SOLVING ISLAND FISHERIES PROBLEMS

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Problems and Potentials for Small Island Fisheries

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Those of us who have the mixed privilege of attending a variety of meetings concerned with marine resource use are accustomed to lengthy and sometimes repetitious discussions of problems. These discussions are usually followed by rather general recommendations, often directed toward individuals or agencies not actually present at the meeting.

This session is intended to depart from this tradition. It is our intention that by the end of this week, the 34th Gulf and Caribbean Fisheries Institute will have resulted in specific steps toward solutions to small island fisheries problems.

If we examine the difficulties faced by fishermen and fisheries managers on each of the Eastern Caribbean islands, we can quickly generate a grocery list of problems which is quite long. But if we begin to define solutions to these problems, we find there are two major obstacles to optimum marine resource use in the region. The first of these is an epidemic lack of awareness and understanding of marine resources which extends from the highest levels of government to the smallest village. The second obstacle is one of technology and information.

This is not the first time that these problems have been discussed. But we must realize that the course of development of living marine resources in the Eastern Caribbean has now reached a critical juncture. In the next five years, fisheries development may take one of two courses: On the one hand, emphasis may be placed on sustainable use and continued benefits. Alternatively, development efforts will concentrate on maximizing immediate returns from exploitation of fishery resources.

Of course, there is no need to explain the rationale for marine resource management to an audience such as this. But we should remember that our perspectives are not shared by most people in the Eastern Caribbean. This is the first major obstacle faced by small island fisheries managers.

Last year, representatives of small islands attending the 33rd GCFI in San Jose repeatedly identified public awareness and support as a major problem affecting fisheries development. And this should not be surprising. For almost

300 years, the development of the region has been linked to agricultural production desired by colonists. The history of the present inhabitants of these islands is tied to the land, not the sea. Islanders are almost totally unaware of the variety of valuable and untapped living resources in their coastal waters. Many islanders cannot even swim, and never look beneath the ocean surface; the sea is an obstacle, not a resource. As a result, the growing interest in marine resources is almost entirely use-oriented. The traditional inattention to life within the sea means that the need and methods for managing these resources are not generally appreciated. This now brings us to the second major obstacle to optimum resource use: information and appropriate technology.

We are all aware that fishery stocks of the smaller islands have not been exhaustively studied on a national or regional basis. Each year, we reiterate the need for fishery research. Dr. Kenny today will propose a new approach toward this problem. But if we assume that resource management must be delayed until such data are available, we have missed the forest for the trees. We do not need precise estimates of standing stock or maximum sustainable yield to know that a problem exists today.

Even with simple technology, many Eastern Caribbean stocks of spiny lobster and conch have been virtually wiped out. Yet, development of living marine resources is often equated with the adoption of more sophisticated technology. It is an unfortunate fact that a number of projects have been proposed or initiated to "improve" artisanal fisheries through the introduction of modern gear and techniques, but little or no consideration has been given to the capacity of fishery resources to support this kind of increased effort. Harvest and management of fisheries are, in effect, treated as completely separate concerns, when in fact they should be interrelated components of every fishery development program.

Well, enough about problems. What is being done, and what can be done to solve these problems? Four major categories of activity are needed. These categories concern the need for popular support, the need for innovative and appropriate technology, the need for improved marine awareness, and the need to develop and support human resources within the region.

First, locally perceived problems must be identified and tackled. It is a sad irony that fishermen are often the last people to hear of fisheries development projects. Fishermen are rarely partners in management activities—usually they are regarded as adversaries. But local support and involvement is the key to effective marine resource management. Demonstrated attention to community needs and perspectives can provide a base of local support for a variety of other activities.

For example, fishermen on Carriacou frequently have difficulty purchasing basic fishing gear. In the process of securing financial assistance for a cooperative fishing supply store, interest and cooperation have been generated for a voluntary program to protect egg-bearing lobsters and a local center has been formed for information on marine resources.

We have the potential here to provide an entering wedge for key marine resource management activities by identifying and addressing specific problems of local concern.

Second, a creative approach is needed to develop locally appropriate management options for Eastern Caribbean islands. Islands without substantial coastal shelves, for instance, may increase the available habitat for nearshore fishes through the use of artificial reefs. These can be efficiently harvested with minor improvements to current artisanal technology. This is an alternative to heavily capitalized offshore fleets which have not been particularly successful in these islands. The artificial reef option is currently being explored in Montserrat, St. Lucia, and several other Eastern Caribbean islands.

We should also recognize the fact that fishery regulations are usually difficult to enforce in small islands. Fishermen must be partners in fisheries management, and this calls for a departure from the traditional legislative approach. A more workable solution to the problem of stock protection, for example, may be through mariculture or protected nurseries for certain stocks. This option is being developed for conch and spiny lobster stocks in Grenada, St. Kitts, and St. Lucia. The involvement of fishermen in these activities means that greater cooperation can be secured for the collection of catch statistics and stock monitoring data.

Several years ago, sea turtle hunters on Carriacou helped establish a protected hatchery for eggs from slaughtered hawksbill turtles and plundered nests. As a result of this effort, several hunters now routinely leave nests to hatch undisturbed and other community members are participating in small-scale research projects to improve the data base for managing the species.

It may be instructive to note that Grenada has had legislation protecting sea turtles for 25 years, but this project involving fishermen is the only effort to have demonstrably increased the number of hatchlings entering the sea.

The third area of activity concerns the problem of marine literacy. Information and education programs are widely acknowledged to be a critical need for schools, the general public, and government decision makers. Those of us who are concerned with optimum marine resource use must explain our concern in effective ways. Technical reports and project documents are extremely useful, but they are not intended for popular consumption, and do not reach the majority of Eastern Caribbean islanders.

People of the Eastern Caribbean are strongly oriented to personal experience. Marine organisms and processes are part of a world which is almost totally alien, and needs to be translated into individual experience. Several effective initiatives have been taken. For example, secondary school students have participated in a study on the use of mangroves in St. Lucia in connection with the Eastern Caribbean Natural Area Management Program. A fisheries week is planned by the Newtown Fisheries Cooperative of St. Kitts to improve the public's awareness of marine resources and support for the fishing industry. A public aquarium and information center is being planned by the government of Grenada. And on a regional scale, the United Nations Environment Program has assigned top priority to environmental education in the Caribbean.

These efforts need better access to existing information in a form suited to local audiences. We have the expertise here to address this need.

Finally, development of local human resources is essential to long-term fisheries management for sustainable use. But training alone is not enough. Without continuing support and access to information, trainees often are unable to use their skills effectively. There is an urgent and continuing need for individual follow-up, better access to information and technical consultation services. The talent assembled in this room could constitute a powerful network of advisory services to provide this type of support.

The fishery problems of the Eastern Caribbean are problems of public awareness, appropriate technology, and access to information. The solutions to these problems involve attention to locally perceived needs, a creative approach to management, increased attention to effective public information programs, and the development and support of human resources within the region. And it all boils down to the fact that optimum use of living marine resources in the Eastern Caribbean depends upon the commitment and capability of the Eastern Caribbean people.

But the real point of this paper is that the Gulf and Caribbean Fisheries Institute has an active role to play in building this commitment and capability. Collaboration is the key: no one has proprietary rights on problem-solving in the region, and there are certainly enough problems to go around. The collective talent represented at GCFI meetings is formidable, and we have the potential to make significant and unique contributions to improve fisheries use in the smaller Caribbean islands.

For several years we have discussed among ourselves the need to include more fishermen and persons concerned with small island fisheries in our meetings. Ladies and gentlemen, the time has come to do it. Let's bring island fishermen and fishery managers to the next GCFI, and apply our collective expertise to developing workable solutions to specific problems of small island fisheries. This is not something that can be done by the Executive Director or the Board of Directors—it depends primarily upon the individual members of the Institute. Funding for this sort of program can be secured provided GCFI has specific individual commitments to participate in the program. We need people who are willing to discuss local problems with users and managers of small island fisheries, and help develop workable solutions to problems of fishing technology, marine education, information access, management and marketing strategy, training, and a variety of other topics. If you are willing to participate in this effort, please let us know before the end of this week.

Year after year we talk, and reiterate the same major problems without actually coming to grips with them. 1981 can be the year that the Gulf and Caribbean Fisheries Institute resulted in specific action and individual commitments to solve these problems.