Status of Assistance to Artisanal Fisheries

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Welcome back my friends to the show that never ends. The status of assistance to artisanal fisheries - as one fisherman put it last year in Nassau - is not so great. We have discussed problems and needs of small island fisheries annually at the Gulf and Caribbean Fisheries Institute for the past 6 years. And this year, we do so again. But perhaps we can also do more.

Two years ago, suggestions were made for specific ways ir which this Institute could participate in solving these problems. After the session in which these suggestions were made, one of my colleagues remarked, "How many times have you heard a call for action at the GCFI? It falls on deaf ears." Well, my cynical friend spoke a bit too soon, because the next Institute included problem-solving workshops for artisanal fishermen which were attended by representatives from 14 different Caribbean islands. So I am encouraged that today we can go beyond another reiteration of chronic problems, and develop workable approaches to solve these problems and most important, to secure real commitments to implement these approaches.

We are all aware that small islands need to become more self-sufficient and that there is a continuing need for foreign revenue. Because they are small, the eastern Caribbean islands must attempt to derive maximum benefits from natural resources which are severely limited when compared to most other nations. The desire for more fish in local markets and for fisheries exports often causes us to focus on optimum harvest as a goal of fisheries development. But let's consider briefly what "optimum" means, because this provides the context for identifying specific approaches to improved artisanal fisheries.

The FAO Manual of Identification and Preparation of Fishery Investment Projects points out that large immediate benefits from a fishery have greater present value than a smaller stream of benefits continuing in perpetuity, and that this might seem to justify pillaging a fishery to near destruction. But the Manual also points out that this view neglects the question of the value of present projects to future people, and that the aim of fisheries policies on ethical as well as economic grounds should be the maintenance of the biological resource. So, we should agree that fishery development projects must not directly or indirectly seek to exceed the limit of maximum sustainable yield.

Let's consider the implications of this. The first implication is that we have to have some reasonable estimates of MSY in order to determine optimum harvest levels. For some reason, stock assessment continues to be regarded as a somewhat esoteric activity which is unrelated to actually developing or improving

a fishery. Now no one here would be particularly impressed if I presented an agricultural development project which simply said, "I'm going to grow something on one of the eastern Caribbean islands." One would want to know considerably more, including what crops were involved, how suitable the land was for these crops, what market value could be anticipated, and what yields were expected. We need to answer the same sorts of questions for fisheries development, and this is not an overly difficult task. John Munro and Daniel Pauly have recently provided excellent discussions of methods for stock assessment which can be readily incorporated into small island fishery development programs. The point is, we must pay at least as much attention to the processes of fisheries production as we pay to the processes of fisheries harvest.

If we regard maximum sustainable yield as a determinant of development strategy, another point arises which we should consider. We know that some eastern Caribbean fishery stocks already appear to be in danger of over-exploitation. Spiny lobsters, conch and near-shore reef fisheries are in this state. Yet, the majority of recent fishery development projects have emphasized more modern harvest technology - larger boats with greater range, hydraulic gear handling equipment and underwater electronics. The justification for this is the existence of offshore or deep-water stocks. In review of marine resources of the Western Central Atlantic fisheries region, David Stevenson indicates that based on the best available estimates, stocks of sharks, demersal reef fishes and coastal palagics probably are underutilized, and regional landings could possibly be doubled or in some cases quadrupled without exceeding MSY.

But the introduction of modern gear and techniques to artisanal fisheries is likely to increase catch efficiency by more than a factor of two or four. Moreover, we should not forget that the distribution of fishery resources is not uniform throughout the Caribbean, and the concentration of these resources around smaller islands is generally lower than around the larger nations in the Caribbean basin. I am not suggesting that there are no improvements to be made in small island fisheries, but I do suggest that it is possible to overcapitalize any fishery, and eastern Caribbean artisanal fisheries are particularly vulnerable to this danger.

So what should we do? Our task today is not to repeat the discussions of needs which have been repeatedly reviewed at GCFI and elsewhere - rather, our job is to address a specific question How can these needs be met through international assistance activity?

During our efforts to answer this question, we must be cognizant of certain realities: First, there is a widespread cynicism among the eastern Caribbean islands directed toward fishery development projects. Most islands have seen a number of these projects over the last 20 years; few are now functional, nor have there been many lasting impacts. In recent years the number of fact-finding teams and current status investigations has reached epidemic proportions. One fisheries' official recently remarked that he had great difficulty doing his job because more than half his time was spent discussing the status

of local fisheries with visitors. Another official said he felt that the Caribbean must be the best studied place in the world. "But," he added, "whatever comes out of all those reports?" Second, besides this cynicism, there is a traditional low priority accorded to fisheries. Most eastern Caribbean islands were developed as agricultural colonies. Fishing was a rather unrespectable occupation taken up by people unfit for anything else. Many people are simply unaware of local living marine resources or their potential; this problem has sometimes been called marine illiteracy, and often places fisheries officers in a Catch-22 situation. Positive results and visible benefits from fisheries are needed to improve local government interest and support, but achieving these results depends upon increased local support. Besides local cynicism and marine illiteracy, we often face a third problem in the area of local participation. Most development agencies now accept the premise that local involvement and counterpart participation is a primary requisite for successful projects. But a shortage of suitable counterparts sometimes means that a few individuals are spread much too thinly over a variety of projects, often to the detriment of routine or on-going management activities. Counterpart participation in such cases maybe somewhat artificial and may have less value than one would wish. A similar artificiality can result from efforts to promote the formation of cooperatives. Often, these groups are formed primarily to secure grant funds, rather than from a genuine commitment to collaborative effort per se. Without genuine commitment to a clear sense of cooperative purpose, the organizations soon collapse, often with mismanagement of funds resulting in an abiding distrust of the coop concept.

Bearing these problems in mind, what sort of approach should be taken toward assisting eastern Caribbean artisanal fisheries? First, we need to improve local support and establish a style for small island fisheries development through projects which include immediate attention to locally perceived problems, which can provide tangible results in a relatively short time, and which can lead to continuing fishery improvement and management activities.

In St. Kitts, for example, a project is now underway to improve the use and management of local spiny lobster fisheries. Both government and private sectors recognize the value of this resource, and are concerned about the possibility of overexploitation. The St. Kitts project includes the usual investigations of local recruitment, growth, mortality, and catch per unit effort; but this is not just a research effort, because the project also includes techniques for more efficient harvest and stock enhancement through artificial habitats and procured nursery areas. In addition, this project is also linked to other activities which address specific problems perceived by local fishermen. Fishermen are participating directly in the data acquisition activities, and public involvement is being encouraged through information programs on local radio and television. The St. Kitts government hopes to encourage community participation in the management process as an alternative to depending solely on restrictive legislation which

is often ineffective. This sort of integration between several types of project activity would be difficult in larger countries, but is imminently practical for smaller islands. There are many opportunities for creativity in small island fisheries management and we should not assume that models developed in large fisheries are necessarily the best approach for the eastern Caribbean.

How do we deal with the problems of manpower? First, by acknowledging that such problems exist. There are many useful projects to be undertaken in the eastern Caribbean, but only a few can be undertaken at one time by fisheries units which often have a staff of less than half a dozen. We should, perhaps, consider the proposition that it is better to do a few things well rather than do many things not-so-well.

We should remember that development aid is rarely rejected by small islands, and new projects may be accepted even though human resources are already overcommitted. Development assistance projects, then, should determine current manpower commitments prior to initiating projects which make additional demands on local personnel. This is particularly the case with developmental research projects. Such research is vital to improved and optimum use of living marine resources, but the time demands of research work make this a difficult activity for most eastern Caribbean fisheries units. Expatriot personnel, of course, can ease the burden on local counterparts, especially during the project initiation and periods of intensive activity. But one often hears of projects which do very well until foreign advisors leave, after which the projects rapidly sink into oblivion. Our experience suggests that continuing manpower problems can be lessened by broadening local participation in project activities. We have found fishermen to be particularly effective allies, even though they are often ignored or viewed as antagonistic to management. School groups and community development organizations are other possibilities. But besides local commitment, projects which are expected to result in ongoing activity must insure that advisory and technical support services will be available to assist local personnel on a continuing basis.

In summary, then, I suggest four points which may help us to develop effective approaches to assist eastern Caribbean artisanal fisheries: (1) Development should be based on sustained use - this requires a knowledge of the available resources, appropriate fishing technology and equal attention to the processes of production as well as harvest. (2) On a practical level, projects are needed to address locally perceived problems and provide visible results as a means of promoting increased government support as well as interest within the private sector. (3) Local manpower limitations make it essential for us to consider optimum use of human resources as well as living marine resources. (4) The islands of the eastern Caribbean are individually and collectively unique. Project approaches which have worked elsewhere are by no means guaranteed to work in the eastern Caribbean. Effective assistance to artisanal fisheries in this area is more a matter of technology development and adaptation than direct transfer of

existing technology.

Addressing the problems of artisanal fisheries is not the exclusive province of any single group or organization. There is plenty of work to go around, and no one loses from true collaboration. The challenge facing us is to tackle local needs through a collective effort between fishermen, government agencies, interested community groups and development assistance personnel. If we can do this, we can achieve a creative approach toward development of living marine resources which will provide increased and continuing benefits to the people of the eastern Caribbean region.