

**COMMUNITY-BASED APPROACHES TO FISHERIES MANAGEMENT: THE
ROLE OF MARKETING DEVELOPMENT AND FISHERIES COOPERATIVES IN
IMPROVING SOCIO-ECONOMIC CONDITIONS
OF SMALL-SCALE FISHERMEN**

by

A.R. Atapattu
Fisheries and Aquatic Resources Department
Colombo, Sri Lanka

ABSTRACT

The paper describes the evolution of the fisheries cooperative movement in Sri Lanka and examines policies and programmes to strengthen their role further, notably by giving greater attention to marketing functions and by involving them more fully in the fisheries management process. Changes in government policy towards fisheries cooperatives are traced, in particular the re-orientation introduced in 1989 which successfully placed emphasis upon the establishment and strengthening of cooperatives at the village level as the base of a three tier structure. The fish marketing and distribution system in Sri Lanka is also discussed. It is argued that, especially because of the limitations of the State-owned Ceylon Fisheries Corporation, cooperatives specifically designed for the purpose of fish marketing could not only be very effective in improving the distribution of fish but would also assist in ensuring more equitable incomes for the fishermen. The author underlines the fact that, while the need for proper management of the coastal fisheries is becoming increasingly obvious and recognized, the open access system in most Sri Lankan fisheries remains a critical problem. High hopes are now attached to the new Fisheries Act which provides for the control of fishing operations through a licensing system. Attention is drawn to the high importance of ensuring proper enforcement of the new management regulations and the need to promote the participation of fishing communities and cooperatives in the design and implementation of management policies and programmes.

1. Introduction

In recent years, there has been substantial growth in fisheries in Sri Lanka, which are basically small-scale. Prior to the 1950s, fishing operations were conducted using traditional non-motorized craft. In the late 1950s and early 1960s, motorized fishing craft using nylon nets were introduced. Due to the limited resources and the open access to most fisheries, there were major conflicts among groups of fishermen. Some fisheries, e.g., beach seine ("Madel") and stake net ("Kattudel") fisheries had an effective, long established system of community-based management but most other fisheries did not have such systems. It is now essential to have a strategy for the management of fisheries based on the participation of the community in formulating such strategy and subsequent implementation.

A full description of the general characteristics of the Sri Lanka coastal fisheries, their recent levels of exploitation and the major socio-economic aspects involved in their future development and management is set out in Document IPFC/Symp/93/CSR.2.

2. Fisheries Cooperative Movement in Sri Lanka

The cooperative movement was introduced to Sri Lanka as early as 1911 in an attempt to uplift the socio-economic conditions of the rural poor. The coastal small-scale fisheries industry was brought under the umbrella of the cooperative movement in the 1940s. There was great enthusiasm on the part of fishermen during this period for the fisheries cooperatives. In general, the fisheries cooperative movement had a mixed success, at times with a high level of activity. In early 1970s, the Government introduced a new policy designed to amalgamate the 250 odd small, village level fisheries cooperative societies (FCSs) into 45 large primary societies. Due to the watering down of the village leadership which had been responsible for the functioning of these FCSs and to the employment of the resources of the successful village FCSs to resurrect the inefficient ones, the system did not work. During this period, the policy was also to channel all Government assistance through the FCSs. Many FCSs received such assistance in the form of capital inputs (boats, fishing gear, etc). Institutional credit facilities and subsidies on capital items were provided. However, the loan repayment rate was very poor (about 12%) and many members left FCSs after obtaining the boats without repaying the loans. Moreover, managerial ability in these FCSs was very limited and there was no supervision of the operation of boats. These problems prevailed throughout the 1970s and early 1980s.

In 1989, government policy regarding assistance to the fisheries sector again changed. This time the emphasis was to establish village level FCSs but on a different basis. Earlier, only active fishermen were allowed to obtain the membership. Under the new policy, it was broadened to include the family members of the fishing communities, especially women. All the Government assistance is now being channelled to the fisheries sector through these FCSs. By mid 1993, this scheme for the establishment of the FCSs seems to work; 765 FCSs had been established under this new approach with a membership of about 82,000 and nationally the loan repayment rate has reached 85%.

3. Marketing of Fish

Since fish is a highly perishable commodity, its marketing is very important aspect. Marketing is also a critical issue in a fishery dominated by small-scale fishermen as in Sri Lanka, where a large number of fishermen are at or just above the subsistence level. Unless they get fair and reasonable prices, their economic conditions will be further aggravated. At the same time, fish is such a significant commodity in the daily diet of the people of Sri Lanka that it is of paramount importance that fish of high quality is made available at reasonable prices to the consumer.

In Sri Lanka fish marketing is handled largely by the private traders. It is government policy not to control the activities of private traders but rather to encourage more persons and organizations to enter this trade and thereby strengthen the competition. Special efforts are made to assist the fisheries cooperatives to undertake marketing of fish. The banking system has also been active in helping traders to improve their facilities for fish marketing.

Role of the Ceylon Fisheries Corporation

The Government has always taken up the position that a certain amount of intervention in the marketing of fish is necessary through the Ceylon Fisheries Corporation. However, as the volume of fish handled by the Corporation is quite small, it has not been able to perform this task effectively.

The Ceylon Fisheries Corporation is nevertheless expected to play a key role in the marketing of fish in a manner which will help the producer during the glut season and the consumer during the lean season. The Corporation achieves this by purchasing and selling volumes of fish at publicized prices through the mass media. These prices are included to act as "floor" prices to the producers and as "ceiling" prices to the consumers.

In order to increase the volume of fish handled, the Corporation has made arrangements with FCSs and other organizations of fishermen to supply fish to the Corporation on continuing basis at fair prices. The Corporation shares its profits with the cooperatives as an incentive to their collaboration.

Buffer stocking of fish by the Corporation would probably be the ideal solution. However, the cost of holding the fish in cold rooms over a period of time and the cost of capital blocked in the process is very substantial. Thus, the buffer stocking function will be de-emphasized and the Corporation will have to rely on higher turnover on a day-to-day basis.

Attempts are being made by the Corporation to distribute the fish produced in a district within the same district and only the excess will be transported.

Presently, supplies of sea fish in rural areas are limited due to a lack of infrastructure facilities for distribution, in particular the non-availability of refrigerated transport facilities and poor network of roadways in the rural areas. Ceylon Fisheries Corporation intends to tackle this problem mainly by increasing the number of retail outlets and also by intensifying its activities in areas such as purchasing and processing of fish and fishery products.

Dried fish has always been an important item in the diet of the people, particularly in rural estate areas, and drying and curing fish is given considerable assistance. Such assistance includes providing access to suitable and sufficient land/beach areas, promoting the use of improved methods of salting, drying and pickling of fish, reducing insect infestation, use of drying/smoking kilns for drying in poor weather conditions, etc. The Government also assists the local fish drying industry by imposing a 10% duty on imports of dried fish.

The demersal offer considerable potential for exploitation. However, low prices due to low consumer preference in most areas inhibit the harvesting of these resources. Development of value-added products, e.g., fillets, is being promoted for local sales as well as for exports. The CFC should strive to increase its volume of packeted and processed fish particularly in the urban areas.

Foreign trade in fish and fishery products

Exports of fisheries and aquatic products are still relatively insignificant as a percentage of the island's total foreign trade. However, there has been an increasing trend in regard to the value of both exports as well as imports.

Shrimps, lobsters, shark fins, bêche-de-mer, crabs and other crustaceans and tunas are exported to Japan, USA, Hong Kong and Singapore. In recent years, the export of ornamental fish has shown a steady increase.

At present, the export trade is dominated by prawns/shrimps. During the past seven years, prawns on average accounted for 54% of the total volume and 65% of the total value

of exports. Though prawn will continue to remain as the most important single item of exports, the diversification of the export base is necessary.

**Foreign Trade in Fisheries and Aquatic Products
(1987-1991) (Rs. million)**

Year	1987	1988	1989	1990	1991
Value of imports of fisheries and aquatic products	956.56	1 137.02	1 058.97	949.52	2 003.31
Total value of Sri Lanka's export of fish and aquatic products	576.21	825.00	1 137.19	883.00	855.54

Source: Department of Fisheries and Aquatic Resources

The ratio of captured to cultured prawns also needs to be changed. Up to 1985, all the prawns exported came from capture fisheries. However, it is not possible to depend on the natural stocks to take advantage of the ever-expanding world demand and the culture of prawns must be developed on a high priority basis. Next to prawns, ornamental fish is the most important single export item.

Marketing and Sales Income Distribution System

Fish production, marketing and distribution of income is very complex in Sri Lanka and the system and procedures differ in different parts of the country. There are two major methods of marketing the catch: (i) the catch is auctioned at the landing site. Wholesalers bid at these auctions and the catch is consigned to the St. John's Wholesale Market in Colombo. Small quantities are sold to retailers, e.g., bicycle vendors; (ii) some middlemen supply capital inputs (boats, etc.) to fishermen and the entire catch is taken by these middlemen. This fish is either consigned to Colombo or, especially if quantities are small, sold to local retailers.

The fish marketing system at fishing centres is generally competitive and middlemen do not exploit producers to a great extent. However, at certain fish landing centres, there may be organized bidding by middlemen.

The distribution of income from the catch is usually on a share basis. The procedure adopted in sharing the catch differs depending on the area and also on the type of fishery. Typically, after deducting operational expenditures, 50% of the income is distributed among crew members and the balance 50% is taken by the boat owner. If the boat is owned by one person and fishing gear by another, the income is proportionately distributed. In the pole and line fishery for tuna using live bait, (found in the southern areas) two types of fishermen are involved. Some fishermen using traditional craft catch live bait. Using this bait, fishermen using motorized boats operate pole and lines to catch tuna. A quarter of the catch share is paid to bait fishermen after deducting operational expenditures. Out of the balance, 50% is taken by the boat owner and the balance is paid to the crew members.

The income distribution on boats issued to FCSs under the credit/subsidy schemes is also similar. After deducting operational expenditures, 50% of the income is distributed among the crew. Out of the balance, 35% is used for loan repayment, 10% for the Boat/Gear Repair Fund and 5% as commission for the FCS. The producer subsidy is fully recovered by the FCS from the members. Although the producer subsidy is a grant from the State, its benefit is passed onto the FCS in order to strengthening them.

The marketing and distribution of income are important aspects in improving the socio-economic conditions of fishing communities. Fortunately, unlike in some other countries in the region, fish marketing in Sri Lanka is competitive and the exploitation of producers by middlemen is comparatively low. As the demand is for fresh fish in Sri Lanka, there must be an efficient transport mechanism for the marketing of fish.

Possible future developments

In the development of the fish marketing system, a few basic features have to be considered. While the chief demand is for fresh fish, small market is developing for packeted fish in super markets for the middle class. In hinterland areas, there is a big demand for dried fish although the supply cannot meet this demand. As a first stage, fisheries cooperatives have been established mainly to organize the fishermen and to boost fish production. The next phase of development must be to organize them to better market their catch. Already one fisheries cooperative has been established mainly for the purpose of fish marketing. Some FCSs will be selected for marketing and infrastructure for marketing could be provided. These FCSs could then be integrated through the District Unions to the National Fisheries Cooperative Federation for purposes of fish marketing. Once this is fully operational, the producer fishermen will receive comparatively better compensation for their labour. The hope of controlling the market by the government-owned fish marketing organization, the Ceylon Fisheries Corporation, has not been fulfilled as its market share is less than 2% of the total production.

3. Strategy and Implementation

The importance of management of coastal fisheries is becoming increasingly obvious and appreciated. The main problem is the open access system in most fisheries in Sri Lanka. Fishing effort continues to increase leading to conflicts among groups of fishermen. The importance of proper management of fisheries has been identified and legislation has been prepared to this end.

A new Fisheries Act has been drafted taking into consideration the environment and sustainable development of fisheries. Under the new Act, all active fishing operations would be brought under licensing arrangements through which effective management measures could be introduced. The new legislation, through proper management measures, is designed to improve the socio-economic conditions of fisherfolk communities. Presently, unlimited entry into fisheries leads to lower incomes for fishermen.

In the development of strategy for fisheries management, the participation of the fisherfolk community is essential. In this context, traditional and customary initiatives by fishermen in fisheries management should be recognized as very often these management measures are very effective.

Community-based approaches to the management process have been emphasized. To facilitate such participation, it is best that fishermen are organized so that the concept of

collective responsibility can be applied. There are various ways in which fishing communities can be organized and in Sri Lanka, fisheries cooperative societies, with a 3-tier structure, seem to work satisfactorily.

Adequate compensation to factors of production in fisheries is essential for the successful application of community-based approaches to fisheries management. A competitive fish marketing system, in which primary producers receive equitable compensation for their efforts, is essential. In an open access situation, if there are more entrants than the fishery can sustain, methods to decrease fishing effort have to be introduced. This has to be done very carefully, mainly by redeployment of fishermen to other sectors.

Another important aspect is the drafting of enforceable legislation. The participation of the community is essential in the drafting of such legislation as socio-economic factors must be considered in addition to biological and technological factors.

Weak enforcement legislation dilutes the effects of management. It is very essential to have suitable mechanisms for enforcement. Special training is being provided to responsible officers in prosecution and courts procedure.

Fishermen and fishing communities should be properly educated regarding the importance of management. For this, information on stocks and available resources is essential. Stock assessment and monitoring of level of exploitation are critical to management.

In order to reduce effort in coastal fisheries, the relocation or redeployment of fishermen is necessary. Fishermen may be relocated into other fisheries, (e.g., offshore fisheries in Sri Lanka), aquaculture or alternative employment (e.g. tourism). Credit and financial incentives are important in providing alternative employment.

Socio-economic issues, although of paramount importance, are very difficult to deal with in the management process. The equitable allocation of fishing rights in a country like Sri Lanka, where different religious, ethnic and social and cultural groups are present, is extremely complex. Under these circumstances, enforcement of management measures pose particular problems as some groups of fishermen may feel that they are disadvantaged.

Absence of effective fisheries management leads to waste of resources and environmental degradation. Socio-economically, it leads to severe conflicting situations among groups of fishermen which are detrimental to the community as a whole. Therefore, the early introduction of management measures for the coastal fisheries would help to alleviate harmful effects on the environment and improve the socio-economic conditions of fisherfolk communities.