

Eastern Caribbean Fisheries Development Workshop

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SUMMARY

Fisheries development in the Eastern Caribbean is receiving increasing attention from governments and development agencies within the region, and a variety of programs are being prepared to increase the contribution of fisheries to local economies. But fishermen are seldom consulted in the development of such programs, even though the success of fisheries projects obviously depends upon the acceptance and participation by local fishermen. A workshop has been held for representatives of small-island fishermen in association with the 35th Gulf and Caribbean Fisheries Institute in Nassau, Bahamas. In addition to participating in at-sea technical training and demonstration activities, fishermen's representatives have identified eight major problem areas of widespread concern to small island fisheries: unreliable supply of fishing gear, difficulty in obtaining engine spares, lack of training in fishing technology and marine mechanics, sub-optimal fishing vessels, loss of gear through theft, unreliable pricing policies, lack of storage/processing facilities and know-how, and poor marketing and distribution facilities. Based on problem-solving sessions during the workshop, a program to address these needs has been developed.

GOALS AND OBJECTIVES

The goal of this project is to develop a framework within which effective technical and financial support can be provided to local initiatives for improving the use of living marine resources in the eastern Caribbean, and to encourage the development of such initiatives. To meet this goal, a workshop has been held with two objectives: (1) To provide technical training and consultation to representatives of small-island fishermen; and (2) To develop workable programs for solving common problems faced by fishermen in the Caribbean islands.

ACTIVITIES

Workshop sessions were held 11-13 November 1982, under the auspices of the 35th Gulf and Caribbean Fisheries Institute in Nassau at the offices of the Bahamian Department of Fisheries, at the fish landing complex on Potter's Cay and on board the R/V GUANA HANI. These sessions were attended by fishermen's representatives from 24 Caribbean island countries, in addition to a wide variety of individuals concerned with various aspects of small-island fisheries development. On 11 November, the fishermen were divided into two groups, one of which participated in shipboard demonstration and training activities while the remainder attended demonstration and discussion sessions ashore. The groups were reversed the following day. The following presentations were made during the shore sessions:

"Suggested Model for Artisanal Fisheries Development in CARICOM," Ronald Gordon, Food Technologist, Caribbean Community Secretariat, Georgetown, Guyana.

"The Application of Good Industrial Practices at Potter's Cay, Nassau Fish Landing

Complex," T.H. Hluchan, Stevenson Hluchan Associates Ltd., Ontario, and J.D. Koppernaes, Koppernaes Engineering Ltd.

"The Importance and Need for Quality Control in Small-scale Fisheries in the Caribbean," Frederick Peterkin, Fishery Consultant, Guyana.

"Fresh Fish Handling Practices at Sea and Dock," Glenn Pritchard, Island Seafoods, Nassau.

Demonstration and participatory sessions on fresh fish handling and smoking were conducted by Michael Braynen, Senior Fishery Officer, Bahamas Department of Fisheries, and by I. Craig Trott, Fishery Officer, Bermuda Department of Agriculture and Fisheries.

Poster sessions and informal consultations were provided as follows:

Fisheries development and technology in the Bahamas — Bahamian Ministry of Agriculture, Fisheries and Local Government

Protecting natural resources in the Bahamas — Bahamas National Trust

Lobster trap fishing and small vessel layout — Caribbean Research Associates

Self-help projects for fisheries development — Environmental Research Projects

Conch mariculture in the Turks and Caicos — Foundation for PRIDE

Handling short lobsters — Gulf of Mexico Fishery Management Council

The 200-mile limit — South Atlantic Fishery Management Council

Small-scale fishing gear, boat and engine maintenance, fish handling and processing, advisory services — South Carolina Sea Grant Consortium

Sail-assisted combination fishing boat — Thompson Trawlers and Virgin Islands Division of Fish and Wildlife

Developments in aquaculture — Wallace Groves Aquaculture Foundation

Program development workshops were organized as small group (8-15 participants) discussions directed toward specific problems articulated by the fishermen's representatives. These discussion groups were directed toward devising realistic approaches to problem-solving, and where possible to make recommendations for specific follow-up projects. Rapporteurs for these groups were: Melvin Goodwin, Environmental Research Projects, Brian Luckhurst, Bermuda Department of Agriculture and Fisheries, and Gregg Waugh, South Atlantic Fishery Management Council and Caribbean Research Associates.

OUTPUT AND FOLLOW-UP

Fishermen's Needs

Based on fishermen's responses to questionnaire surveys, workshop sessions and informal discussions during the workshop, eight common problem areas have been identified.

1) *Better supplies of fishing gear.* — Most fishermen buy their supplies locally from merchants who know little of fishing practice, and consequently stock a very limited selection of gear which is often less than ideally suited to local circumstances. The cost of fishing supplies in the islands is high, due to low purchase volume and many intermediaries in the buying chain. Alternative sources of supply and comparative prices from different distributors are generally unknown.

2) *Improved engine parts supply.* — The problem of engine spares is much the same as that described for fishing gear. The situation is so severe in some cases that it is more practical to discard a faulty engine than to try to have it repaired. A related problem is the lack of warranty protection on new engines.

3) *Technical training in small-scale fishing technology and marine mechanics.* — A variety of relatively new materials is commercially available which could substantially improve fishing practices in most islands. Similar improvements could be real-

ized through local adaptation of fishing techniques used in other areas, without quantum jumps in technology or capitalization. Maintenance and repair problems could be largely solved if the services of trained marine mechanics were readily available to local fishermen.

4) *Improved fishing vessels.* — Most fishermen felt that their boats could be improved, but there was little agreement on what specific improvements are required. This reflects the differences in fishing style and fishery resources among the Caribbean islands. There was general agreement that large or expensive vessels would be less likely to meet the needs of artisanal fishermen than small-scale vessels adapted to local conditions.

5) *Protection of fishing gear.* — Theft of fish traps and other unattended equipment is a widespread problem. Local law enforcement agencies are not generally equipped to handle thefts that occur at sea, and even if thieves are apprehended, prosecution is usually not severe.

6) *More stable pricing.* — Fisheries landings frequently experience periods of scarcity and glut, resulting in widely fluctuating market prices. As a result, some fishermen prefer to sell their catch to export markets which tend to be more stable, or to spend less effort fishing during periods when catches tend to be greater.

7) *Improved processing facilities and techniques.* — Local acceptance of frozen or iced fish is impaired by the widespread belief that such fish are “bad.” Poor at-sea handling practices are partly responsible for this belief, along with the absence of appropriate cold storage facilities. Most fishermen were very interested in smoking and drying processes which could be carried out locally with very little financial investment.

8) *Improved marketing and distribution facilities.* — Problems of pricing, scarcity and glut could be solved at least in part if large catches could be made available to markets at some distance from fish landing sites. In some islands fish is often unavailable to people who do not live close to the sea, while fishermen may simultaneously have difficulty selling a larger catch before it spoils.

Suggested Approaches to Problem Solving

The interest and response of fishermen's representatives during the training, demonstration, and discussion sessions revealed five points which played an important role in formulating specific follow-up projects.

First, all of the problems listed above can be solved, to a large extent, *by the fishermen themselves* given adequate and appropriate support. Most important in this process is the realization by small-scale fishermen that they do indeed have options for effecting desired changes; demonstrations and training concerned with techniques that are new but within the grasp of individual fishermen were particularly helpful.

Second, many potential solutions depend upon some form of group action by the fishermen concerned. The most obvious vehicles for this are cooperatives, but there are often negative connotations associated with this word among fishermen. Despite this situation there was much discussion of various types of collective activity, suggesting that the elements of a cooperative approach may be more widely acceptable than the term itself.

Third, local site-specific demonstrations are extremely important not only to encourage the involvement of a large number of fishermen, but also to improve understanding and interest of the general public in the fisheries sector. Lack of local government support was a frequent complaint, and much of this disinterest is thought to stem from a poor appreciation of the problems and potentials for local fisheries.

Fourth, while the problems described above are widespread, local conditions vary

so widely from island to island that a high degree of site-specific "tailoring" is needed for projects intended to solve these problems.

Finally, development of artisanal fisheries in the Caribbean islands could be greatly advanced by improving the opportunities for exchange of information and ideas among the fishermen of the region. There were repeated requests for an "island fisheries newsletter," as well as questions concerning the possibility of future workshops dealing with catch handling and processing, navigation, safety and record keeping for fishing businesses.

Follow-Up Activities Planned

For immediate action. — Collation of information on suppliers and comparative pricing on common fishing supplies. Information and samples to be solicited directly from manufacturers where possible, and circulated to fishermen's representatives participating in the workshop (to be undertaken by Environmental Research Projects).

Circulation of information on maintaining financial records for small fishing businesses (to be undertaken by James Burnett-Herkes, Bermuda Dept. of Agriculture and Fisheries).

For action within the next 12 months. — Development of a program to encourage a self-help approach to problem solving in small-island fisheries. This program will include (a) site-specific workshops directed toward devising and demonstrating improved techniques for local fisheries (e.g., fishing for demersal or pelagic species, trap fishing, net gear), fishing vessel improvement and underutilized stocks; (b) intensive training of representatives of fishermen's groups in modern gear and techniques appropriate to artisanal fisheries, catch processing and marine mechanics; (c) inter-island workshops featuring presentations of relevant techniques by fishermen from within the region as well as other topics of general interest and importance to small-island fishermen (to be undertaken by Environmental Research Projects in collaboration with the Caribbean Conservation Association, the program committee of the Gulf and Caribbean Fisheries Institute, and the International Center for Marine Resource Development at the University of Rhode Island).

Development of a workshop for the 1983 Gulf and Caribbean Fisheries Institute which will include presentations and discussion sessions on developing successful cooperatives, and poster/demonstration sessions on navigation, safety, cold storage and catch processing as applicable to the needs of small-island fishermen (to be undertaken by the program committee of GCFI).

To explore opportunities for including information of interest to the region's island fishermen in one or more of the newsletters currently produced in the Caribbean, and for enlarging the circulation of these publications to include fishermen and fishermen's associations (to be undertaken by Environmental Research Projects).

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