

Figure 1. The Culture Facility and Production of Oyster (Kyoungsang Namdo Province)

Unit: US Million Dollars

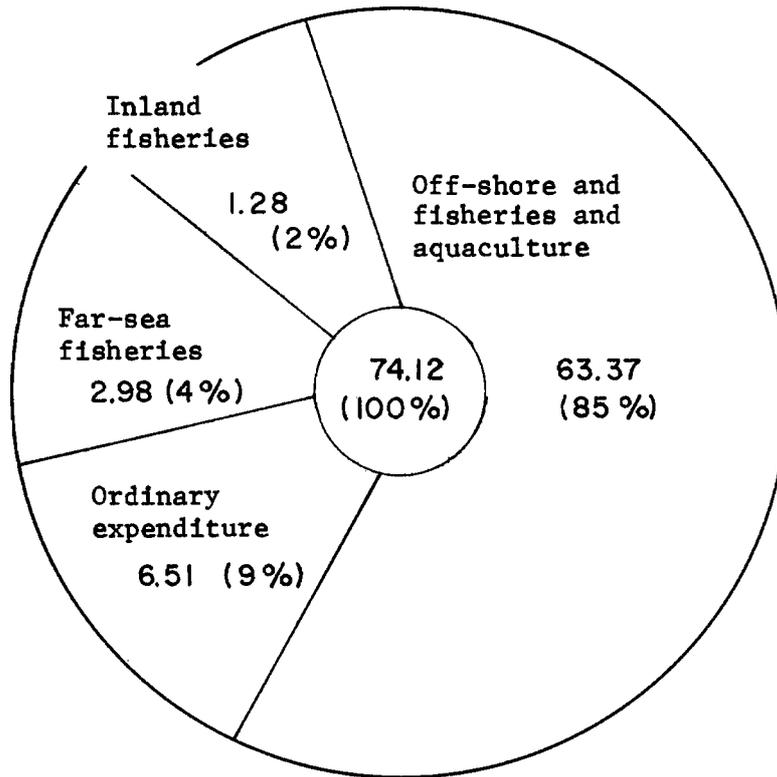


Figure 2. The Investment Plan for Development of Fisheries in 1979

COUNTRY STATUS REPORT

ON

MALAYSIA *

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1. INTRODUCTION

The Malaysian fishing industry is dominated by the small-scale fisheries and scattered throughout the length of the coastline. It is characterised by a lack of organisation and by the large number and variety of fishing equipment and techniques. There are some 37,130 fishing vessels engaged in the sector. The majority of these are small being under 15 GRT and traditional in design with low investment and technology. Nevertheless the small-scale fishery plays an important role in the national economy and is the mainstay of the Malaysian fishing industry. It contributes some 500,000 metric tons or 80% of the total fish landings in the country. In terms of employment, it is estimated that some 95,000 fishermen in Malaysia are directly engaged in the industry accounting for about 90% of the total fishing population in the country.

One of the outstanding issues of the small-scale fisheries in Malaysia is the low productivity of the sector. The income of the fishermen is generally low and this has given rise to the high incidence of poverty among fishermen households. According to recent estimates, some 55% or 23,000 fishermen households are classified as living in poverty. The majority (68%) of these are on the East Coast and the high incidence of poverty in this region is attributed to the low investment and technology, non-ownership of productive assets and the lack of market power.

There is also a geographical differential distribution of the fishing population in Malaysia. Of the total 102,809 fishermen in Malaysia, 83,694 are in Peninsular Malaysia, 11,834 in Sabah and 7,281 in Sarawak. About 64% of the total fishermen in Peninsular Malaysia are on the West Coast and the remaining 36% of the population are on the East Coast. The distribution pattern of the fishing population is however not compatible with the potential of the marine resource in the area. The marine resource potential lies mainly in the South China Sea off the coasts of Sarawak, Sabah and some of the East Coast States but the major fishing population is centred on the West Coasts of Peninsular Malaysia where there is already overexploitation of the resources.

Generally the size of the fishing household is large (6.2 persons) as compared to the average household size (5.4 persons) in the country. This coupled with the lack of alternative employment opportunities in the depressed coastal environment has resulted in the occurrence of high unemployment of youth in the area and the drift of a young population with low qualification into the fisheries sector.

The low educational level of fishermen is a cause for concern in the development of small-scale fisheries. A recent agriculture census showed that only 1.7% of the fishing households have secondary education. The balance of 98.3% having no formal education (33.1%) or only primary/religious education (65.2%).

2. PRESENT SITUATION

Economic role of fishing industry

Fisheries play a significant role in the Malaysian National Economy. The three main contributions of fisheries are the supply of food, generation of employment and earning of foreign exchange. Fish constitutes about two-thirds of the total protein intake of the population in Malaysia because it is the cheapest source of animal protein food and acceptable by all the ethnic groups in the country. Further the supply of protein rich food is vital to the health of the indigenous population and at the same time providing employment and income to live on. It is estimated that the fishing industry provides direct employment to some 102,809 fishermen and numerous others in the secondary and tertiary sectors as well as in the ancillary industries. As a foreign exchange earner, fisheries is constantly gaining in importance. The main export commodities are fresh and frozen fish, crustacea (mainly prawns and shrimp) and salted fish. However this aspect of policy objective in the Fisheries Development Plan may be reviewed.

Resource availability

The resources available for fisheries use can be grouped into inshore fisheries resource, offshore fisheries resource and aquaculture resources. In the case of the inshore fisheries resources, the evidences are that they are being overexploited. However, the offshore fisheries resources have not been fully ascertained yet although the indications are there is quite a fair bit available for exploitation in the order of 350,000 tons of demersal and 152,000 tons of pelagic fish. With respect to aquaculture both coastal and inland, the scope for development is considerable in Peninsular Malaysia as well as in Sabah and Sarawak. The area available for development is estimated at 123,000 hectares for Peninsular Malaysia, 140,000 hectares for Sabah and 87,000 hectares for Sarawak.

Production

The total landings of marine fish recorded in 1978 were 684,010 metric tons, 83% of which were from Peninsular Malaysia, 11% from Sarawak and 6% were from Sabah. Commercial fish landings constitute more than 70% of total marine landings, the remaining being trash and mixed fishes. The two most important fishing gear in terms of production are the trawl nets and the seine-nets with the former accounting for about 50% of the total landings.

The present production from aquaculture is estimated at 61,165 metric tons, more than two-thirds of which are cockles, followed by freshwater fish, marine finfish, prawns, crabs and oysters. In quantitative terms, the aquaculture production constitutes only 9% of the total fish landings in Malaysia.

Utilization, consumption and trade

About 70% of the fish landed in Malaysia is consumed mostly in the form of fresh fish and chilled fish followed by frozen fish and cured fish especially in the hinterland area. The balance of 30% is being processed of which 15% is for human consumption and the other 15% is converted into fertilizers and fish meal. There are at present 65 fish meal, 23 freezing and 18 canning factories in Peninsular Malaysia, 11 processing plants in Sarawak and 13 processing establishments in Sabah making a total of 125 plants in the whole country.

The average per capita consumption of fish in Malaysia is about 27 kg per annum. In terms of expenditure it constitutes about 14% of the household spendings. Generally the commoner and lower priced fish are consumed locally whereas the high-priced ones, especially prawns, are exported.

In the years prior to 1975, Peninsular Malaysia had a surplus fish for export. The situation has since changed and Malaysia is presently a net importer of fish. A total 123,000 metric tons of fish were imported into Malaysia in 1977 as against some 115,000 metric tons which were exported. However the value of the exported fish products was M\$218 million which far exceeded the import value of M\$110 million. Fresh fish and ice-packed fresh fish are mainly exported to Singapore while frozen fish and prawns are sent to Japan and Europe.

Marketing, distribution and physical infrastructures

Fish marketing is a complex issue involving a chain of activity and a large number of market intermediaries from the time the fish is landed until it reaches the consumer. There is little auctioning of fish at the landing centres. Most of the fish are taken up by the collectors and wholesalers at pre-arranged prices or sent to the terminal markets for sale. The locational distribution of fish and its supply are also inadequate. The bulk of the available supply is directed to the urban consuming centres. Consumers in the rural areas and landing centres are often by-passed. As regards physical infrastructure facilities for marketing, they are generally lacking and inadequate to meet the demands of the industry. This has also affected the proper handling and quality control of the catch landed.

Administration and institutional structure

The two main Government agencies involved in the development of the fishing industry are the Fisheries Department and the Fisheries Development Authority. Both agencies come under the Ministry of Agriculture and Rural Development. The Fisheries Department is the Government's administrative agency in charge of fisheries matters as a whole. In addition, it functions as a technical support department providing service to the fishing industry as well as the Fisheries Development Authority.

The Fisheries Development Authority, commonly known as MAJUIKAN, is a quasi-government body instituted to represent Government participation in commercial fishing enterprises in the fields of production, processing and marketing. MAJUIKAN also functions as an agency responsible for introducing satisfactory marketing system and has the power to regulate fish marketing in the country.

3. GOVERNMENT POLICIES ON SMALL-SCALE FISHERIES

Although there is no specific policy directed towards small-scale fisheries development, the Government is giving priority to up-grading the socio-economic position of small-scale fishermen because they are one of the most depressed group in the country today. This is reflected in the present five-year development plan (1976-1980) which is directed at the eradication of rural poverty and the restructuring of society. In accordance with the National Economic Policy, the broad guidelines for the development of small-scale fisheries are to:

- a) increase the income of small-scale fishermen, and
- b) restructure and improve their socio-economic position.

In achieving the objectives stated above, the approaches adopted currently are as follows:

- i) to move whenever possible underemployed fishermen into the more modern and productive sector of the industry;
- ii) to improve the productivity of the remaining fishermen through improvements in technology, provision of credit, infrastructure facilities, training and extension services, and the promotion of fishermen's organisation;
- iii) to redeploy the surplus labour into aquaculture and land based occupation; and
- iv) to provide special attention to the educational and vocational training needs of children and youth from fishing communities and equip them for employment in other sectors of the economy.

4. DEVELOPMENT PROGRAMME FOR SMALL-SCALE FISHERMEN

In view of the magnitude and multitude of problems encountered in the development of small-scale fisheries, the programmes designed for this sector are broad-ranging. These programmes are being channelled through various public agencies, the main ones of which are the Fisheries Department, the Fisheries Development Authority, the Fishermen's Organisation, Federal Land Development Authority (FEDA), Federal Land Consolidation Rehabilitation Authority (FELCRA), Raayat Trust Council (MARA), Agriculture Bank and other credit lending institutions. Some of the programmes directed at the development of small-scale fisheries are outlined below:

Modernization of the small-scale fisheries

The small-scale fishery is predominantly a traditional fishery with low investment and technology. On recognising the need to upgrade the small-scale fishery, the Government has a programme with the Asian Development Bank to build 200 units of multipurpose fishing vessels (12-15 GRT) based on improved design and technology for the fishermen. The objective of this programme is to enable small-scale fishermen to own more efficient and productive fishing units.

Improvement of the productivity of small-scale fishermen

Subsidy scheme

Lack of capital is a serious problem plaguing the small-scale fishermen. This has prevented fishermen from owning productive assets and the acquisition of more efficient fishing gear and equipment to increase their productivity. To overcome this problem and at the same time free fishermen from the ties of middlemen, who often exert a high interest for their capital, the Fisheries Division operates a capital subsidy scheme. The Subsidy scheme is directed at the needy and deserving fishermen for the purpose of purchasing new fishing units, inboard engines, outboard engines, fishing gears, insulated fish boxes and fishing aids to increase their productivity.

Credit facilities

Credit facilities on easier terms are made available to small-scale fishermen through two Government sponsored financial institutions namely the Agriculture Bank Malaysia and the Credit Guarantee Corporation.

The Agriculture Bank Malaysia gives loans for the purchase of fishing vessels, engines and fishing gear on less stringent terms, e.g. lower interest rates and longer repayment period than those normally imposed by banking institutions. However, successful loan applicants are required to provide 20% of loan required as advance payment and security in the form of fixed assets.

The Credit Guarantee Corporation provides for the loaning of up to a maximum of M\$30,000 without security and M\$100,000.00 with security from the commercial banks. This is a government-sponsored Corporation and it will guarantee up to 60% of the loan and the remaining 40% will be borne by the commercial bank which issues the loan concerned.

Infrastructure facilities

One of the basic needs of the small-scale fisheries communities which are often located in isolated places is shore-based facilities to support fishing operations. There is an ongoing programme to meet this basic need of the industry through the provision of ancillary facilities to the areas concerned such as guiding lights, landing jetties, packing shed, cold rooms, and slipways. These facilities have the effect of relieving some of the hardships

of fishing, reducing wastage due to delays in handling, lack of cold storage facilities and minimising the cost of repair and maintenance of fishing boats.

Extension and training

The extension service constitutes an important activity in upgrading the operational efficiency of the small-scale fisheries by the dissemination of up-to-date information and techniques for adoption. This is being done through simple publications, film shows, lectures and exhibitions.

There are two Marine Fisheries Training Centres in Malaysia catering mainly for the small-scale fishermen. The training programme of the two centres are directed at upgrading the skills of traditional fishermen. The training programme covers simple navigation, fishing techniques and maintenance of marine engines.

Fishermen's organisation

The organisation of fishermen into groups (association/cooperative society) is one of the measures adopted in improving the socio-economic well-being of fishermen. By grouping together they are able to take advantage of the economies of scale through bulk purchasing of inputs such as fuel and ice, but also increase their bargaining power. In addition, the pulling together of both human and capital resources under the banner of fishermen's organisation would enable them to undertake various economic activities, e.g. marketing and related fishery enterprises. Unfortunately few such organisations have performed well due to bad management and the lack of operating capital. To correct the situation, the Government has a programme to activate fishermen's organisations through the provision of management capability and the injection of launching funds to enable the organisation to undertake commercial activities.

Rehabilitation of surplus fishermen

Aquaculture

The indications are, there is a vast potential for aquaculture development in Malaysia but there are still numerous problems to be solved before its development can be promoted. The main problem faced with aquaculture development is the lack of expertise and technology to spearhead its development. A brackishwater Station is underway to develop techniques suited to the local area and pave the way for its development.

Land schemes

Agriculture provides another source of alternative employment for surplus fishermen particularly those with experience of backyard farming on part-time basis, to supplement their income. So far a total of 800 fishermen families have already been resettled in land schemes opened by the Federal Land Development Authority (FEDA) and the Federal Land Consolidation Rehabilitation Authority (FELCRA) whereby the authorities concerned not only develop

the land (rubber and oil palm) and hand it over to the settlers for maintenance but also handle the marketing and processing of their produce. Since the land scheme has met with considerable success, the Government is developing a 20,000 acre oil palm plantation at Rasau-Kerteh in Trengganu to cater specifically for fishermen.

Education and vocational training

The measures described so far are aimed at improving the economic position of fishermen by increasing their productivity through modernisation or providing them with more gainful alternative employment. However, to ensure that the surplus labour in the fishing industry does not increase unduly, there is a need to prevent the constant drift of school-drop-outs and unemployed youths into the fishing industry. Some of the measures employed to tackle the problem are as follows:

Tuition classes and material assistance

Many of the school drop-outs in the fishing communities are due to financial difficulties and adverse environmental conditions which are not conducive to study. One of the efforts to reduce the problem is the organisation of tuition classes and the provision of educational aids to deserving fishermen's children and enable them to catch up with their studies and complete their formal education.

Vocational training

For children who are unable to continue their education due to academic backwardness and unemployed youths in the fishing communities, there is an ongoing programme whereby those interested in learning a new trade, e.g. mechanics, carpentry, electrician etc. are sent to the various vocational training institutions in the country for courses.

Integrated pilot project

So far the efforts directed at improving the small-scale fishing community have been more or less on piece-meal basis. Though some improvements have been made, they were not sufficient to generate the impact desired. This has led to the concept of an integrated approach in developing the small-scale fisheries. In cooperation with South China Sea Fisheries Development and Coordinating Programme, the Government is now implementing a pilot project for improving the socio-economic position of the artisanal fishermen in the fishing village of Kuala Besut on an integrated basis. It is hoped that this pilot project would evolve a model for the development of small-scale fisheries in Malaysia.

5. ACHIEVEMENTS

There is as yet no proper evaluation to determine the impact of development programmes on the small-scale fisheries sector. However there are sufficient indications to show that the various programmes launched by the Government

over the years have resulted in bringing about some improvement to the small-scale fishermen. One of the indications of progress is that the incidence of poverty amongst fishermen households has declined from 73% in 1970 to 63% in 1975 and 55% in 1977. Another indication is that the productivity of fishermen has increased. In 1970, the average productivity of fishermen in Peninsular Malaysia was 4.4 tons per annum and in 1977 it has arisen to 6.3 tons per annum. This is also reflected by the increase in fishermen households income to an average of M\$260 per month. Linked to the increasing income of fishermen is the ownership of productive assets such as fishing boats, engines and gears. The Government subsidy scheme has so far benefitted 9,031 fishermen in this respect.

6. SCOPE OF DEVELOPMENT AND DEVELOPMENT NEEDS

The two main objectives of developing fisheries in Malaysia are to increase the production of fish to meet the growing national demand and to increase the income of fishermen. The strategy adopted to achieve the stated aims is to develop a modern offshore sector and to improve the depressed status of the small-scale sector. By so doing the Government hopes to develop a well balanced industry comprising a modern commercial sector and an efficient small-scale sector co-existing with each other.

The future scope of development will be entirely dependent on the available resources. In the case of the marine aquatic resources, the indications are that the Exclusive Economic Zone (EEZ) area of some 140,000 square miles in the South China Sea for Malaysia hold considerable promise. Preliminary estimates show that there is a total of about 502,000 metric tons of pelagic fish. These resources lie off the East Coast of Peninsular Malaysia and off the coasts of Sarawak and Sabah. Although some general information is available on the extent of the offshore resources, they are however not sufficient for developmental purposes on a commercial scale. There is paucity and lack of up to date data on the nature, composition, density and distribution of the potential resources. As such it is difficult to promote the development of offshore fishing on a commercial scale with confidence. There is thus a need to clearly identify the extent, density and location of the fishable stocks for exploitation. Technical assistance in the form of experts and equipment are required to carry out the programme and train local counterparts for it. Assistance is particularly needed in the field on acoustic survey techniques and its operation.

Aquaculture is still in its early stages of development in Malaysia. The present aquaculture production only accounts for about 9% of the total fish landings in Malaysia. From the viewpoint of resources, the potentials for the development of aquaculture in Malaysia are tremendous. A rough estimate shows that the total potentials for aquaculture development is in the region of 350,000 hectares comprising 205,000 hectares of mangrove swamps, 10,000 hectares of mud flats and coastal waters and 135,000 hectares of inland areas. The vast aquaculture potential especially in the coastal areas hold considerable promise for the small-scale fishermen because of its prospects for employment generation.

This is particularly important for Malaysia because the small-scale fisheries suffer from underemployment and unemployment and as such the development of aquaculture would provide an outlet for siphoning off the surplus labour to more gainful activities. Top priority is thus accorded by the Government to accelerate the development of aquaculture in Malaysia. There are however constraints in the endeavour to develop aquaculture. The major ones are the lack of technical data on suitability of potential areas and inadequate supply of seeds for promoting its development. In view of the above situation, there is an urgent need to carry out a comprehensive technical and feasibility survey of the potential areas and identify the suitable sites for development. The suitable sites can then be mapped out for developmental use. Technical assistance in the form of expertise and equipment is required to execute the envisaged work. As regards the seed supply problem, it is imperative that seed production activities be developed for the large scale production of fry for the industry. The technology for the artificial reproduction of several suitable species of finfish and penaeid prawns are already available with the region. What is required now is the transfer of the available technology to the country. This can be best achieved through the secondment of experts with practical skills and experience into the country to carry out the work.

The small-scale fishing community represents one of the most depressed groups in the country today. Fishing villages are mostly located at river mouths, which are often isolated and lacking in physical, social and public amenities such as water supply, electricity, medical clinics, schools and proper housing. As a result the living condition in fishing villages are usually crowded and unsanitary. Such an environmental situation stemming from the lack of physical and social needs is not conducive to the general development of the fishing community. There is a need to improve the environmental set-up of the fishing community and upgrade the quality of life of the small-scale fishermen to a level whereby they are able to understand, appreciate and finally accept the necessity for changes in the context of modern day life and living. This is by no means an easy task. It requires in-depth studies, careful planning and an integrated approach to tackle the problems faced.

7. CONCLUSION

It is recognised that the development of small-scale fisheries is not only difficult but complex. However there is mounting pressure from the socio-political arena to improve its depressed state. Numerous discussions had already been held in this regard and perhaps the time has now come for some real, solid and concerted action on the subject. Funding agencies, regional and international bodies can contribute significantly towards this end by not only providing technical assistance in planning but also complemented by the much needed execution of the programmes. This is vital because in the final analysis, it is the end result of the programme and its impact on the fishermen that count.