


18 OCT. 1983

SOUTH PACIFIC COMMISSION

A MARINE RESOURCES INFORMATION SYSTEM FOR THE PACIFIC?  
PAPER PREPARED FOR CHOGRM EXPERT STUDY GROUP ON MARINE ISSUES,  
2ND MEETING, SRI LANKA, 18-21 OCTOBER 1983

by  
Bess Flores  
Librarian  
South Pacific Commission

SPC Library  
  
33183  
Bibliothèque CPS

## A Marine Resources information system for the Pacific?

### Summary

The advice of colleagues in the SPC environment and fisheries programmes, the Pacific Information Centre and University of the South Pacific, the Library of the University of Papua New Guinea and the Information Sciences Division (Asia) has been sought and incorporated.

Arguments are advanced against the encouragement of proliferating unrelated single-disciplinary information systems. Equipment, staff costs and information handling techniques are similar, regardless of the field. A multi-disciplinary system avoids duplication, ensures compatibility and offers a wider range of services.

CHOGRM could play an important role in facilitating information transfer. Practical actions could include:-

- (1) support for the concept of an integrated multi-disciplinary multi-media information system based on the Pacific Information Centre, with input from SPC, SPEC and Pacific governments and output back to governments, regional bodies and to systems established elsewhere in the Commonwealth;
- (2) direct assistance to countries and organisations who are already co-operating in the system and who could present a coherent joint programme and costings;
- (3) support for holding in the SPC area, a meeting of government planners, scientific workers, librarians and international bodies, to identify the needs of governments and organisations wishing to participate in the development of integrated national and regional information systems and services;
- (4) encouragement of research and co-operative efforts in ensuring compatibility of information processing and recording equipment and programmes;
- (5) assistance in identifying and approaching agencies (Commonwealth or other) as potential donors and co-operators.

## A MARINE RESOURCES INFORMATION SYSTEM FOR THE PACIFIC?

"The major information-handling institutions in the area, i.e. the University of the South Pacific, the Forum Fisheries Agency and the South Pacific Commission, have few serious problems in identifying or obtaining relevant marine resource publications produced or held outside the SPC area. The real problem lies in the identification, collection, organisation and dissemination of relevant publications produced in or about the SPC area.

"There is no Aquatic Sciences and Fisheries Information Service input centre in Australia, Hawaii or New Zealand, nor in any country of the SPC area, and this world-wide source of fisheries information receives only incidental input from the South Pacific. It is not that this information does not exist, but that, with too few notable exceptions, library, publishing and distribution facilities are poorly funded, staffed and organised.

"It is often difficult for a Government officer to find within his department a complete range of his own department's publications, let alone relevant publications from other departments and countries, and this is repeated on a national scale. The South Pacific Commission, for example, produces useful fisheries documents, every one of which is sent to fisheries and other offices in each country throughout the region. These documents may not reach the offices to whom they would be most useful, and may not be retained for future reference. Documents can be lost, destroyed, abandoned or taken into protective custody by itinerant experts.

"Expatriate workers and extra-regional organisations consistently have larger, better-organised and hence better-used collections of publications relating to South Pacific fisheries than exist in the countries themselves. South Pacific countries not only do not control their own fisheries information resources, but also are largely dependent on extra-regional countries to provide and disseminate the information which they need and which they themselves produced." (1)

This was written and published early in 1982. Since then, there have been several developments:-

- (1) The Pacific Information Centre, formerly the Regional Bibliographic Service, received IDRC funding to establish a multi-disciplinary bibliographic information and document delivery service, and published the South Pacific Bibliography, 1981. (2)
- (2) The South Pacific Regional Environment Programme (SPREP) established focal points and published, through PIC and with SPC Library assistance, a bibliography of environmental issues related to natural resources (3), a directory of research workers in national resources, and is preparing a directory of marine research institutions.

- (3) The CRRERIS, working through SPEC, established focal points for the collection and dissemination of energy information.
- (4) FAO is providing a consultant to discuss with governments and regional bodies their possible input into AGRIS.
- (5) A number of other networks have been proposed, usually without reference to existing systems.

These developments were discussed at the meeting of the PIC Advisory Committee where several recommendations of interest to marine resources information systems were made. (4). One recommendation was that funding be sought from ESCAP, and other potentially interested agencies, to hold in the SPC area in 1984, a meeting to discuss existing and proposed national and regional information systems, and to identify the needs of governments and organisations wishing to develop or participate in information systems.

Interest in marine resource information was shown at the Twenty-third South Pacific Conference in Saipan, October 1983, which directed the Secretary-General to identify available reports relating to the development management and control of maritime natural resources in the SPC area. Identification will be facilitated by the PIC/SPREP bibliography on environmental issues, (3) in which approximately one quarter of the references relate to marine resources. When, however, marine resource information is seen as part of the total information relating to the Pacific, the proportion drops sharply. Analysis of SPC library holdings and information activities shows that marine resources account for one tenth of the total holdings, one tenth of the current intake and one sixth of the information requests, against, in agriculture, one sixth of the total holdings, one tenth of the current intake and one third of the information requests. On the other hand, marine resources staff account for more than one eighth of SPC headquarter's total staff, and if their personal information collections and activities were taken into account, both holdings and demand would obviously be higher. However, the same trend is seen in catalogues of other collections. In the 1981 South Pacific Bibliography (2) marine resource information accounts for one fourteenth of the total. In the 1981 Papua New Guinea National Bibliography (5) it is one eighteenth, while in the total holdings of the Kiribati National Collection (1981) (6) it is slightly more than one tenth. It is certainly true that marine resources publications are under-collected, under-recorded and often unknown, filed and forgotten in the office of origin. If it were not for the annual SPC fisheries technical meetings, the tuna, billfish and deep sea fisheries programmes and the programmes of the FFA and the Universities, Pacific marine resources literature would be meagre indeed.

In marine resources and in the inclusive fields of natural resources and environment (which account for between one third and one half of the SPC library's holdings and intake and more than one half of the library's incoming information requests) it is necessary to take into account the interaction between people and resources, and to widen the fields of interest

into economics, anthropology, nutrition, demography, history, politics etc. The means by which information is/should be transmitted and collected include therefore oral and audio-visual (audio cassettes, videos, film and radio). Most agencies, however, support specific programmes and projects rather than attempt to meet the needs of a multi-disciplinary system, and few governments in the SPC area have any coherent policy on information resource management. These two factors result in a proliferation of single-disciplinary information system projects and proposals which do not necessarily, or even usually, include support to the, usually weak, information infrastructures of governments or regional bodies.

Yet the equipment and technical processes associated with the collection, organisation and dissemination of information are similar regardless of the subject fields in which the information is collected, and to some extent regardless of the size or form of the collection. A microfilm camera, for example, costs as much whether it is bought to record 1,000 marine resource reports or 5,000 natural resource reports, and so does a typewriter or micro-computer. On the other hand, taking the microfilm example further, one organisation may decide to record on 16 mm film and another on 35 mm. If their reading/reproducing equipment is not compatible, they will not be able to exchange the documents they film. The same is true of micro and mini-computers which are increasingly used in the SPC area and for which no standard bibliographic software exists.

The lack of standardization, inherent in a proliferation of separate, sometimes competing, systems adds to costs and limits information exchange. To avoid this, co-operating bodies should formulate joint policies regarding areas of specialisation (subject fields, form of material, scope of operations) and compatibility of equipment and processes for information transfer. While acknowledging the importance of marine resource activities in the SPC area and the necessity to record and make available for general use, relevant library, government office and personal collections, I therefore question the cost-effectiveness of establishing a purely marine resource-oriented information system which could divert funds and time from other equally important fields.

The ideal would be for agencies interested in Pacific development information to provide need-related support to an integrated multi-disciplinary and multi-media Pacific bibliographic data base and document delivery service, such as is now beginning operation at PIC with the co-operation of SPC, SPEC, national libraries and other national and international bodies (UPNG; NLA; FAO; ESCAP; IDRC;...). Aid to a multi-disciplinary system would strengthen the collection, organisation and dissemination of information, both in the donor's special field and in related fields, to government planners, scientific and technical workers, educators and the population at large.

Examples of present activities are many. PIC can offer limited financial and technical support to the information infrastructure of its member countries, but is hampered in its document delivery service by insufficient reprographic equipment. UPNG is planning with IDRC a copying project to cover publications

relating to PNG and to result in at least all PNG provincial capitals having catalogues and sets on microfiche of such literature. The project may not, however, include the reproduction of these sets for users outside PNG, and this could be a field of interest to CHOGRM. The SPC Library is investigating the possibility of microficheing the bulk of its SPC publications collections plus part of its archives and producing, with PIC assistance, sets of microfiche and catalogues thereof. This project is at present only under discussion but could develop along the lines of another IDRC-funded project which is to survey, select, microfiche and catalogue non commercial documents on livestock production in 16 African countries. Such a project could interest the South Pacific region, though because of the small size of Pacific countries (other than Papua New Guinea) it could need to be applied to development literature on a whole rather than to natural resources or the more limited marine resource literature.

The Library of the South Pacific Bureau for Economic Co-operation also contains a wealth of development literature and could take part in such a project in co-operation with SPC and PIC, but has limited information processing staff, and FFA is in a similar position. SPREP is undertaking a study of traditional methods of resource management, and many governments are encouraging the collection of local traditions, but there are at present no means to make such collections widely available. (7).

There is therefore wide scope for co-operative action.

#### References

- (1) Flores, Bess, Fisheries information in the South Pacific. ICLARM Newsletter, 5 (2) - April 1982: 20
- (2) South Pacific bibliography 1981. Suva: Pacific Information Centre, 1982 - (Input from libraries in Cook Islands, Kiribati, Solomon Islands, Tuvalu, Western Samoa, SPC, USP).
- (3) Environmental issues in the South Pacific: a preliminary bibliography. Suva: Pacific Information Centre/Noumea: SPREP, 1983 - (Input from SPC Library; USP Library; Fiji College of Ag. Library. Fiji Min. Ag. Fish Library; USP Library; USP institute staff).
- (4) "PIC advisory committee meeting". University of the South Pacific Bulletin 16(29) July 1983:6.
- (5) Papua New Guinea national bibliography 1981, Waigani: National Library Service of Papua New Guinea, 1981.
- (6) Kiribati national collection 1981, compiled by Richard Overy. Tarawa: National Library and Archives, 1982.
- (7) See for example: Rahnema, M. The sound library: a simple but revolutionary tool for development. Unesco journal of information science, librarianship and archives, 4 (3) 1982: 151-58.