

## **CONTRIBUTION OF FISH MARKETING TO FISHERY RESOURCE MANAGEMENT IN ASIA**

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### **ABSTRACT**

This paper advocates the establishment of links between fisheries management and fish marketing. The constraints and potential benefits of encouraging cooperative marketing systems, particularly auctions, are examined. Fishery cooperatives are the most likely bases for the establishment of such systems but their introduction will need careful preliminary research to ensure the cooperation of all parties involved. Recommendations for such research are made, and for the role which could be played by national and local governments and international agencies in the integration of cooperative marketing into fishery management.

### **1. INTRODUCTION**

There has been increasing recognition that fisheries management policies should include a component of participatory approaches which emphasise the role of fishermen in the design and implementation of management measures. The creation of powerful fisheries cooperatives is the key to success for effective fishery resource management. Fisheries cooperatives are in a position to be able to strengthen linkages between marketing activities and resource management measures for protecting the state of fish resources. In the circumstance where fisheries cooperatives are involved in marketing of catches, there might be a greater opportunity for developing management methods in conjunction with fish marketing operations.

The development of efficient fish marketing systems and methods depends to a large extent on government policies and services since the problems are often beyond the control of the fishermen. The effectiveness of government assistance could be augmented through enactment and enforcement of relevant regulations, improvement of market information systems, training, research and infrastructure development.

A positive response from, and the collaboration of the private sector in the policy measures and regulations are important. Efforts should be made to enhance the capability of fishermen to use collective marketing in order to increase their bargaining position. In developing countries fishermen generally have difficulties in organising efficient collective marketing, largely due to the organisational weaknesses of fisheries cooperatives, their poor management capabilities and insufficient cohesion among the members.

The purpose of this paper is to present the concept of establishing linkages between fishery management and fish marketing, to identify constraints on cooperative marketing and to recommend auctioning as a tool for developing cooperative marketing. The paper concludes with a number of recommendations to be considered by government authorities, fisheries cooperatives and development agencies.

## **2. LINKAGES BETWEEN FISH MARKETING AND FISHERY MANAGEMENT**

Fishermen are often well aware of the importance of resource conservation and that the existing form of unchecked competition in fishing effort will sooner or later threaten their livelihood. In some cases fishermen voluntarily establish management measures. For example, community-based traditional management systems have been practised in some countries for centuries. However, such examples are exceptions because up to a generation ago the oceans and their fishery resources were thought to be inexhaustible. The situation nowadays is such that no matter how strongly fishermen are aware of the danger of depletion of resources, they engage in competitive fishing efforts because of the necessity of earning a livelihood. If the enforcement of regulatory measures brings about decreased fishing effort, catches and income, fishermen would not comply with them. Thus in situations where a decrease in catches and income is inevitable as a result of rigorous management implementation, the management authorities must convince the fishermen that it is necessary to weather the difficult period, which may last several years, before fishery resources are restored.

It is therefore necessary to consider how to minimise the negative effects of fishery management on the economic returns to fishermen. The decrease of income may be compensated for by subsidies or credit schemes if the financial situation of cooperatives allows. On the other hand, restrictions on landings may give rise to increases in fish prices when the demand is high and the integration of marketing into fisheries management mechanisms may be effective to prevent the decrease of prices. In this case, it is essential that marketing should be carried out in a collective manner by cooperatives in order to enforce the regulations. A daily production/shipment limitation scheme designating landing sites may also be useful but such schemes would only be feasible when the majority of fishermen are members of the cooperatives and they comply with cooperative regulations.

## **3. COOPERATIVE MARKETING DEVELOPMENT**

### **3.1 Constraints**

Cooperative marketing is a form of collective marketing which is making slow progress in the Asia. The fish marketing sector in general has common problems in the producing areas.

- i. Apathy of cooperative members caused by heterogeneity of membership and little or no benefit to members from the cooperatives;
- ii. Inefficient management due to lack of grass-roots leadership and managerial/ technical talent plus slow decision making processes;
- iii. The strong bargaining power of fish dealers who often provide boat owners and/or crew with finance and often dictate the prices of the catches;
- iv. The prices offered by fish dealers do not always reflect the demand in consuming centres nor that at other landing sites because of lack of market information;
- v. The distance of landing sites from large consumer centres and markets;

- vi. Poor infrastructure facilities such as road access to landing sites, fuel, cold storage equipment, communications, water and power supplies which cannot meet the need for rapid handling of perishable fish products.
- vii. Lack of proper grading systems for fish by species, size and quality;
- viii. If the lion's share is taken by intermediaries and the equitable distribution of benefits among fishermen is hampered, fishing does not attract people as an occupation. Low income levels lead to an exodus of fishermen, particularly the young, from fishing. This leads to a shortage of fishermen and in some countries, boat owners inevitably have to employ foreign fishermen.

### **3.2 Merits of cooperative marketing**

Collective marketing is an effective way to bring about increased bargaining power, leading to an increase of income to the participants. Among the possible sales systems that can be used, auctions have a number of advantages.

- i. They are an efficient and speedy way to dispose of a large amount of fish in a short period of time;
- ii. There is transparency of price information because the transaction is carried out in public;
- iii. They are flexible and allow quick adjustments to changes in demand and supply;
- iv. They can strengthen the economic basis of the cooperatives.

Transparency of price information is particularly important. In Malaysia, for example, it was observed that in the past fish were shipped by fish dealers to consuming centres on a management basis under which the fish dealers only settled their accounts with the fishermen after they had sold the fish at the consuming centres. This system was disadvantageous to the fishermen if the prices at which the dealers sold the fish was not published. In a public auction an authorised auctioneer carries out the auction and awards the fish to the buyer offering the highest price. Normally government authorities, fisheries cooperatives or marketing boards undertake this responsibility.

Proper market halls, accessory equipment (e.g. weighing machines), efficient auctioneers and supporting staff who record the results of transactions should be available for establishing auction systems. Charges for the use of market facilities and equipment will provide the income of owners of such facilities. Auctioneers will gain revenues for the services that they offer. In this way, incomes of fisheries cooperatives if they undertake the auctions will be augmented.

With this system the fish dealers pay the cooperatives for their purchases and the cooperatives pay the fishermen. Fisheries cooperatives charge handling fees to the fishermen, but all risks involved in the sales and purchases are taken by the dealers. If fishermen have taken out advance payments from the cooperative these amounts can be subtracted from the value of their sale, so that cooperatives are always assured of collecting their money. This general pattern of auction systems can be found in several Asian countries (e.g. Japan, Republic of Korea, Malaysia).

Fisheries cooperatives in these countries normally avoid buying directly from fishermen and reselling their products elsewhere because of the heavy risks involved. These risks can be minimised if the fishery products can be marketed in an oligopolistic manner by the cooperatives. An example is the Nori (seaweed) cooperative association in Japan. However, it is often more profitable to limit the functions of cooperatives to the provision of services for wholesale fish sales to fish buyers. In collective marketing, fisheries cooperatives should act as middlemen between fishermen and fish dealers.

It has been observed in these countries that when fisheries cooperatives begin to get involved in fish marketing, fish dealers are likely to intervene. But empirical experience indicates that although fish dealers are generally opposed to public auctions in the beginning, they later become quite happy with the system for two main reasons. First they will be freed from the risk and worry about not being able to collect the money for the advance payments they make to fishermen. Second, they have greater choice in the fish products they can handle. When fish dealers have made loans to fishermen they usually had to buy whatever fish the fishermen produce. With the public auction system the dealers are able to bid only for the type of fish they like and thus expand their businesses, specialising in favoured species.

Fishermen who rely on advance payments by fish dealers are often obliged to sell their catch at a big discount. If public auctioning is implemented by fisheries cooperatives it may be possible to substantially increase the value of the catch. It is also expected that incomes will increase through greater accuracy of weighing the catch in public as is common in developing countries.

### **3.3 Development of fish auction systems**

In the implementation of management measures, close collaboration among fishermen is indispensable but such collaboration is generally weak in most Asian countries. Collective marketing of their fish may provide excellent opportunities for the fostering of greater cohesion and cooperation among fishermen and show them how they can profitably cooperate. An auction system is a useful tool for the promotion of collective marketing.

#### ***3.3.1. Procedures for the introduction of auction systems***

1. Fish market regulations may be formulated to stipulate the marketing methods to be adopted. The market regulations generally designate areas of control where the auction should be carried out; specify participants who are allowed to buy fish on the market premises; determine the transaction methods to be used; specify particulars regarding licences to be issued to authorised persons; describe details regarding fees, floor prices, commissions to be charged to fishermen and fish dealers; sorting and grading of fish; use of weighing machines; hygiene regulations; mooring time; auction time; minimum amounts to be purchased.

It is important to establish a fund for the disposal of unsold fish and determine who is responsible for undertaking this function.

2. The market should be gazetted by the government as a model area where auctioning should be introduced.

3. It is important that a close dialogue among the persons concerned is established before auction systems are introduced. Such persons may include, fishermen, fish dealers, government officials, cooperative managers, etc. The objectives, merits, obligations and the likely effects of auction systems should be explained to them and candid exchanges of views should be held in order to obtain the consent of those who will be involved in the implementation of the auction system.
4. It is also important to study the present situation of the wholesale market at the landing site to which the auction methods will be introduced. The results of the study will be useful for formulating the auction regulations. the following matters may be investigated:
  - a. Who is the founder of the wholesale market? Government agency, provincial government, private companies, fisheries cooperatives? or a mixture of these? If so, what are their percentage shares?
  - b. What are the conditions for public wholesale markets in terms of the the scale, the minimum amounts of fish products to be handled. Are there any restrictions with regard to the number of wholesale markets to be established within a certain area?
  - c. Who are authorised to be the wholesalers of the market? Are they the founders of the market? Single or plural persons? What are the conditions for approval? What is the term of office?
  - d. What are the qualifications required to be an authorised buyer who can participate in wholesale transactions in the market? Can general consumers also participate in such transactions?
  - e. What are the financial conditions that authorised buyers have to meet? Is it necessary to deposit security money to obtain a fish buyer's licence?
  - f. Is it obligatory for fishermen to sell their entire catch in the market? or are there any minimum quantities they are obliged to sell to the market? or are they not bound at all?
  - g. What is the transaction method employed between fishermen and wholesalers? Is it a consignment of catch from fisherman to wholesaler? or does the wholesaler purchase the fish and resell it to a fish buyer?
  - h. What is the rate of commission that the wholesaler charges to the fisherman in the consignment sale?
  - i. What is the method of payment by the wholesaler to the fishermen? When must the payment be made to the fishermen? Is it on the same day as the transaction or by an established date; if so how many days after the transaction?
  - j. What transaction methods are employed in the market? Auction (public or secret)? tender (public or silent)? personal negotiation?

- k. Where are the fish dispatched after purchase (major destinations, and the share in the shipment by destination, e.g. local retailers, processors, wholesale markets in provincial consuming centres, wholesale markets in central wholesale markets, exporters etc.)?
- i. What proportion of fishermen sell their entire catch to the wholesale market?
- m. Where do fishermen sell their catches if not to the wholesale market? Who are the main buyers of their catch? What are the business relationships between the fishermen and the buyers? What are the main reasons why they do not sell their catch through the wholesale market?
- n. Is the wholesale market equipped with cold storage rooms and ice making facilities?
- o. Are daily transactions of fish in the market compiled in a statistical report? If yes, what are the major contents of such data?
- p. Is there established standardisation of fish with regard to species, size, freshness etc.?

#### **4. CONCLUSIONS AND RECOMMENDATIONS**

Collective marketing is effective in increasing the bargaining power of fishermen, thus leading to increases in their incomes. Such methods can be efficiently implemented by fisheries cooperatives if they represent the majority of the fishermen in a village and their talent for management is strong.

It is a difficult venture to make cooperative marketing successful. The main causes of failure include:

- i. lack of competent managers and staff at the primary level cooperatives,
- ii. lack of loyalty among members of the cooperative,
- iii. lack of strong and honest local leadership,
- iv. lack of capital,
- v. low rate of cooperative membership among fishermen,
- vi. too small scale of operation at the village level.

On the other hand, the success of many producers' cooperatives can be attributed to

- i. enlarged scale of operation through mergers or amalgamation,
- ii. successful cooperative marketing through the operation of auction systems,
- iii. proper government measures to assist cooperatives (e.g. leadership education)

- iv. determined self-help efforts on the part of cooperatives.

In order to promote producers marketing in relation to effective fisheries management, the following actions are suggested to be taken by government, community and development agencies, taking into account the institutional weaknesses of existing fisheries cooperatives.

**For government**

- a. Establish clear government policies and regulations with regard to transaction methods at the wholesale markets, clearly indicating what the government aims are (e.g. fair transactions, stabilisation of prices, preservation of quality of fish products, stabilisation of fish supply, etc.).
- b. Introduce and enforce policies and legal and structural reforms (e.g. auctioning, amalgamation of cooperatives) which promote more equitable access to resources and equitable distribution of benefits.
- c. Enact or amend laws to ensure the integration of marketing activities in fishery management measures aiming at easier acceptance by fishermen.

**For cooperatives at community level**

- a. Create awareness among fishermen as to the long-term benefits of fishery management and the merits that can be derived from the integration of marketing components into management measures.
- b. Strengthen cooperative marketing in collaboration with government and the private sector, train their staff and improve economic performance to attract more fishermen to cooperatives.

**For International organisations**

Assist governments, fisheries cooperatives or community organisations in conducting case studies and research on the status of marketing institutions, in preparing manuals for introducing auction systems, in formulating pilot projects to experiment with the establishment of linkages between fish marketing and fishery management.