

PROGRESS in stock assessment work on tropical fisheries has been very slow and there are still exceedingly few examples of fisheries which are managed on the basis of options formulated as a result of management-oriented research. For the most part, fisheries are either unmanaged or are managed on the basis of ill-founded perceptions of the status and potential productivity of the stocks and undocumented recollections of the history of the fishery. The reasons for this situation are not difficult to discern; constraining factors relate to the biology of the fishes, the nature of the fisheries and to the institutions responsible for research and management in the tropics, as well as to educational opportunities available to scientists.

The greatest constraint relates to the fact that scientific personnel attached to fisheries institutions are often not well versed in matters relating to stock assessment. Apart from the complex nature of tropical fisheries, the mathematical aspects of stock assessment are intimidating for most biologists and so are often actively avoided. That this is the case is hardly surprising. The few universities that teach stock assessment techniques are mainly located in temperate countries; the variety of ad-hoc training courses available through the offices of various international agencies are not always satisfactory and in any event the number of possible participants is always limited, as is the availability of sufficiently skilled lecturers.

Thus, ICLARM is initiating the creation of an international Network of Tropical Fisheries Scientists to enhance communication between fisheries scientists working on aspects of management-oriented research. Basically, this would include those who are engaged in studies of the scientific aspects of assessment, conservation and management of tropical stocks. More specifically, it would include anyone with an interest in estimating the various biological, fishery and socioeconomic parameters which determine the magnitude of harvests and in the application of those parameters to models, with the final

objective of arriving at scientifically sound management measures for tropical stocks.

In our experience, fisheries scientists in the tropics tend to work in far greater isolation than those in temperate regions and the lines of communication, such as they are, often run north-south instead of equatorially. The result is that scientists in adjacent countries or even in the same country can quite often be unaware that they are working on parallel tasks. Scientists of the Indo-Pacific and of the Atlantic seas have similar problems and similar fisheries but minimal contacts, particularly if they do not rank high in seniority.

## The ICLARM Network Of Tropical Fisheries Scientists

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Additionally, access to the current literature is difficult and expensive.

The principal vehicle for communication in the Network will be a newsletter for exchanges of informal notes, news and views on stock assessment and management. The emphasis will be on how to make parameter estimates for stock assessments, application and applicability of assessment models and on management decisions based on such assessments. It

**IF THE IDEA sounds interesting and you feel you could benefit from membership, write to the Director, Resource Development and Management Program, ICLARM, MCC P.O. Box 1501, Makati, Metro Manila, Philippines outlining very briefly your scientific background, any scientific publications and your current research program. Membership is free. The only expectation is that members should be willing to discuss their work and respond to inquiries from fellow scientists.**

will contain program descriptions for calculators and microcomputers, worked examples applied to tropical stocks and news on developments in appropriate hardware.

For members of the Network, ICLARM will provide, at no cost, relevant literature, excluding textbooks but including unpublished reports, previously unpublished data sets and reprint of out-of-print papers. Where possible, the Center will act as distributor for manuals prepared by other organizations.

In selected cases, if requested, ICLARM will provide free assistance in data analysis, including periods spent in Manila by members of the Network or visits by ICLARM staff to the institutions concerned to formulate plans and devise appropriate methodologies. Assistance will also include the development of data-acquisition strategies where no database exists.

The final phase of development of the Network will be the development of Management-Oriented Fisheries Research Groups in various countries. Such groups will only be set up at the request of individual institutions and will consist of scientists from the country concerned working on stock assessment problems in close collaboration with an ICLARM staff member who will work with the group for up to two years. Basic equipment such as microcomputers and programmable calculators will be supplied when necessary.

It is also expected that the Network will lead to the identification of topics for training workshops. For example, the need for a workshop to develop further and propagate length-structured stock assessment methods is already evident. The lack of understanding of mesh-selection phenomena and of the methods for treating data biased by gear selectivity suggests a second workshop subject. A third workshop could aim at bringing together social scientists and fisheries biologists for further attempts to formulate cohesive management strategies for various fisheries.