanography is one of the Institutes in India dealing with
marine science research. Scientific and Technical manpower numbering over 400
publish results of their work in various journals, conference proceedings volumes
and reports. NIOPUB lists the publications of the scientists of NIO. The references
can be retrieved by searching any of the data elements. The database is updated
every day.

OCEANLINE
The search for the books, reports, conference proceedings, serials, etc., available in
NIO library is possible using this catalogue. The availability of the documents at
NIO Library can be checked on this database.

INDMS
NICMAS is in a process of updating the Indian National Directory of Marine Scien-
tists. The last version (1992) of the directory is available in print form. Now this
would be made available on magnetic readable media and stored on the INOIS server.
The data would also be passed on to the International Directory of Marine Scientists
which will be available worldwide on Intergovernmental Oceanographic Commission's
server UNESCO, Paris, France.

Internal databases
In order to have information from other parts of the world, NICMAS procures inter-
national databases concerned with the marine sciences too.

ASFA
Aquatic Sciences and Fisheries Abstracts (ASFA) is the product of ASFIS. This is one
of the cooperative international information system coordinated by UN agencies like
FAO, IOC, UNOLOS, etc. The member countries input their literature on this data-
base. Over 40,000 references on all aquatic studies are added every year to this data-
base. This database is widely referred among the marine science community all over
the world. A CD-ROM version of the database is acquired and updated quarterly,
available from 1978.
Current contents on diskette

The latest information is received on diskettes at weekly intervals. Sections relevant to marine sciences fields such as agriculture, biology & environmental sciences; physical, chemical & earth sciences, and engineering and computing technology are subscribed by the NICMAS. First two sections are available with abstracts.

PATENTSCAN

This is a CD-ROM based, most comprehensive bibliographic database on the patents published in United States on all subjects.

Internet surfing

The Institute has recently acquired the hardware for internet surfing. It is now possible to search for the required information which is not available within the institute / centre. This accessibility has increased the capability of providing information to the users in a better way.

International contacts

The staff of NICMAS participate in various activities at international level. NICMAS acts as the National coordinating centre for ASFA. This has facilitated dissemination of the Indian literature in the field of aquatic sciences worldwide. Input of published as well as grey literature (reports, thesis, etc.) is carried out without any charge for all Indian scientific community.

The staff also represent India on the Intergovernmental Oceanographic Commission’s (IOC) Group of Experts in Marine Information Management (GE-MIM). This group advises on the policies and plans and priorities of IOC information management programmes.

The membership of an International Association of Aquatic and Marine Service Libraries and Informations Centres helps in maintaining worldwide contacts. This has helped very much in meeting information requirements of NICMAS users beyond the scope of the Institute’s collection.

Services

The marine science information requirements of Indian users are very many. Large number of users belong to the academic community from students to faculty in the university \ college departments and scientific staff in various research laboratories \ private sector in the field of marine sciences where information base covers also power generation, waste disposal, recreation, etc.

NICMAS primarily serves the users in three ways: Literature search, document delivery, and information consolidation products.
Literature search

The information professionals with the scientific background search for required information from concerned databases. They convert the users' topic into a search strategy using controlled vocabulary tools and other items. They have been specially trained in formulating search strategy. The search over electronic databases could be conducted for retrospective literature as well as current literature.

Document delivery

Literature search service provides users the citations along with abstracts. If the user desires to have a primary document for research purpose, a photocopy of the same is usually provided keeping in mind the copyright restrictions. In the absence of the source document at NICMAS, the same is procured and supplied from other institutions in India or abroad. Nearly 80% of the requests are met from the Institute's resources.

Information consolidation products

Apart from the routine requests for literature search and document delivery, NICMAS also handles information requirements for specific purpose and occasion. Compilation of bibliographies, directories, state-of-the-art reports or any such items is ably handled by the NICMAS. Publication of such documents on the occasion of conferences, symposia and workshops helps in backing up the programme with appropriate material.

Membership

For routine receipt of these services the NICMAS has introduced a membership for the regular users of marine science information. This helps members in receiving the items of their interests automatically. It also gives some concessions in the expenditures the user otherwise would be spending.

CONCLUSION

A very strong information base exists now in India for providing information on marine science literature including aquaculture. The personnel engaged in aquaculture should make use of these facilities and the excellent services.