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The UNDP/FAO South China Sea Fisheries Development and Coordinating Programme (SCSP) has been providing assistance on statistics to the countries in the South China Sea area since 1975. The UNDP/FAO Programme for Tuna Resources Development and Management in the Indo-Pacific (RegTuna) is beginning the task of compiling a database on the tuna fisheries of the Western Pacific and Indian Oceans.

South China Sea Programme

The SCSP presently includes the countries of Hong Kong, Indonesia, Malaysia, the Philippines, Singapore, Thailand and Brunei; it commenced operation in Manila, Philippines in 1974. The Project has a broad mandate for conducting fisheries development and management activities, especially those of regional nature. From the beginning, the importance of fisheries statistics as the basis of information for development and management decisions was realized.

From 1975 to 1978, and since 1980, SCSP staff has included a statistician to assist countries of the region with their statistical systems. During the earlier period, this assistance concentrated on designing or modifying statistical data collection systems and helping in their implementation and use. As the data collection systems improved, it became evident that, to provide the necessary information, these systems would have to be integrated.

Since 1980, SCSP statistics activities have concentrated on the systems approach to providing information. At the national level, the focus has been on establishing the institutional structure and technical capabilities for information systems required for Extended Economic Zone (EEZ) management and development. These systems should have the following characteristics:

- Fisheries statistics data collection systems for catch, effort and basic demographic and economic data of known quality and precision.
- Data management systems for processing, documenting, computer storage and summarization of fish-

..SCSP, RegTuna and Statistics..

eries statistics and resource surveys data. These data would be available for further analysis by stock assessment scientists, economists, planners, etc.

 The necessary institutional and working relationships between the statistics and data management units, and the units concerned with stock assessment, economic analyses and planning.

At the regional level, the SCSP objective has been to assist the countries in the creation of a regional mechanism for sharing knowledge on statistics and data management activities; identifying and setting standards for data to be shared at the regional level, and for liaison with the regional stock assessment activities.

Although improvements have been made in the fisheries statistics systems of the South China Sea countries over the past decade, further improvements are both possible and necessary to create effective information systems. In nearly all countries, there is a gap between survey design and implementation. While the statistical survey designs in most countries are sound, the resources are often lacking to implement these designs in the field effectively. In the larger countries, the volume of data collected and processed manually tends to cause long delays before data are published.

The present lack of computer processing capability also means that the analysts, such as stock assessment scientists and economists, have great difficulty in working with the original data. By adopting automatic data processing techniques in the statistics systems, data could be made available faster and in more usable forms than is now the case. The statistics units can then perhaps begin to build the institutional relationships with research groups, planners and others that are required for effective fisheries information systems.

Tuna Resources Development and Management in the Indo-Pacific

The objective of the RegTuna Programme is to assist the governments in

the area in the preparation for long-term management and development of tuna and tuna-like species. It should be mentioned that the "area" of interest to this program ranges from the western Pacific across the Indian Ocean to the eastern coastline of Africa, including all island states in the central and western Indian Ocean, the Bay of Bengal and the Arabian Sea. One of the immediate objectives of the project is to develop an information base through collection and analysis of historical statistical data, and design and implement a quasi-synoptic fishery data system for resource assessment and economic studies.

The Programme's statistician will devise standards for data on catch and effort to be contributed by the countries in the region on their tuna fisheries. These data will be stored and analyzed on a Hewlett-Packard 1000 computer in Colombo, Sri Lanka. The Programme is responsible for planning for biological and economic analyses.

One of the major activities of the RegTuna Programme is to coordinate with programs of investigation, including stock structure studies, surveys for baitfish and seasonal fishing patterns, as well as the development of appropriate fish harvesting methods. RegTuna is designed to become an "umbrella" program, carrying on basic statistical data collection and processing, and coordinating related projects, concentrating on biological and economic investigations.

RegTuna, as it becomes fully operational, will be an effective information system for tunas, encompassing all of the elements of data collection, data processing and analysis, in order to set the stage for and encourage development and management of tunas in the Western Pacific and Indian Oceans.

The activities of RegTuna will be complementary to those of the South Pacific Commission's statistics project (article p. 17). Together, the two systems will allow complete statistical coverage of the tuna fisheries of the Indian and Western Pacific Oceans.