

# BAY OF BENGAL NEWS



MARCH 1982

A PUBLICATION OF THE  
BAY OF BENGAL PROGRAMME



## THE BAY OF BENGAL COMMITTEE An Impressive Inaugural in Colombo

Countries bordering the Bay of Bengal formally launched in Colombo on December 7, a committee that will be the supreme inter-governmental coordinating and advisory body for fisheries development and management in the region.

It will be known as the Indian Ocean Fishery Commission's Committee for the Development and Management of

Fisheries in the Bay of Bengal, and in brief as the Bay of Bengal Committee (BOBC).

Twenty five delegates – including representatives from five countries (Bangladesh, Malaysia, Maldives, Sri Lanka and Thailand), plus representatives from the FAO and the UNDP and observers from Sweden, Norway, Denmark and the Colombo Plan –

attended the three-day meeting of the Committee, December 7-9, its first session. It was inaugurated by Sri Lanka's Minister for Fisheries Festus Perera at Mount Lavinia Hotel near Colombo.

The inaugural was notable as much for formal ceremony as for pageantry. Minister Perera and the delegates were escorted into the hotel by a procession

of flag-bearers, girls in white; and by the Wennapuwa Convent Oriental Band, whose stunning costumes (maroon and yellow batik sarong, bejewelled headband) vied for attention with their musical instruments: a conch, flutes, bells and drums. As an invitational audience awaited at the Empress Hall of the hotel, the procession entered, and soft strains of the flute wafted into the hail.

Minister Festus Perera took his seat on the stage accompanied by Mr. Anura Weeraratne, Sri Lanka's Secretary for Fisheries; Mr. John Carroz, Director of FAO's Policy and Planning Division; and Mr. L.O. Engvall, Director of the Bay of Bengal Programme and Acting Secretary of the Bay of Bengal Committee.

As Minister Perera lighted a lamp to mark the inauguration of the Committee,

#### THE BOBC AND THE IOFC

The Bay of Bengal Committee is a subsidiary body of the Indian Ocean Fishery Commission (IOFC). This is one of nine FAO regional bodies which between them cover most of the sea areas off coastal states. Their activities span the entire fishery spectrum, from assessment of resources to their exploitation on a sustainable basis. The IOFC was set up in 1967, and has some 40 members. About 30 of them are coastal states bordering the Indian Ocean. The Commission also includes about a dozen developed countries.

The IOFC has proved to be a useful international forum. It has made notable progress in statistics and fishery resources information, tuna management, and development work in general.

The decentralisation of the IOFC into subsidiary bodies covering smaller natural management areas is meant to make the IOFC more effective in meeting the new challenges that confront coastal nations' fisheries in the 1980's. It is believed that the subsidiary bodies can foster better regional cooperation among coastal states and stimulate self-reliance. The Bay of Bengal region is one such "natural management area", hence the establishment of a Committee for the region.

The Bay of Bengal Committee will be assisted in its advisory roles on fishery development and management by technical support modules. One of these modules is the existing BOBP which is devoted to small-scale fisheries. Another module will be a five-year UNDP-funded project beginning in 1982, "Marine Fishery Resources Management in the Bay of Bengal". Its main concern will be stock assessment. The Committee will, with the assistance of FAO try to obtain further funding for strengthening and widening its support programme to adequately cover all essential matters within the Committee's terms of reference.



*Sri Lanka's Minister for Fisheries, Mr. Festus Perera, lights the traditional lamp to mark the inaugural of the Bay of Bengal Committee. By his side is Mr. John Carroz, Director of Policy and Planning, Fisheries Department, FAO, Rome.*

conch shells trilled, drums resounded and Sri Lanka's national anthem was sung. Delegates from the Committee's member-countries joined in lighting the lamp.

Addressing the delegates, Mr. John Carroz described the first session as "another milestone" in the policy of restructuring FAO's regional commissions so that they could respond better to the new needs of coastal states in the era of exclusive zones. As a first step, these regional fishery commissions had to establish sub-regional committees on the basis of "natural management areas." The Bay of Bengal Committee was one such sub-regional committee.

Mr. Carroz said that national policies on fisheries development and management must be related to the resource potential and must take into account human factors. There was a need throughout the Bay of Bengal region to improve information on available resources and on the socio-economic conditions of fishing communities. The Committee should therefore provide a forum for exchange of experiences on harnessing national efforts and on sharing valuable expertise. For example, much could be gained by reviewing problems concerning control and surveillance; the impact of the fuel crisis on the fisheries sector, and the need to avoid conflicts between artisanal and large-scale fisheries.

Mr. Carroz said that the Director General of FAO, Mr. Edouard Saouma, had in

a message, assured his full support to the endeavours of the Bay of Bengal Committee.

In his inaugural address, Minister Festus Perera noted that members of the new BOBC with the exception of the Maldives were already partners in the small-scale fisheries project funded by SIDA (the BOBP). They had thus already established an excellent rapport and a close working relationship. While member countries of the BOBC may have differing economic problems and different ways of solving them, they also had many problems in common: unemployment, balance of payments, high population growth and low protein intake, problems with mechanization in the context of escalating fuel costs, and the need to meet the new challenges arising out of the EEZ. The BOBC member countries would achieve a great deal as partners in overcoming such problems.

Mr. Perera mentioned the lack of reliable resource data as one of the important problems of fisheries in the region. A little had been achieved in Sri Lanka in this area but many gaps remained to be filled. A cooperative programme to build knowledge of resources through surveys, a better statistical and data base, and training programmes would strengthen Sri Lanka's efforts.

Mr. Perera said that the collection of useful and reliable fisheries resource data would be one of the urgent tasks of the BOBC. He also cited the problem

*(Continued on page 17)*



## A Letter from the Publisher

In this issue you will find two articles dealing with the work and life, particularly of women, in fishing villages of Tamil Nadu, India. They are written by — and based on the work of — two of our sociologists. Elsewhere in the issue is a report of a regional workshop/consultation held a few months ago in Dacca on how to improve the conditions of coastal fisherfolk. All the three stories describe work which we in the BOBP classify as Extension Service.

But “extension” means different things to different people. To a technical officer it usually means demonstration and training in a technical discipline such as fishing gear and methods. The administrator often sees “extension” as his own extended arm. Many regard extension as provision of welfare.

These common approaches have a strong flavour of superimposed technocracy and bureaucracy and often fail. If we accept that the primary role of an extension service is to help improve the living conditions of the fisherfolk, it has to be made “people-oriented.” It should cater to the majority — and not to a small elite, which is often the main beneficiary of extension of technology. It must also encompass the entire family; traditionally, extension has been catering to men only. The other half of the population, the women, actively engage in economic activities, e.g. net-making, handling, and drying of fish, marketing, etc., besides their household and childcare duties, but they are ignored. The women in fishing communities decisively influence living conditions, and a “people-oriented” extension service recognizes this fact and the need to do something about it. “People-oriented” also implies that the extension service should cater to the actual needs, wishes and aspirations of the fisherfolk. To achieve this, extension has to be a two-way flow. Close and continuous contact with people at the village level is required to obtain the necessary feedback to determine the content of the extension service.

A fourth aspect of the people-oriented approach is the mobilization of the community’s human resources. The extension service will itself provide some direct assistance; it will also be instrumental in obtaining more assistance from elsewhere. But in order to encourage self reliance, the extension service must avoid creating a community of passive receivers. The long-term effects of assistance would then be wasted. More important than the assistance itself is the process of the fisherfolk identifying and clarifying their own needs, their struggle for obtaining the necessary means

to achieve improvement and finally the work to make it materialise. Human resource mobilization is making people aware of their condition and assisting them to improve it. Let me repeat the four components of a people-oriented extension service. It caters to the majority. It encompasses the whole family. It is a two-way system. It mobilizes the community’s human resources towards self-help.

The two pilot projects in Adirampattinam and Chemmenchen described in this issue are small examples of a people-oriented extension service. The results are by no means spectacular, going by the usual development indicators of fish production, investment or earnings. But they are significant. A change, both in attitude and in economic activities, is taking place mainly through mobilization of the people without any significant external impact except for the extensionist. It is too early to say that the ideas and work have taken root in the villages, but the signs are encouraging and therefore worth mentioning.

Who is the extensionist in a people-oriented extension service? Unlike in technical disciplines the specific skill or knowledge is of minor importance. The extensionist need not have all the answers but should know where to find them. He/she knows who can offer loans, who can fix an engine, who can handle small children, etc. Besides the ability to communicate and work with different people, the most essential qualities for extensionists are dedication and integrity. They have to be good samaritans. There is a very strong correlation between such qualities and success as an extensionist. We often see excellent work produced by voluntary organisations with small means under difficult circumstances. It is such qualities that make them great.

This leads to the thought that true people-oriented extension services cannot be successfully implemented by government organisations. Is it really so? — Lars O. Engvall



*The launching of the Bay of Bengal Committee opens up new opportunities for fisheries development and management in the region. Some of the major challenges that confront fisheries planners in the region, and ways in which these can be met, are examined in this article by the Director of the Bay of Bengal Programme.*

Elsewhere in this first issue of 1982 we report the launching of the Bay of Bengal Committee which is the supreme inter-governmental body for fisheries in the region. Its functions are to promote and facilitate development and management of fisheries of the member countries.

How will the Committee go about this ambitious mandate? Before attempting an answer let us look at the major issues and challenges to be met by the Committee.

**Fishing Communities:** The bulk of the fish produced in the Bay of Bengal comes from the small-scale sector: fishermen who together with their families constitute a total population of several millions. The fisherfolk live in small villages all around the Bay. They belong to the lowest strata of society, generally below the national poverty line. Fisheries is generally looked down upon and considered inferior to most other occupations. With a few exceptions this has also resulted in step-motherly treatment of the sector by Governments. The fisherfolk in coastal villages are the last ones to receive basic public facilities and services such as roads, water, electricity, health care, etc., if they at all get it.

One cannot expect any quick or drastic improvements in the living conditions of fisherfolk. The betterment process is bound to be slow and cumbersome. The major avenues for improvement are technology development and extension services.

Technology development in small-scale fisheries must aim at upgrading technologies and methods for catching and handling fish and fishery products. It is of paramount importance that any change is appropriate to the particular conditions where it is to take place. For instance, fishermen who operate from surf-beaten beaches without access to protected waters must have a craft with which they can cross the surf safely and land on the beach.

By extension services is meant a people-oriented service that assists the fisherfolk in obtaining their wants (public facilities and services) or fulfilling their aspirations (finance). The extension service needs in the first place to assist in obtaining the benefits already potentially available through various government agencies. These might be individual credits for fishing requisites or house construction, or they may concern grants to villages for provision of water supply.

**Static catches:** The era of continuous growth and of unbridled fishing is over. Many fish stocks are in danger of being over-exploited, thus producing much less than the optimum yield; some stocks have already been over-fished. As resources get scarce, the competition to harvest them increases. It is particularly the conflict between the traditional and the more mechanized sector that is being aggravated.

To secure long-lasting and equitable benefits from the valuable and renewable resources, the fisheries must be better managed. Some possible measures:

- "Limited entry", to keep the number of fishing units at a level commensurate with the size of the fish stocks;
- "Catch quotas" to allow only a specific amount of certain fish in certain areas to be landed each year or season.
- "Closed seasons" that for instance protect spawners;
- "Gear regulations" restricting design (mesh sizes) and their use.

Any management measure will on introduction produce adverse economic and social effects in the short-term. Careful thought must be given to the possible implications so as to minimize the disturbances and facilitate the acceptance of just and long-lasting management schemes.

Information is a pre-requisite for good and efficient management. The present data base is however very poor: a real dilemma for planners and administrators. There are often for instance clear signs of over-fishing but it cannot be quantified. Furthermore data and information are lacking about costs and earnings and other essential fisheries characteristics, which are required for good management practices.

Static catches do not necessarily mean that all the resources have been fully utilized. Available estimates indicate that there is a potential for increased production in the upper and western part of the Bay of Bengal. Development efforts with exploratory and experimental fishing should be combined with improvements in craft and gear to bring the untapped resources economically from the sea to the plates of the consumers.

Another development prompted by static catches and dwindling resources is intensification of brackishwater fish farming. In the eastern part of the Bay where marine catches have reached the maximum sustainable yield the countries concerned are pursuing an active policy of providing employment in coastal aquaculture. This is also being followed by the other countries. The farming is still in most of the countries in its infancy, and much development work and extension of technology and methodology is required.

**Exclusive Economic Zones:** The world's countries have developed a consensus (through the third United Nations Conference on the Law of the Sea) that coastal states should exercise greater control over the living resources lying off their shores. Consequent on this, most countries have declared 200-mile Exclusive Economic Zones (EEZ).

# ING AHEAD

By LARS O. ENGVALL

This means that fishery resources that were earlier regarded as common property are now owned by the coastal states. This ownership implies not only a right but also a responsibility – to utilize these resources for the benefit of mankind. For instance a country lacks the capability to harvest her own fishery resources, she should in the spirit of the new Law of the Sea come to suitable agreements with other states or organizations that do have the capability.

The immediate practical consequences of the EEZ are the need for new arrangements for:

- surveillance and control
- legislation
- joint venture agreements (whereby one country assists another in tapping its EEZ resources).

The management of shared stocks is another practical consequence of the EEZ. Fish do not accept man-made borders but swim freely between one country and another. Countries have to discuss and agree on measures to manage this common resource.

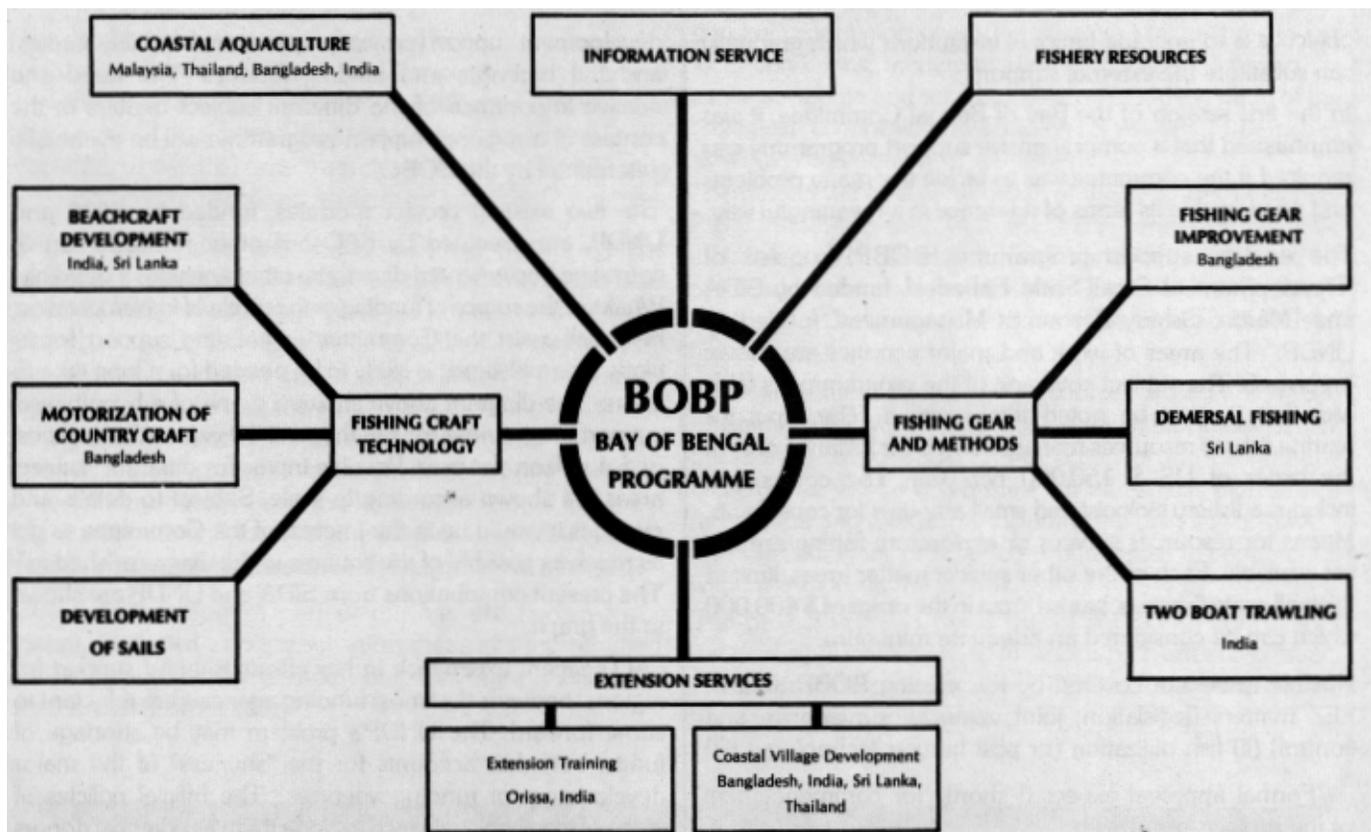
*Escalating energy cost:* Another major issue in world fisheries is the increasing cost of energy. In the past, the introduction of fishing nets of synthetic material and the motorization of fishing craft were the two most significant stimuli to fisheries

development. Today, however, one has to be cautious in applying these remedies. The economic benefits are not obvious any longer and real efforts have to be made to reduce the costs of fishing and make the fishing units more versatile and effective. This concerns particularly the small-scale sector. Research and development are required to make sails for propulsion simple, efficient and readily available to the small-scale operators. Development or application of stationary fishing methods requiring less energy is also highly desirable. The costs of components of synthetic fishing gear have reached a high level and every effort must be made to reduce them by using the cheapest alternative that is available.

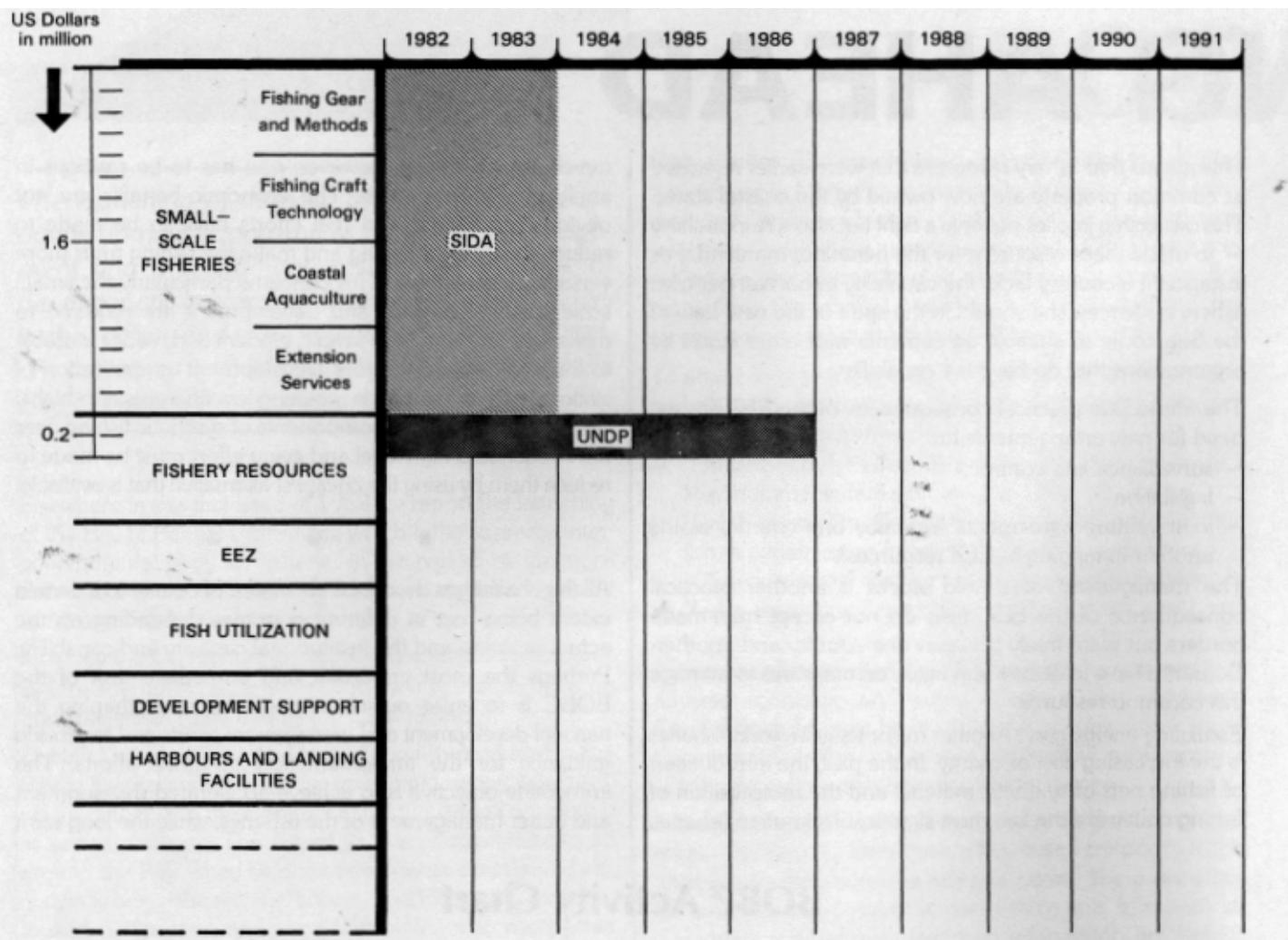
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All the challenges described above are of course to a certain extent being met in different countries depending on the actual situation and the institutional capacity and capability. Perhaps the most important and immediate task of the BOBC is to enlist outside support for strengthening the national development and management efforts and to provide guidance for the implementation of those efforts. The immediate objective is to achieve accelerated development and better management of the fisheries, while the long-term

## BOBP Activity Chart



# Hypothetical Support Programme of the Bay of Bengal Committee



objective is to upgrade national institutions which gradually can substitute the external support.

In the first session of the Bay of Bengal Committee, it was emphasized that a comprehensive support programme was required if the committee was to tackle the many problems and needs within its terms of reference in a meaningful way.

The existing support programme (BOBP) consists of "Development of Small-Scale Fisheries" funded by SIDA and "Marine Fishery Resources Management" funded by UNDP.\* The areas of work and major activities are shown on page 5. The subject coverage of the programme is fairly wide but it must be noted thinly spread. The input for marine fishery resources management is for instance only of the order of US \$ 150,000 per year. The component includes a fishery biologist and small amounts for consultants. Means for resources surveys or exploratory fishing are not yet available. Each of the other subject matter areas, limited to small-scale fisheries, has an input in the order of \$400,000 which can be considered an adequate minimum,

Notable areas not covered by the existing BOBP are: (i) EEZ matters (legislation, joint ventures, surveillance and control) (ii) fish utilization (or post harvest technology) (iii)

Formal approval expected shortly for commencement of the project April 1982.

development support (project preparation, feasibility studies) and (iv) harbours and landing facilities. The need and relative importance of the different subject matters in the context of a regional support programme will be eventually determined by the BOBC.

The two existing project modules, funded by SIDA and UNDP, are executed by FAO but other modules can of course be implemented directly by other agencies if desirable. Whatever the source of funding or the mode of implementation, FAO will assist the Committee in enlisting support for its work. The assistance is likely to be needed for a long time to come. The diagram above shows a graph of a hypothetical support programme for say the next 10 years at a total cost of \$4 million per year. Possible inputs for different subject areas are shown according to scale. Subject to details and priorities it would be in the interest of the Committee to get as much as possible of the squares in the diagram "shaded". The present contributions from SIDA and UNDP are shown in the graph.

FAO's recent experience in her efforts to enlist support for regional bodies is that most funding agencies are reluctant to come forward. The UNDP's problem may be shortage of funds, but what accounts for the "shyness" of the major development or funding agencies? The official policies of some of the agencies, which exclude them as potential donors

for regional fisheries programmes, is of course one reason. A lack of knowledge about and appreciation for the advantages of this type of development cooperation seems to be another reason.

What are these advantages?

A regional programme is the ideal vehicle for TCDC (technical cooperation among developing countries). Meetings, workshops, training courses, study tours, consultancies are TCDC in themselves and furthermore generate and lead to new TCDC activities.

Fisheries expertise with a high standard of both competence and dedication is rare and costly. Through a regional programme it can be shared by several countries. Frequent visits by experts provide an intermittent advisory service to the countries. The experts are available when needed and are conversant with the conditions and problems of the region by staying in the region.

Duplication of effort can be avoided by tackling specific development problems on a regional basis. In the existing BOBP several activities such as beachcraft development, sails, fish aggregating devices, net-making, etc., are of direct interest to all the countries. There are many more activities that concern more than one country but not all of them.

Better result at lower cost will be achieved by concentrating the available resources in a regional programme.

A regional "on the spot" programme is a very useful support mechanism for spurring other projects and programmes launched by international agencies. The knowledge and experience of the regional programme prove invaluable. For example, the existing BOBP has been used by agencies such as NORAD (Norwegian Agency for International Development), SIDA (Swedish International Development Authority), and AsDB (Asian Development Bank) in preparation and implementation of projects in BOBP member countries. This trend may gain ground in the future.

The BOBC is an ambitious undertaking. How well it will succeed depends largely on the interest and initiative displayed by member countries, their willingness to cooperate and their energy in mobilising support from international development agencies. External support will undoubtedly speed up progress.

Cooperation with international development agencies is therefore essential. Support will no doubt be forthcoming if countries of the region demonstrate sincerity and determination in solving their fisheries problems.

## Marine Fishery Resources Management in the Bay of Bengal

A five-year \$1 million project, concerned mainly with stock assessment, is to be launched April 1982 from Colombo. Titled "Marine Fishery Resources Management in the Bay of Bengal," the project will be funded by UNDP and executed by the FAO, and will cover the countries bordering the Bay of Bengal including the Maldives.

The project's goal is rational development and management of fisheries resources within the EEZ of participating countries to "ensure everlasting availability of fisheries resources in the region." The immediate objective is to improve the capability of national fishery administrations so that planning is based on more accurate assessment of fishery resources.

Some resource data for the Bay of Bengal region: average total production over the last five years in the Bay is estimated at 1,522,000 tons. Average yield per km of coastline varies from 106 t in Sri Lanka to 342 t in Malaysia. Average yield per hectare of exploited area is approximately 44 kg, varying from 12 kg/hectare in the Andamans to 65 kg/hectare in Malaysia. The stocks of several commercially important species are being shared between neighbouring countries – e.g. the resources along the lower eastcoast of India and the northcoast of Sri Lanka; the hilsa of India, Bangladesh and Burma, and the mackerel of Thailand and Malaysia.

Waters in the eastern part of the bay are known to be heavily exploited and conservation measures are required. In the upper and western part however there is still scope for increased production.

The UNDP-funded project will be primarily geared to assistance in the assessment of resources and the establishment of a machinery for regional monitoring of resources.

Its activities will include compilation and processing of data on catch and effort; analysis of the data, and comparative studies within the area and with fisheries elsewhere; identification and adaptation of stock assessment techniques to suit local conditions; implementation of a regional system for exchange of data and joint analyses and studies; study of the biological, economic and sociological aspects of particular fisheries; organization of workshops.

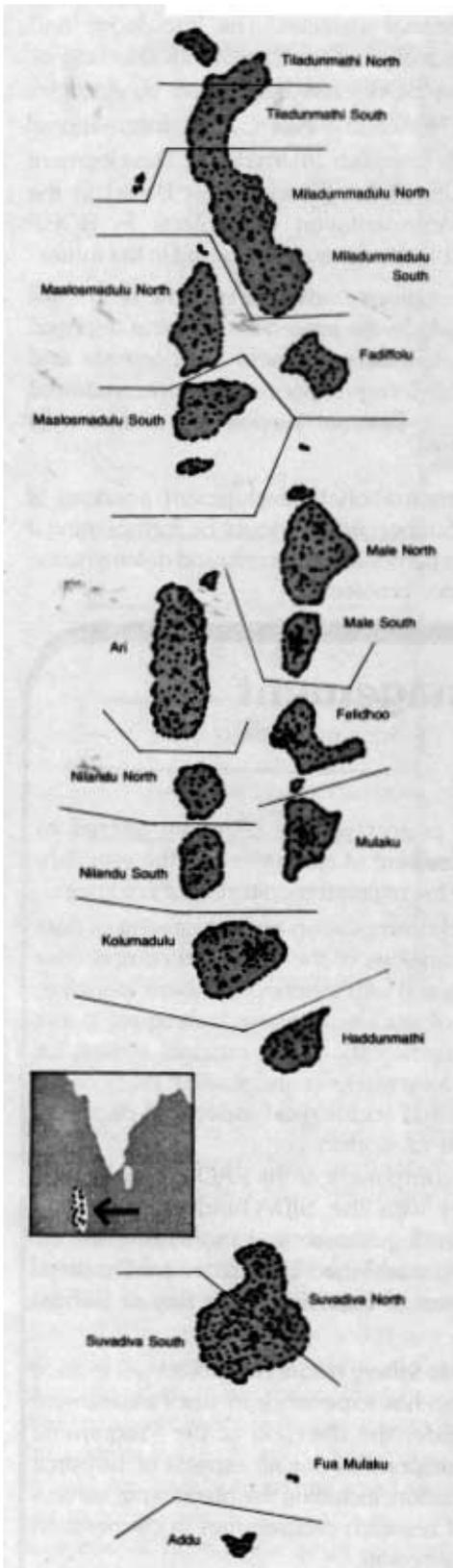
The project will be a component of the FAO Bay of Bengal Programme together with the SIDA-funded small-scale fisheries project. Overall guidance and monitoring will be provided by the newly established Committee for Development and Management of Fisheries in the Bay of Bengal (BOBC).

The staff of the marine fishery resources project will include a fishery biologist who has experience in stock assessment and survey work. Under the direction of the Programme Director, he will be responsible for all aspects of resource assessment and evaluation, including the planning of surveys and the setting up of research programmes in cooperation with institutions in the region.

The project will also make use of short-term consultants, national and international. In addition, it will sub-contract national institutions and pursue TCDC arrangements among the participating countries.

# MALDIVES : A Fisheries Profile

By CEDRIC DAY



*The Republic of Maldives comprises an archipelago of about 1,500 islands scattered in 19 groupings of atolls (ring-shaped coral reefs that enclose lagoons). Map above gives names of each atoll grouping.*

*"We prefer the regional approach to fisheries development" says a spokesman of the Maldives, a country of 1,500 islands (map at left), which is one of the members of the just-established Bay of Bengal Committee.*

There are several remarkable things about the Maldives, a "country" composed of 1500 islands in the Indian Ocean, and not the least is that nearly half – over 45 per cent – of the working population are employed in fisheries.

However, as Dr. Ahmed Ali Didi, Deputy Minister of Fisheries, told me when I met him in Colombo, Sri Lanka, encouragement is being given to those who wish to become sailors, carpenters, and engage in other useful occupations.

"Our archipelago covers an area of 417 square miles and only 202 of our islands are inhabited," Dr. Didi explained.

"Our capital is in Male which has a population of some 25,000 out of a total of 153,000 for the Maldives. The inhabited islands, which are atolls, are divided into three zones – northern, central and southern. Local communication is with walkie-talkies, while the atoll chiefs appointed by the Government, report to Male by radiotelephone."

The fishing season has three peaks, Dr. Didi said, rising between January and March, with a mid-year down-and-up period ending in July, then going down in September and rising again at the end of the year.

The biggest number of fishing boats is the 35 ft. overall "mas-dhoni" a three-sail vessel, one big, two small. Their use depends on sea conditions and wind strength. There are more than 1,300 in operation in the islands. Next in number are the 800-odd mechanized versions of the mas-dhoni, the same in size but equipped with 22 to 33 h.p. inboard engines. Also in use are some 400 vadhu-dhoni, 12 to 15 ft. overall sailing boats. They have only two sails.

"One curious phenomenon I have noticed since the introduction, of mechanized boats," said Dr. Didi, "is that we no longer see the large schools of tuna that used to shoal within 10 to 20 feet of the reefs."

He added that no tagged fish had been caught in the Maldives, which seems to indicate that their fish stocks are unconnected with others in the region. While tuna is the biggest and economically most important, most of the catch is sold fresh to Japanese freezing vessels while some is sold to a joint venture canning plant. The rest is processed and exported, mainly to Sri Lanka – there are substantial stocks of reef fish, lobster, black coral, squid, turtle, clams and other varieties.

"However," Dr. Didi said, "we have to survey these resources to find out their abundance."

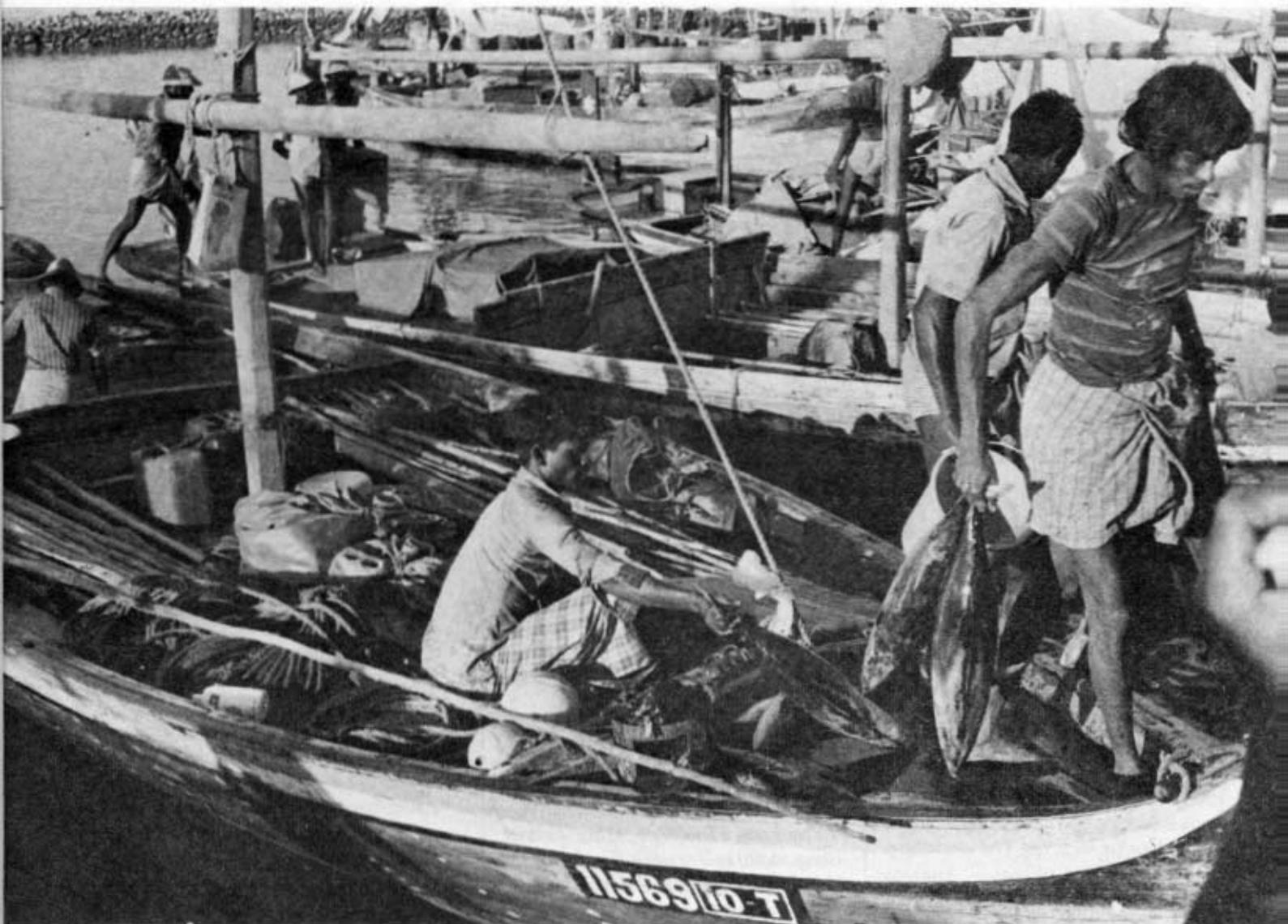
The Japanese have done some surveys of the tuna stocks and have found a breeding ground for big-eye tuna.

The need for resource surveys and for management of the fisheries is a main reason why the Maldives have joined the Bay of Bengal Committee even though, physically, they are not in the Bay of Bengal area.

"We think that the Committee is good for the whole region," he said. "We favour the regional approach to these extensive problems of survey and management of the resources and to the cooperative tackling of the problems. The Committee is particularly good from that point of view as it provides a forum for all the countries of the region, enabling us to meet and discuss the problems and see in what way we can act jointly in efforts to solve them."

As he told me, the mechanization programme in the Maldives, started seven years ago, has changed the traditional pattern and the government has had to see that the engines are maintained in working order, repair facilities provided and fuel supplies made available at all fishing centres.

"Along with this, I might add," observed Dr. Didi, "education and research in our fisheries sector are in urgent need of expansion. In fact, the main single



*Small-scale fishermen operating their traditional craft at Male harbour. (Picture by Marie-Christine Comte)*

problem relative to the development of our fisheries is the lack of trained personnel at technical and all skilled levels."

In view of this situation the Ministry of Fisheries has adopted a development and management policy which is designed to build up the infrastructure for fisheries, build up training facilities in fisheries technology, promote more effective marketing for the benefit of the fishermen, and so on. The complexity of the problem of dealing with the fisheries sector in 202 islands is illustrated by the progress made in the provision of fuel. So far, fuel tanks with a capacity of 800 gallons have been established only in 53 islands.

"One technology problem is that we have to try to improve the design, construction and performance of our traditional fishing boats to enable us to adopt diversified fishing methods so that our fishermen can operate better

in the off-shore waters," Dr. Didi explained. "Again, in the question of price and marketing, our people receive comparatively low prices because they remain in a poor bargaining position and because of the poor flow of marketing intelligence."

Fortunately, several donor agencies, including the World Bank, UNDP/FAO and the Kuwait Fund for Arab Economic Development are taking note of the Maldives and its fisheries problems. They have provided credit for 500 marine engines and five repair centres, trained skippers in the use of long-range fishing vessels, provided facilities for fresh fish collection and freezing on five islands, supplied fuel for the mechanised craft and made possible an experiment with anchored fishing rafts to aggregate fish.

It is, at least, a start for these remote islanders. But "remote" is not perhaps the word to use in these days of mass

air travel. The tourist trade has already become a factor of economic importance — 40,000 people visited the islands last year and more are expected in the coming years. These visitors are provided with specially built accommodation and facilities on uninhabited islands as there is little or no room for them to live in Male or other Maldivian communities. Besides, it is believed that the visitors should be afforded peace and quiet in places with familiar facilities.

And again, as Dr. Didi pointed out, the "remoteness" is also overcome by a local radio and television service. He added: "What is more, we saw through TV the marriage of Prince Charles and Lady Diana."

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*About the Author: Formerly FAQ Representative in India, Cedric Day is presently a freelance writer in London. He specializes in fisheries subjects.*

# Improving the Living Standards of Coastal Fishing Families in the Bay of Bengal Region

## Dacca Workshop Discusses Methods

Ideas to improve the standard of living of coastal fishing families in the Bay of Bengal were discussed and developed at a two-week workshop held in Dacca from October 27 last year. Organised jointly by the Government of Bangladesh and the FAO/SIDA Bay of Bengal Programme, the workshop was attended by 73 people – representatives from Bangladesh, Malaysia, Sri Lanka and Thailand; resource persons; and BOBP staff. The participants came from both government and non-government agencies. Many of them had had some experience with community development activities at various levels.

The workshop adopted a “participatory” approach, the emphasis being on group work, field trips and case study analysis, rather than on lectures. The workshop consisted of three phases – analysis of the problems faced by small-scale fishing communities; examination of the strategies some organisations have adopted to solve the problems of small fisherfolk and other disadvantaged groups; and preparation of project ideas for different countries.

Three field trips were made during the workshop – to the CARITAS-funded Kalidaha Fishing Project run by the Miriam Ashram, which has some experience in organising fisheries cooperatives; to the Grameen Bank project in Tangail district which aims at giving credit to the landless for self-employment; and to the Manikganj project of the Bangladesh Rural Advancement Committee (BRAC) which aims at the economic and social development of rural areas of Bangladesh.

After discussion of several issues, the workshop participants agreed that to better the quality of life of small-scale fisherfolk, a country’s fisheries development programme should include:

- Activities to improve fishing technologies in tune with the socio-



Attentive participants Remgruciee Pruthiarenun (Thailand), Sister C\*rbriei (Bangladesh) and observer Farida Akhtor (Bangladesh), at the workshop.

- economic condition of fishing families;
- betterment of other appropriate income generation activities – both improvement of existing activities and introduction of new ones;
- activities to improve other areas affecting the quality of life – e.g. health, nutrition, adult education, etc.

It was underlined that all these activities should be synchronized and closely related and, more important, that they should take into consideration the special condition of each country. All the activities should ensure the betterment of the family as a whole.

The participants emphatically agreed that women have generally been disadvantaged by political and economic circumstances and by religious and cultural values. Yet projects should aim at improving the condition of the whole family rather than of the women alone. And families can best fulfil their development potential if women are given equal opportunities in all respects.

To put it differently, the project approach should be “family oriented” but place emphasis on those activities in which women are mainly involved taking into consideration the effect on the families as a whole.

For the successful implementation of projects, the participants agreed that there should be:

- a strengthening of cooperation and coordination between government and non-government organisations to ensure effective utilisation of resources and facilities;
- an effective organisation of the target groups to ensure their involvement in planning, implementation and evaluation at all levels;
- training of fisheries extension workers, supervisors and target groups in both skills and methods;
- a regular assessment of ‘problems and needs and a continuous support at all levels through effective supervision.

After studying the existing organisational set-up in each country the problems identified and the guidelines drawn up in earlier phases of the workshop, participants from each country proposed ideas for BOBP-supported small-scale fisheries project in their respective countries. They are summarized below:

### *Bangladesh*

On the basis of a socio-economic survey initiated in two fishing villages of Chittagong district, an integrated pilot project could be set up for the development of small-scale fishing families who have no assets (land, craft, gear) and only have physical labour to sell for survival. To execute this project a special unit equipped with experienced and dedicated staff trained to work at the village level would have to be created in the Marine Fisheries Department.

The work should be initially limited to two villages and serve as a training



In the page 11 picture, the caption should read as follows:  
 Clockwise from extreme right: Observer Shelley Feldman,  
 G W Sylvia (Sri Lanka), A H A Jalil (Bangladesh),  
 Lazarus Penheiro (Bangladesh), Sister Anna Marie (Sri Lanka)  
 and Khamsiya Haji Yahya (Malaysia).

adesh),

tome

women's net-making groups which have already been formed. There ought to be close cooperation between government agencies and voluntary organisations who have experience and have been successful in rural development work. A committee consisting of government officers and NGO representatives was suggested to formulate detailed guidelines for the project.

#### Malaysia

The nation-wide aquaculture demonstration-cum-training project envisages training of fishermen from all over the country at Ban Merbok. The Ban Merbok project may however take another three years to be ready for such a training programme. The Malaysian participants therefore proposed organisation of a pilot course in three villages near Ban Merbok which could incorporate both technical training in aquaculture techniques and community development programmes for fishing families as a whole. The help of other departments like KEMAS (a Government community development organisation), would be enlisted.

to planning and implementing the right projects for improving the conditions of fishing families:

- lack of training and proper orientation at different levels.
- dearth of accurate and up-to-date socio-economic data.

#### CASE STUDIES AT THE WORKSHOP

The following case studies and papers were discussed at the Dacca workshop:

1. "A night in the life of an Indonesian fisherman" by Janu Ismanik – Ideas and Action/ill, 1976/4
2. A tentative analysis of fishing families in Juldia and Mobra : discussion paper
3. An interview with Priobala and Kalabashi – a family of Juluda village.
4. Report of the NORAD/Ministry of Fisheries Survey and Planning Mission to Ilainbantota District, Sri Lanka, 17 August to 7 September and 21 November to 6 December 1979.
5. Three Fishing Villages in Tamil Nadu – "A socioeconomic study with special reference to the role and status of women" by Edeltraud Drewes. BOBP Working Paper 14.

Insion officers at different levels to be formulated and implemented by the Ministry of Fisheries;

- a project to establish guidelines for socio-economic surveys.

#### Thailand

The participants decided to develop project ideas to continue the BOBP sponsored Phang Nga aquaculture demonstration project. Since technical development activities in Phang Nga have proved to be successful, the participants drew up a proposal to extend them to all the potential beneficiaries in Phang Nga bay. Activities to provide alternative sources of income for family members should also be continued along the aquaculture, with an emphasis on women. A provincial-level meeting should be initiated to secure cooperation from other agencies in credit schemes, community development, health, etc.

Participants suggested that extension training should also be planned for project staff at Phang Nga and for the new project site at Satul as well as for the local fisheries officers.

# glimpses into BOBP projects



The lecture is on *Participants at the recent course on stock assessment and fishery statistics in Samutprakam, Thailand.*

## *Asian Training Courses on Stock Assessment and Fishery Statistics*

Eighty middle-level fishery officials from 13 countries of South and Southeast Asia took part in two six-week training courses on fishery statistics and stock assessment that concluded recently in Thailand. Organised jointly by three agencies – the South China Sea Programme (SCSP), the Bay of Bengal Programme (BOBP) and the South East Asian Fisheries Development Centre (SEAFDEC) – and funded by the Asian Development Bank (AsDB), the courses were held at the SEAFDEC centre in Samutprakam, Thailand.

Officials from Bangladesh, Burma, Hong Kong, India, Indonesia, Malaysia, Maldives, Pakistan, Philippines, Sri Lanka, Taiwan, Thailand and Vietnam attended the courses.

The object of the courses was to upgrade present knowledge and methods on assessment of fisheries resources and analysis of fishery statistics. The need for such courses is considered acute with the declaration of 200-mile exclusive economic zones by a number of developing countries, which give them opportunities to explore resources further offshore and also the responsi-

bility to manage and conserve these resources.

The teaching staff of 23 for the courses was drawn from many nations and international agencies.

The statistics course covered basic mathematics, statistical parameters and estimation procedures, sampling methods, properties of fishery information systems, the design and conduct of statistical surveys, the use of computers, and discussion of case studies from Malaysia and Sri Lanka; as well as biological, economical and sociological applications of statistics. The resource assessment course dealt – among other things – with basic concepts of fishery resources and marine echo systems; data analysis; use of computers in data processing; theoretical models (Schaeffer, B/H, MSY, MEY, multispecies models), biological sampling, concepts of standing stock and population dynamics, and management of fishery resources.

BOBP Associate Expert for Education and Training, Dr. Uwe Tietze, who was one of the instructors, said that the courses brought up the question of the value of the “regional approach” to training courses. It is sometimes held that the heterogeneity of a regional

course – varying languages, backgrounds, experiences and qualifications of participants – poses insuperable problems for training. At the Thailand courses, however, such apprehensions turned out to be unjustified. The two courses proved effective in improving professional skills and knowledge and in stimulating an exchange of views and experiences among the participants. “In fact the courses have perhaps contributed to better inter-country understanding in the region on subjects like joint management and sharing of stocks, which may lead to better co-operation,” said Dr. Tietze.

Both courses dealt with their subjects at a comparatively general level. “If local fisheries conditions are to be covered systematically – to put acquired knowledge to practical use – more homogenous groups of participants are desirable. Follow-up training courses for each country are therefore useful,” said Tietze. Such activities will be taken up by the new UNDP-supported project, Marine Fishery Resources Management in the Bay of Bengal Region, due to begin this year.

## *Photo Exhibition in Colombo*

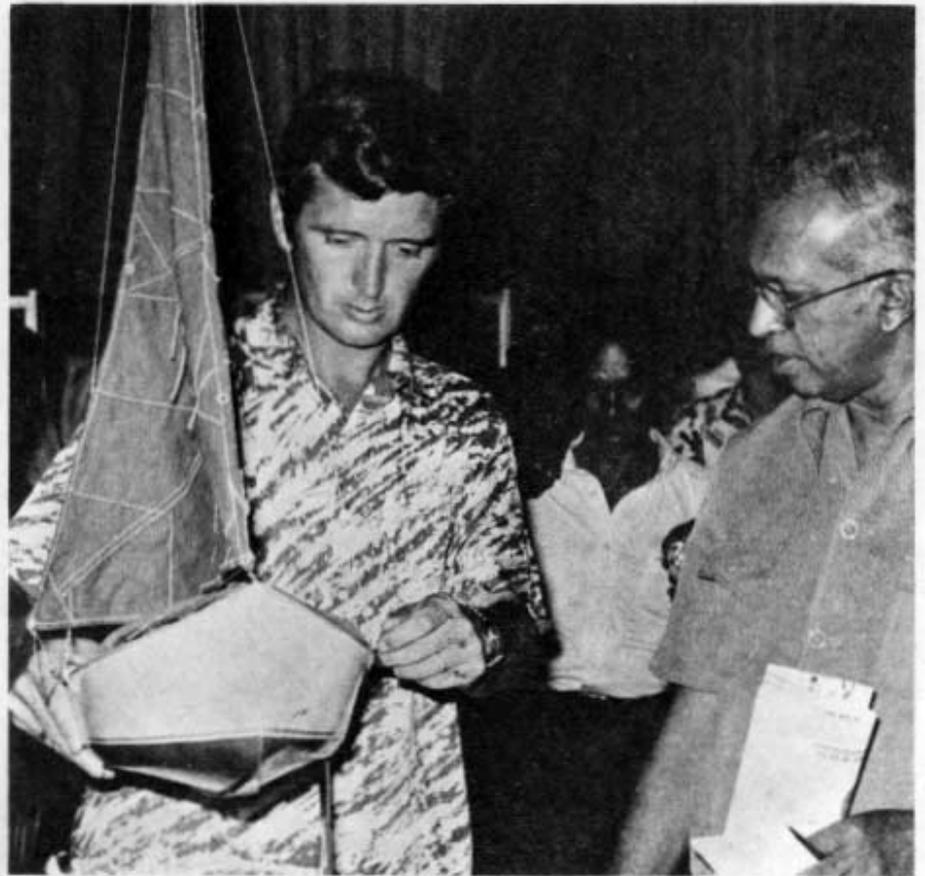
How good is a photo exhibition on small-scale fisheries as a public attraction? We were pleasantly surprised by the response to BOBP’s photo exhibition held last October in Madras. (It drew



more than a thousand visitors.) The same exhibition was held early December in Colombo, at Galle Face Hotel. This time the turn-out, for the December 4 invitational inaugural and the public showing December 5 through 7, was somewhat below expectations, about 550. A Sri Lankan fisheries official pointed out, however: "Since Colombo has only one-fifth the population of Madras, half the Madras turn-out is pretty good public response! Further, the Colombo exhibition was on for only three days."

As at Madras (see *Bay of Bengal News*, December 1981) some 100 photographs were on view, depicting the fishing craft and gear seen in the Bay of Bengal region, methods of fish utilization and distribution, the conditions of fishing communities. There were also pictures of BOBP projects. A model of SRL 11, BOBP's beachcraft for Sri Lanka, was exhibited as well.

Inaugurating the exhibition, Minister Festus Perera revealed two new plans to help small-scale fishermen in the context of rising energy costs: subsidies might be provided to fishermen to operate modern non-motorised craft; and existing mechanised boats might be fitted with auxiliary sails to reduce operating costs. Minister Perera referred to "the beautiful and handy sail" of the BOBP beachboat being tested at Negombo and expressed the hope that



*Sri Lanka's Fisheries Minister Festus Perera listens as BOBP's Arild Overa explains the working of BOBP beachcraft SRL-11 at the recent photo exhibition on small-scale fisheries held in Colombo.*

work in this direction would be continued. Sri Lankan fisheries officials and experts, and luminaries of government and diplomacy attended the inaugural, besides delegates to BOBP's

Sixth Advisory Committee. On the days that followed the visitors included photography buffs and professionals of many hues. Quite a few pictures were picked up by the Sri Lankan media.



### BOBP Advisory Committee Meets in Colombo

The BOBP's Sixth Advisory Committee, meeting in Colombo December 1 - 5, reviewed the progress of work in 1981 and endorsed the Programme's work plan for 1982. During a field trip to Negombo, delegates observed BOBP's operations in the area of craft and gear. Left: The beach-landing boat developed by BOBP for Sri Lanka. SIDA's Lars Augustinson, Sri Lanka's Aloy Fernando and FAO's N. Kojima go out on SRL 11. Far left: Bangladesh's M. Yousouf Ali, SIDA's I. Sorenson and Malaysia's Mazlan Jusoh listen to a briefing on the BOBP/Sri Lanka demersal fishery project.

# SAILS

*BOBP fisheries engineer And Overa discusses how fishermen can lower operational costs – and heighten pleasure and profit – by fitting boats with sails*

Want to go sailing? Any one with a bit of seawater in the veins, who has seen a beautiful sailing boat creaming along with "a bone in her teeth", (a white bow wave) would immediately say "Yes!" And after experiencing silent speed under sail with the boat nicely leaned over no rolling to upset a tender belly no smoke and ear piercing noise from a screaming diesel, who would not want to do it again. Some of us would surely like to do it all the time.

But so many fishermen in both developed and developing countries have given up sails and taken completely to motorized fishing boats. Let us take a look at what new technology can offer us today and examine whether it is time to partly reverse this unfortunate development (or perhaps we should not call it development at all).

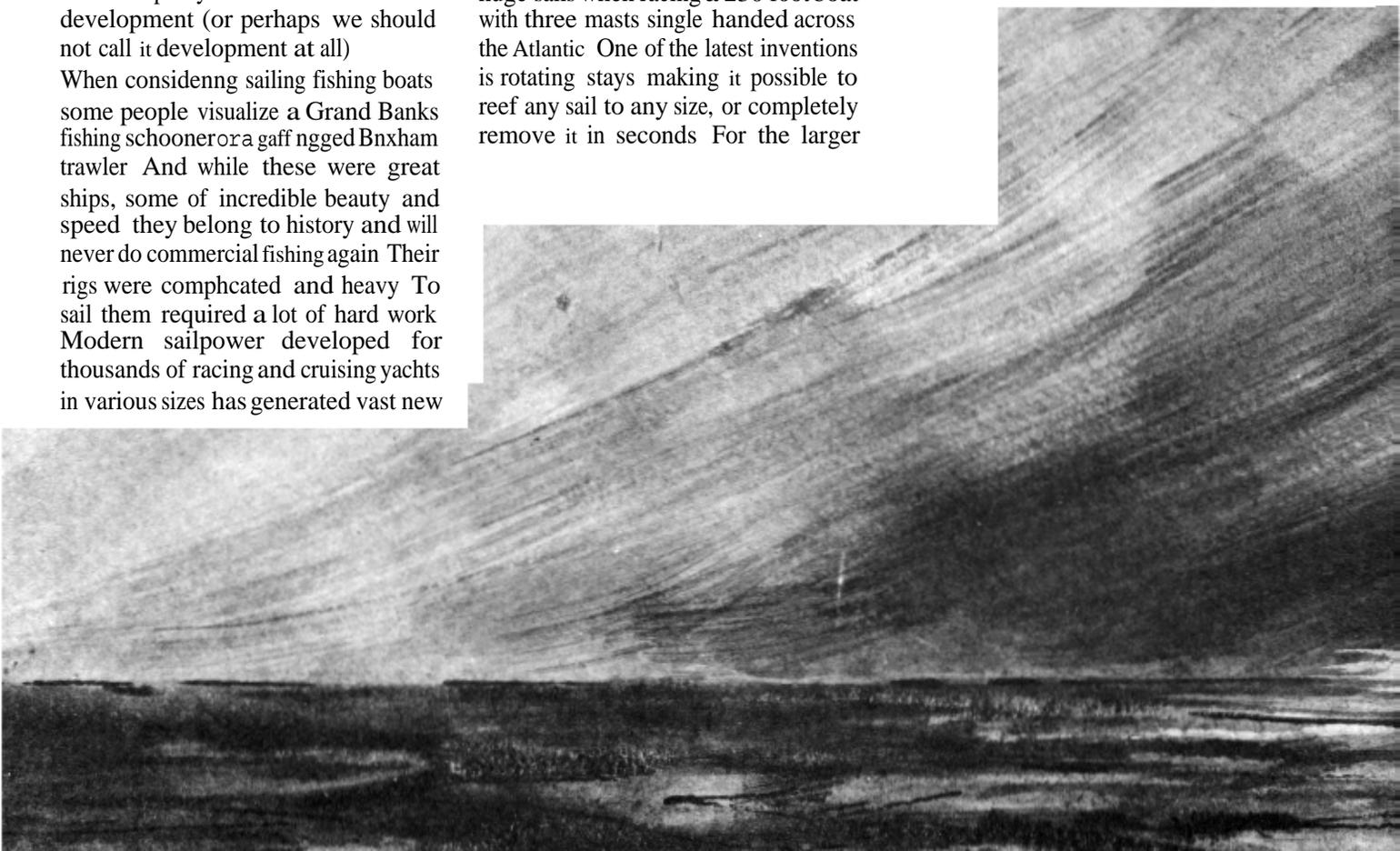
When considering sailing fishing boats some people visualize a Grand Banks fishing schooner or a gaff rigged Brixham trawler. And while these were great ships, some of incredible beauty and speed they belong to history and will never do commercial fishing again. Their rigs were complicated and heavy. To sail them required a lot of hard work. Modern sailpower developed for thousands of racing and cruising yachts in various sizes has generated vast new

knowledge, enabling designers to include simpler and more efficient rigs on modern boats. Just as engines which used to weigh a ton or more per 10 horsepower now weigh only about 60 kg for the same power sailpower has experienced a similar development, in which new materials have played a major role.

Some of these new materials are aluminium masts, stainless steel wire or rods of great strength for standing rigging, synthetic ropes for running rigging; and synthetic sailcloth which never rots however long you stow it away wet. On deck you have powerful but small and light winches, enabling one man some years ago to handle huge sails when racing a 230 foot boat with three masts single handed across the Atlantic. One of the latest inventions is rotating stays making it possible to reef any sail to any size, or completely remove it in seconds. For the larger

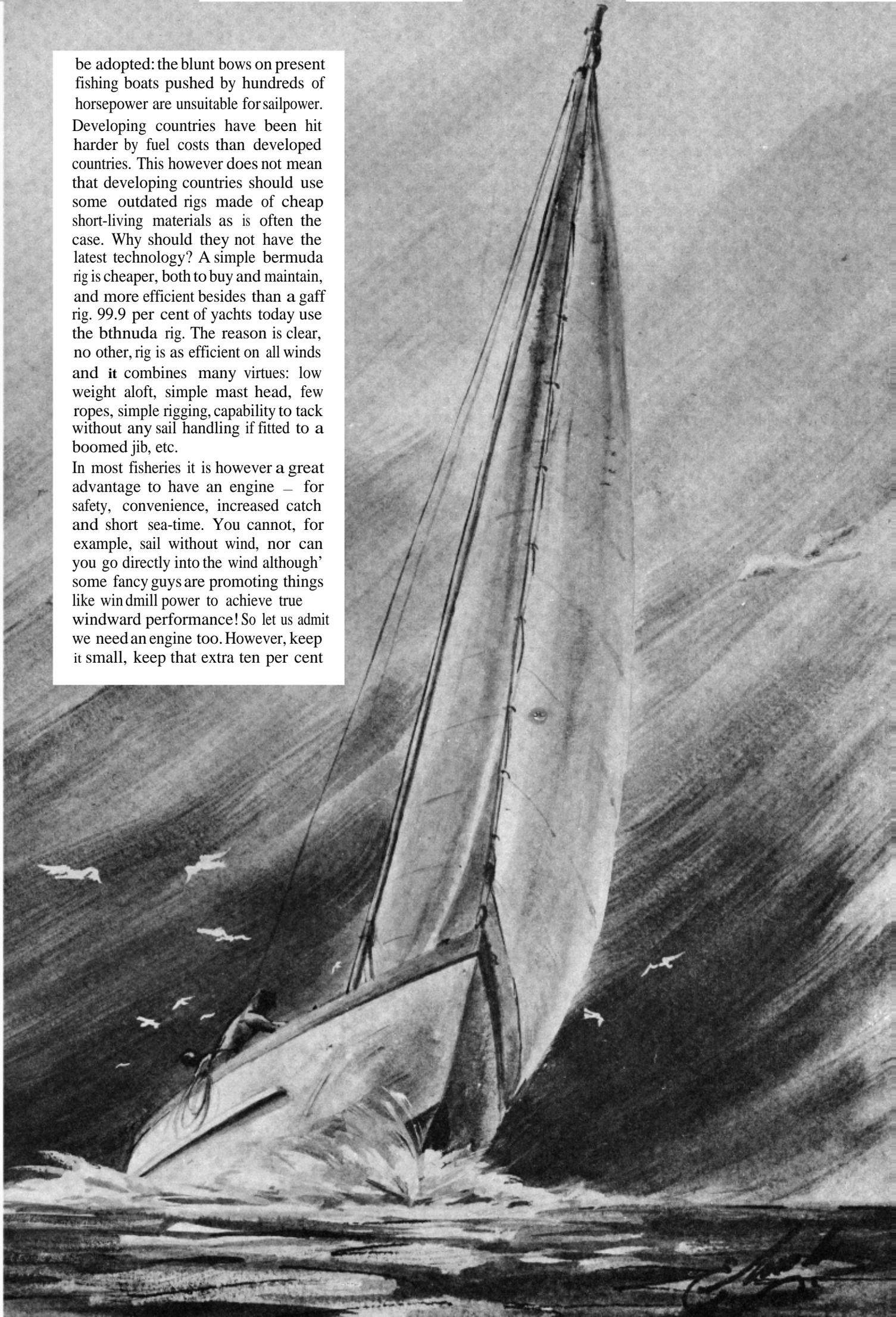
boats, rotating stays and winches can be driven by electrics or hydraulics, controlled by a skipper pressing push-buttons from his cosy chair inside a snug, warm wheel house with *Playboy* on his knees! What a difference from the old Cape Horn cry of "All hands aloft" where many a lad slipped from ice-covered yards and went headlong into the icy sea if not on to the deck, 150 feet below. They could never stop to retrieve a man since he would have drowned or frozen to death before a ship like a full-rigger could even stop.

Sailpower for commercial fishing is returning. In France and the USA, boats for some fisheries are being built with large rigs. They are tuna trolling boats operating a thousand miles from port, relying on steady tradewinds to go on one tack all the way. So there is very little extra work to be done. However this is not going to be an overnight revolution. New hull shapes have to



be adopted: the blunt bows on present fishing boats pushed by hundreds of horsepower are unsuitable for sailpower. Developing countries have been hit harder by fuel costs than developed countries. This however does not mean that developing countries should use some outdated rigs made of cheap short-living materials as is often the case. Why should they not have the latest technology? A simple bermuda rig is cheaper, both to buy and maintain, and more efficient besides than a gaff rig. 99.9 per cent of yachts today use the bermuda rig. The reason is clear, no other rig is as efficient on all winds and it combines many virtues: low weight aloft, simple mast head, few ropes, simple rigging, capability to tack without any sail handling if fitted to a boomed jib, etc.

In most fisheries it is however a great advantage to have an engine — for safety, convenience, increased catch and short sea-time. You cannot, for example, sail without wind, nor can you go directly into the wind although some fancy guys are promoting things like windmill power to achieve true windward performance! So let us admit we need an engine too. However, keep it small, keep that extra ten per cent



speed for the days when the wind is fair, and use a combination of sail and engine or sails only when the wind is stronger to get the extra speed without pushing up costs too high and cuffing net profit.

The Bay of Bengal Programme has built three bermuda rigged beachlanding fishing boats. Some of the main features: mast of aluminium pipe in two pieces,

5 m.m. stainless standing rigging, mast head with eye bolts for stays and halyard blocks, imported blocks, mainsail pocket around the mast instead of tack and slides, and only two sails – a main with two sets of reef points and a genoa with one set of reef points. Together they are 34 m<sup>2</sup> in area, and rigged on a 28 foot boat, they give an easy seven knot speed in good breeze.

The economics are quite interesting. These boats are built as alternatives to the 3 tonner in Sri Lanka which is mostly fitted with a 30 hp. diesel, costing US \$ 4,400. The new boats have a 12.5 hp. diesel costing US \$ 1,800; while the rig costs US \$ 800 with terylene sails made in Hongkong. In future, the sails will be made locally in cotton and the rig cost will come down to US \$ 500. Therefore, even with sails made in Hongkong, the total propulsion investment is US \$ 2,600 – a saving of US \$ 1,800 over the 30 hp. engine. With a speed reduction of ten per cent, the fuel saving is still 55 per cent for the same distance if engine only is used. Combining with or using sails only, whenever the wind permits it, the economic picture looks even better, and speed can be higher than when using 30 hp.

For smaller boats, some existing rigs like a dipping lug, gunther rig, lateen

or spilt sail may be even simpler and quite effective except when going close hauled to windward – for which no other rig can compete with the bermuda rig. So let the traditional crafts continue to use the rigs evaluated through the centuries with perhaps better cloth and better made sails, while fitting new craft with the most suitable rig. Many countries have limited materials from which to make modern rigs and this must be considered when deciding on the rig. Rot proofed cotton can be a very good sail cloth and much cheaper than synthetic sail cloth. It is also more sun (UV) resistant, important in the tropics where sails are also often used to provide a shade under which the fisherfolk mend their nets.

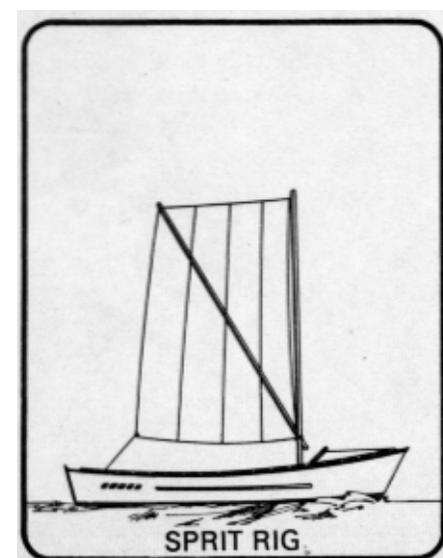
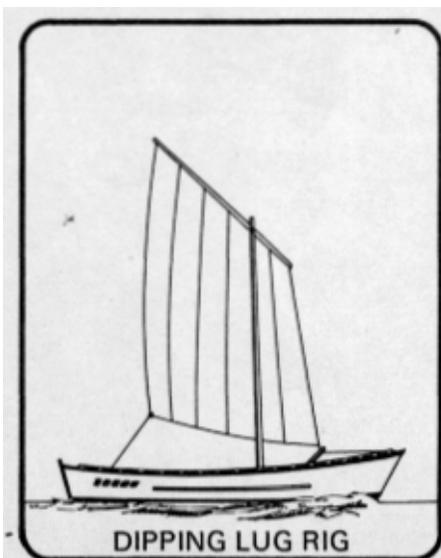
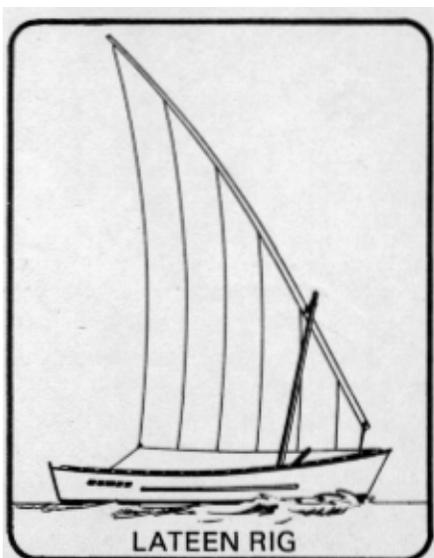
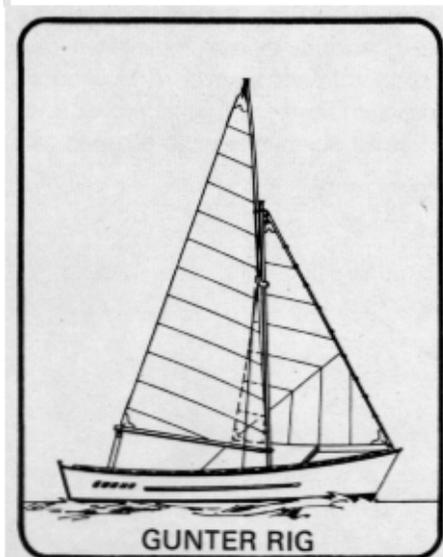
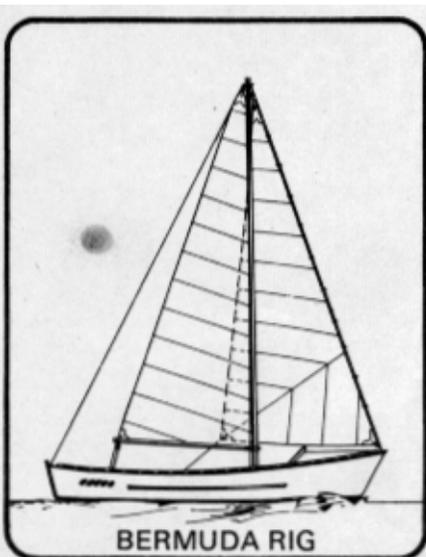
An interesting rig is found on the Sri Lankan Oru. It is similar to a spinnaker and gives very high downwind power. Two bamboo masts, 6 inch diameter and 30 ft. long, control the two upper corners of the square sail. This boat is dragging a small trawnet downwind

and the rig is a splendid example of how a very suitable rig has been evaluated to suit a specific fishery. The Oru can achieve a speed of 8-10 knots.

Positive developments are now taking place. Many governments, with the support of aid agencies, are giving high priority to fitting sailpower on existing and future fishing boats. Sri Lanka, for instance, is planning to use “force” through subsidy schemes to reduce the engine size and fit sailpower as additional power in future fishing boats.

Many fishermen are also coming forward themselves to ask for assistance in fitting sails to their mechanised boats. Let us hope that this sets the course for the future as long as the “blue water-green skipper” phenomenon doesn't occur too often!

We must not forget that the crew must be trained in sail handling to avoid capsizing and loss of lives, since in many places sailing is a forgotten art. All hands aloft!





## INAUGURAL OF BAY OF BENGAL COMMITTEE

(Continued from page 2)

of monitoring, control and surveillance of fisheries, and referred particularly to poaching. He believed that the BOBC would be an appropriate body to discuss and resolve such problems.

The Minister wished the delegates a productive and rewarding discussion and thanked them and the FAO which had brought them together.

Mr. Anura Weeraratne was unanimously elected chairman of the Committee and Mr. M. K. Anwar, Secretary of Fisheries, Bangladesh was unanimously elected vice-chairman. The Committee agreed that they would remain in office till the beginning of the second session. After the inaugural function, the Committee met to discuss the various items on its agenda. The discussions spread over three days. What follows is a summary of some of the Committee's decisions and of views expressed by delegates.

### *Objectives, functions and operational arrangements of the BOBC:*

- While the IOFC is responsible only for marine fisheries, the BOBC should deal with fisheries in marine, brackish and inland waters.
- All programmes and projects of the BOBC should be located in one place. The Committee accepted with appreciation the offer of Sri Lanka to provide host facilities for the committee, covering all the operational components of the BOBC's programmes and projects.

### *The state offisheries resources in the region:*

- The Sri Lankan delegate said that knowledge of pelagic stocks in Sri Lanka was poor, and personnel and equipment to improve this knowledge were lacking. The need to

determine the exact pelagic potential was urgent. He urged regional effort to determine the migration patterns of tunas, and studies on the shrimp fishery of Sri Lanka.

- The Bangladesh delegate urged exploratory fishing to determine his country's pelagic stocks including tuna, and bottom trawl surveys to improve preliminary estimates of demersal resources made by acoustic methods. Assistance from the BOBC would be welcome.
- The Malaysian delegate emphasized the need for expertise to back up the national effort in stock assessment. He also welcomed additional survey activities.
- The Thai delegate welcomed expertise and equipment for stock assessment.

### *fishery development and management problems at national and regional levels:*

- Sri Lanka, Bangladesh, Malaysia and Thailand underscored the conflict between artisanal and large-scale fisheries and the spread of marine pollution as serious problems. The Thai delegation noted that pollution could cause serious damage to mariculture.
- The Committee recognized the need for measures to control fishing effort wherever too many vessels were employed to catch too few fish. In this context, Malaysia said that a large number of trawlers continued to fish despite low per unit catch because of the high prices for prawns:
- Malaysia said that over-fishing and under employment in the west coast of Peninsular Malaysia had engendered the need to provide alternative sources of employment. It was therefore, with BOBP assistance, testing the technical and economic viability of coastal aquaculture.
- The Maldives delegation mentioned the conflict between the objectives of greater employment and higher earnings. More taxes meant fewer jobs, but if also meant significant revenues for the economy. Lower taxes would mean more jobs; but also less tax revenue, and this would not help fishermen.
- Delegates agreed on the need to share their experiences in management measures. They also agreed that one or more pilot management projects should be started in the region. Any case studies that could

clearly demonstrate the positive results of management would be extremely worthwhile. The FAO was requested to pursue the idea of pilot management projects and to help in the task of getting funds for the projects.

### *Existing and proposed projects/programmes*

- The role of the Committee as a forum for exchange of information about projects in the member-countries was emphasized. Accounts of successes and failures would stimulate the discussion about the action to be taken up by the Committee.
- As for future projects and action programmes, delegates agreed that technology transfer was most important and that training, primarily at the national level, should receive high priority. Another high priority area would be aquaculture, a subject that offered scope for TCDC. The activities should be field-oriented.
- The proposal for a new UNDP-funded support project "Marine Fishery Resources Management in the Bay of Bengal," RAS/81/051, was endorsed.
- The Committee emphasized that the UNDP-support project was only a small contribution in relation to the needs of the area. The Committee suggested that its chairman and vice-chairman should, together with FAO, approach other development cooperation agencies for funding support, for this and other projects.

### *Monitoring, control and surveillance:*

- The Committee agreed that regulations on fishing activity should be practical and easily enforceable. If fishermen understood the intention behind control, they complied with the controls better.
- Regional cooperation must be approached with caution because of the need to respect the national sovereignty of coastal states. But the large capital costs of control ships and surveillance aircraft was such that regional cooperation and equipment-sharing might be the only possible approach. Subject areas that permit regional cooperation should be identified. Cooperation between member countries in enforcement measures against third-nation fishing vessels was also considered advisable by the Committee. - **S.R.M.**

# Artisanal and Mechanized Fisheries in Kerala: a study of costs and earnings

*A comparative study of the costs and earnings of traditional and mechanised fisheries in Kerala, India was organized in 1980-81 by a sister project of the Bay of Bengal Programme in cooperation with a Kerala voluntary agency. This article explains the rationale and significance of the study and sets out its main findings. The interview that follows discusses the methodology of the study, problems encountered by the investigators, etc. The report of the study is presently under print*

Early in 1980 the regional FAO/UNDP Project for Small-Scale Fisheries Promotion in South Asia initiated a study on the economics of artisanal and mechanised fishing units in Kerala, India. The main objective of the study was to examine the techno-economic and socio-economic performance of the different fishing techniques. Such information is needed to assess the economic and social impact of technical innovation. Costs and earnings data are also important for fisheries development or management planning; they should form the basis of fisheries policy measures such as subsidy and credit schemes.

The first step was to locate a suitable organisation to carry out a field survey of the envisaged size lasting for a whole year. It would have to possess a good working knowledge of the technical and economic aspects of fisheries, experience in the collection of statistical data in the field, and last but not least, be familiar with, well known to, and accepted by the fishing communities. Such an institution exists: it is a small, autonomous voluntary organisation named the "Programme for Community Organisation" (PCO) based in Trivandrum, capital of the state of Kerala. The PCO undertakes village-level development work, training and educational programmes and research. For over a decade most of its activities have been in the area of artisanal fisheries. A unit of the PCO, known as the Fisheries Research Cell, undertakes research.

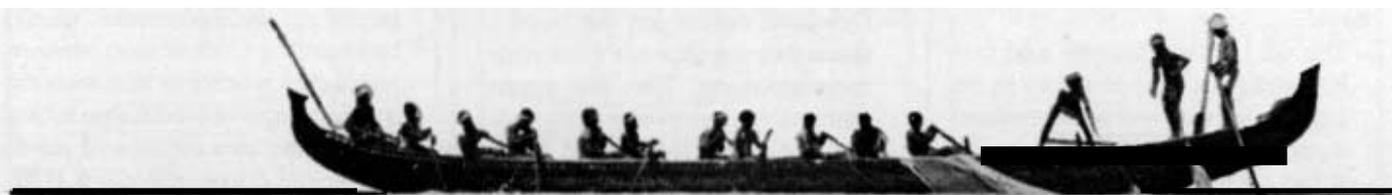
The PCO agreed to undertake the field survey for the study. Its team was led by John Kurien, a research associate of the Centre for Development Studies in Trivandrum, who has specialised in socio-economic aspects of artisanal fisheries and is an honorary study coordinator of the PCO. In charge

of data collection and data processing was Balakumaran Nair. The FAO members of the team were Rolf Willmann, Associate Expert in Economics, and a consultant, Gunnar Nybo, who is responsible for costs and earnings studies in the Norwegian Directorate of Fisheries.

The manpower and other resources that would be necessary to record the costs and earnings of every fishing unit in Kerala would be enormous. It was therefore necessary to select a representative sample for study. The size of the Kerala fishing industry, the geographical dispersal, the variety of methods and equipment, and the seasonal changes in the craft and gear in active use, made the task of selecting a representative sample of villages and fishing units an especially difficult one. The chosen sample consisted of 242 different fishing units operating out of 15 different villages along the Kerala coast. Their activities were studied for a year (April 1980-March 1981). Twenty seven youths belonging to the fishing communities were employed as enumerators. Over the year of the study they collected statistics on over 20,000 fishing trips which between them produced fish worth over Rs.5 million. For those interested in data-processing, the information collected amounted to over 1.5 million 'bits'. The compilation of data was completed in August 1981.

## **Significance and conclusions of the study:**

This is one of the first large systematic studies in South Asia on costs and earnings in the artisanal fisheries sector, dealing with such a variety of craft, gear and fishing seasons. It has highlighted the heterogeneity, the strengths and weaknesses and the latent potential of the small sector in Kerala's fish economy. Only preliminary analysis of the information collected so far has been possible.



Extensive use of existing fishing units in Kerala could lead to high levels of labour productivity even with simple technology. Such use has not been possible so far because of the vagaries of the weather. Given this fact, which was particularly accentuated in 1980-81, the study shows that the artisanal units on the whole made better use of their invested capital than the mechanised units. Seventeen of the 20 artisanal craft/gear combinations operated on a profit and the remuneration generated per crew member was in most cases as high as that of the profit accruing to the owners (owners are nearly always also crew members). As regards contribution to society – new incomes created, employment generated and protein produced – the artisanal units fared better, at much lower cost, than the mechanised units.

The findings summarized above may justify the allocation of more resources and effort to the technical development of the traditional sector, which is hampered by limitations in performance of the existing craft and gears. Equal emphasis should be placed on examining the socio-economic effects



*Data collection for the costs and earnings study: a group of fishermen talk to an investigator.*

of changing particular systems of ownership; the pattern of sharing of costs and earnings; curbs on the use of scarce hydro-carbon fuels; and the provision of adequate surpluses that will be reinvested in fisheries.

In Kerala, the FAO is already engaged in trials of beachlanding boats propelled by engine and sail, of greater range and carrying capacity than the traditional craft. The results of the costs and earnings study will provide a basis on which the economic performance of the new boats can be compared with that of the craft they are intended to replace, and provide a guide as to how the systems of ownership and sharing of earnings must be arranged in order to ensure adequate provision for the repair and maintenance of the more sophisticated units. This is just one of the many ways in which costs and earnings studies can help to ensure that the direction and scale of fisheries development will redound to the benefit of the fishermen, the merchants, the consumers and the national economy.

**"In this venture  
we were all  
learning together"**

John Kurien, coordinator of the Kerala costs and earnings study, discusses the challenges it posed and the rewards it yielded – with *Bay of Bengal News*.

**Q. Please outline the work of the Programme for Community Organisation and its Fisheries Research Cell. What types of projects have you undertaken in the past?**

**A.** The Programme for Community Organisation (PCO) is a voluntary non-governmental organisation functioning primarily in Trivandrum district of Kerala State. The work of this organisation was initiated by a group of 'young men and women who, about two decades ago, decided to work among the small-scale fishermen of Trivandrum district. The PCO took its present form in 1977 with the establishment of its registered office in Trivandrum city. The activities of the PCO are now three fold — grassroots development work among the fishermen; development education and conscientization; and action-oriented research. The Fisheries Research Cell (FRC) is the autonomous activity unit of the PCO that undertakes research. Projects and programmes undertaken by the PCO in the past have included (a) assisting fishermen in organising themselves to form cooperatives and local associations; (b) conducting training programmes for village youth, women and fishermen to improve their knowledge and skills and to enhance their awareness of the dynamics of society; (c) undertaking research on issues of urgent concern to the fishermen.

In the two years of the FRC's existence, it has undertaken some micro-studies in Orissa, Karnataka and Kerala to understand some of the emerging trends in the fish economy of India. The fourth and major assignment has been the "Costs and Earnings Study of the Fishing Units of Kerala" which was completed in mid-1981. This study was undertaken in collaboration with the FAO/UNDP Small-Scale Fisheries Promotion in South Asia Project and the FAO/SIDA Bay of Bengal Programme.

**Q. Is the Kerala costs and earnings study unique in any way from the standpoint of the PCO and from the standpoint of fisheries research in Kerala? How did you select the geographical area for the study? What was the study's *modus operandi*?**

**A.** Yes, it certainly is unique. To my knowledge this is the first study of costs and earnings in South Asia, particularly of artisanal fishing units, which was conducted in such detail and over a continuous period of one year. For the PCO,

undertaking this study was a big challenge since its research unit had never ventured to manage such a huge organisational task. My own reading is that this study has contributed substantially to fisheries economics research in Kerala. It has provided a basis on which to design a system of data collection that can be utilised to monitor the “health” of the fish economy of the state.

The geographical area selected for the study consisted of five of the eight coastal districts of Kerala state. These districts represented the whole gamut of craft-gear alignments used in Kerala’s marine fisheries and accounted for over three-quarters of the fish production. They were also the areas where the PCO has good contacts among the fishermen:

In these five districts we selected 15 fishing centres and monitored as many as 242 fishing units which represented 22 different craft-gear combinations. Data was collected at each centre for every fishing unit on a daily basis using a schedule designed for this purpose. The daily schedules were sent to the headquarters at Trivandrum at the end of the month. Here they were scrutinised (and referred back for verification if necessary) and tabulated. A quarterly and mid-time review was made. Once the monitoring was over, in April 1981, the final processing was undertaken, on the basis of which a draft report was ready by August 1981.

**Q.** Please describe your team of investigators and data processors. How were the investigators selected? What were their qualifications and previous experience?

**A.** The task force we mustered for the study consisted of a total of 40 persons. The 27 investigators – we called them enumerators – at the village level were youth from the respective villages who had earlier contacts with the PCO’s educational programmes. In most cases their appointments were even informally ratified by the fishermen groups in the village whose craft and gear were to be monitored. In general they were youth who enjoyed the confidence of the fishermen. This they had earned because of their earlier involvement in the social activities of the village. This, along with the fact that they knew the intricate details of fishing operations was their main qualification. The majority of them had only high school education. In the centre where the bulk of the mechanised fishing units were monitored we had a few college graduates.

The five field coordinators and the six research associates in the office in Trivandrum were all graduates or post-graduates with some previous research experience. Some of them were also from the fishing community. Of the eleven, five were women. The technical coordinator was a senior retired government officer with over 30 years of experience in the government’s economics and statistics bureau but was still young at heart. As coordinator my task was made very easy because of the competence, high morale, cooperation and commitment of this excellent team.

**Q.** Did the enumerators get good cooperation from the fisherfolk and from the crew of the artisanal and mechanised units?

**A.** From the way we went about selecting the enumerators, good cooperation from the fishermen was ensured. Of

course we did have problems in spite of this – particularly so with the owners of the mechanised units in one centre. Part of the problem here could be attributed to a “researcher allergy”: any number of studies on issues concerning social, economic and technical development have been conducted here by numerous national and international agencies leaving the respondents rather weary about the earthly use of such data collection. By and large the level of cooperation was fairly high and consistent.

**Q.** What were the problems encountered by the enumerators? How were they overcome?

**A.** Learning to make eye estimates of weight; getting at the fishermen during their free time; pacifying the irritated fisherman who does not want to respond the day he gets a poor catch; verifying the correctness of repair and maintenance cost figures stated by the mechanised boat owners. These were some of the problems. To get over these they required training for the first and last and tact for the others!

**Q.** What were the problems encountered by the data processors?

**A.** Lack of time. While data processing was being undertaken simultaneously with the data collection – there was a lag of about 30 days – the final computations and analysis became quite stupendous. The volume of the data and consequently the very physical form of the tabulation sheets became large and unmanageable by one person. A high level of team spirit and a very good sense of humour kept an otherwise monotonous task fairly enjoyable.

**Q.** What were your own management problems as coordinator of the study? Can you describe the way you, Rolf Willmann and Gunnar Nybo worked together?

**A.** I really had no management problems except that of apportioning the time between my own full-time job and the work of the project. Keeping the motivation and the tempo going; monitoring the progress; continuous dialogue with the headquarters staff on the technical and conceptual dimensions of the analysis and the final report writing were my main responsibility. Maintaining the link between the study team and the FAO consultants was also my task.

The success of the study and its timely completion are partly due to the excellent rapport we had with Rolf Willmann (Economist, FAO/UNDP project “Small-Scale Fisheries Promotion in South Asia”) and Gunnar Nybo (Consultant to the study from Norway). Rolf by virtue of his proximity (he was based in Madras) was more often in touch with the actual work. We kept contact by post and over the phone. We sent notes. He made comments. Gunnar came down twice during the 18 months – once at the beginning and then about three months before the completion. During this last spell we all put our heads together. Neither of them acted like ‘experts.’ In this venture we were all learning together. All the staff at the office reminisce about the loud arguments on the approach to the analysis and also the numerous, refreshing ice-cream and coffee sessions at the Indian Coffee House. We really worked as a close-knit team.



*Kerala boatbuilding yard. The state has some 30,000 traditional craft and 3,000 mechanized craft (gillnetters and trawlers).*

**Q. What in your opinion are the main strengths of the study? What are its drawbacks?**

**A.** The main strength of the study was that it covered the whole gamut of the main craft-gear combinations in Kerala and was based on primary data collected over a long period of time. For the first time we have a complete picture of the complexity, the problems and the potential of Kerala's small-scale fisheries sector. We now have a basis on which to orient specific policy measures and set targets. The point of view of the workers, owners and the economy as a whole can be assessed. The main drawback of the study is that it gives only a point estimate; and considering that 1980/81 was one of the worst fishing years we've had, it is also probably a bad estimate. The drawback of the report itself is that it is primarily based on data at its highest level of aggregation – the annual level – and deals largely with annual averages. Volumes of information still remain untapped in the recesses of the raw data and readers will not get the benefit of the more detailed analysis that may have been possible had more time and finance been available and had electronic data processing been used.

**Q. Do the conclusions of the study come as a surprise in any way?**

**A. Yes.** A pleasant surprise on knowing that the findings confirm many of our earlier perceptions based on the collective experience of the PCO. Quite a bit of what the fishermen have been saying about the economics of their own techniques

is now validated. Some of the artisanal techniques perform as well as, and sometimes even better than the mechanised units. This underscores the desirability of the former. It also indicates the need for a drastic rationalisation to improve the performance of the latter.

**Q. Has the study been a rewarding experience for you and others involved with the study? Do you intend any follow-up work?**

**A.** When I entered into discussions in 1979 with Rolf and Gunnar about undertaking the study, I was not fully confident that we at the Fisheries Research Cell could handle such a big task with the sort of small and informal set-up we had. However, by hindsight, I think the most rewarding aspect of the study was precisely the challenge that it posed, and the potential of making a substantial breakthrough in our knowledge of the functioning of the fisheries sector of Kerala. To this end all the 40 members of the staff and the fishermen involved worked with one accord, giving a synergic thrust to fulfilling our goals.

Follow-up should really be the task of the government. We have provided the methodology and shown the usefulness of the exercise. Probably the fishermen and the fishing industry should apply pressure to ensure that follow-up action is taken. Monitoring of such data is the only sure way to provide the crucial indicators for gauging the health of the sector. This is in the interest of the workers, the capitalists and the economy.

# WHY WOMEN'S PROJECTS?

*“The social and cultural discrimination of women calls for a specific female component in an income-raising project, aimed at developing fisherwomen’s own grassroots-level organisations and ensuring better access to extension education,” says Edeltraud Drewes, socio-economist of the Bay of Bengal Programme, in the article on these pages.*

The Bay of Bengal Programme aims at introducing new techniques to improve the living conditions of small-scale fisherfolk. Fisherfolk naturally include both sexes, female and male. And both can help improve their own living conditions, since both are involved in the fishing economy. Men are responsible for fishing and net repairing; women sort, cure and sell fish, sometimes by walking very long distances carrying baskets of fish; they also make nets. This is of course in addition to their household and child care responsibilities.

The BOBP’s work comprises of technical projects like fishing craft technology, fishing gear improvement, and coastal aquaculture, as well as extension projects such as “coastal village

development” and “fisherwomen extension activities.” This is based on the understanding that in order to improve living conditions of fisherfolk, both new technology and social changes are required – for both men and women. Why then have specific projects for women? There are good reasons.

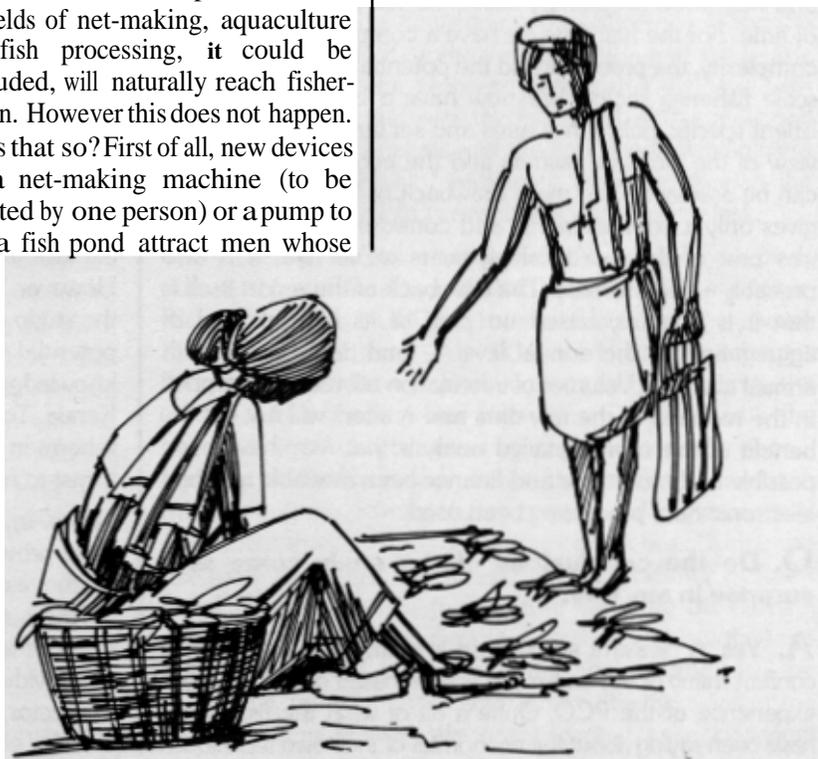
It is commonly assumed that in development projects, enhancement in the economic status of women is sufficient to improve their status in that community, but it often does not happen unless that traditional community’s ideology rises above the existing traditional norms which give an inferior status to women. More needs to be done! The social and cultural discrimination of women calls for a specific female component in an income-raising project, aimed at developing fisherwomen’s own grassroots level organisations and ensuring better access to extension education.

Fisherwomen make valuable contributions to the small-scale fishing sector by carrying out the above mentioned activities. Technical improvements in the fields of net-making, aquaculture and fish processing, it could be concluded, will naturally reach fisherwomen. However this does not happen. Why is that so? First of all, new devices like a net-making machine (to be operated by one person) or a pump to feed a fish pond attract men whose

occupation so far has been confined to fishing and net repairing. Secondly, training and extension services – to introduce new techniques for example – are generally male oriented and are with almost no exceptions carried out by men. In order to let fisherwomen benefit from technical improvements in fishing activities carried out by them traditionally, an extension service for women and by women is required.

Efforts of the BOBP’s women projects have resulted in reciprocal action by the Tamil Nadu Fisheries Department. A Fisherwomen’s Extension Scheme with a woman Assistant Director in-charge was sanctioned in 1981. The extension officers at the village level however, are men, because the existing personnel were absorbed into the project.

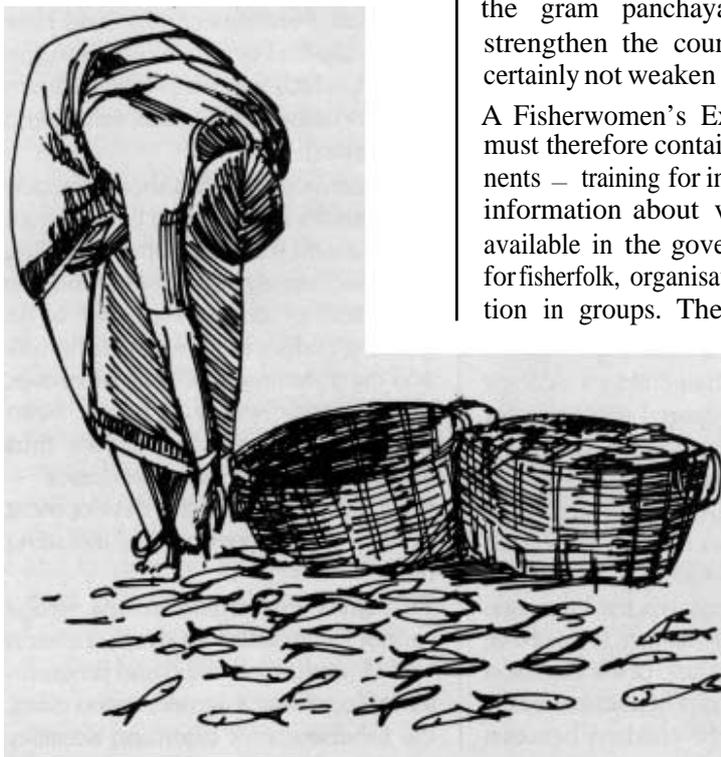
At this stage of economic, social and cultural development in rural India, when women may talk freely only to women, the process can be accelerated



effectively only if women are posted as village level extension workers for women's projects. Experience shows that this is an uphill task, because men are not quite prepared to accept women professionals and also because women find it difficult to resist family pressure for taking up jobs outside their villages or home towns. However, there are also several encouraging examples where local women, even with very little education, are being recruited and trained to be community development workers. With proper encouragement, organisational support and guidance, women's work performance in several agro-based projects can be very gratifying.

*Examples:* Village women in Kanakpura block of Karnataka state have been given training in sericulture and are working as sericulture extension workers, since a large percentage of operations in sericulture are performed by women.

- In an agricultural university in Bihar, women are employed in a pilot project for technology transfer from the university to the tribal women, who carry out most of the agricultural operations.
- In a large-scale dairy development operation in Andhra Pradesh, women members are being included in the spearhead teams to ensure that women get access to extension education, membership in dairy cooperatives and even membership in boards of directors.



- In Gujarat state, a voluntary agency has formed 20 all-women dairying cooperatives,

In all these projects, it was initially assumed that women extension workers would not come forward to work in rural areas, but when it came to the implementation stage women extension workers did come forward.

However, when we talk about women's extension services, we cannot restrict ourselves to extension of techniques and training for income-generation. We must include education to eliminate social and cultural discrimination against women – the discrimination that is manifest in fishing communities where

80 per cent of all women earn a great portion of the family income from fish selling and are still subjected to physical violence by husbands, get less food and education and do not have any decision making powers in community activities.

Women are not even allowed to watch, let alone participate in, the proceedings of village council meetings. They should be helped to discuss and solve their common problems in a large group, gain self-confidence to participate in political bodies like the traditional village council (kulu panchayat) as well as in the modern political village level body (gram panchayat). Since the representation of women in the gram panchayat has the backing of the Government of India, representation of fisherwomen in both the Kulu Panchayat as well as the gram panchayat would really strengthen the councils and would certainly not weaken them.

A Fisherwomen's Extension Service must therefore contain several components – training for income generation, information about various schemes available in the government specially for fisherfolk, organisation and participation in groups. The Fisherwomen's

Extension Service will also look for improved fish handling technology, whose scope in very small villages is somewhat limited, but might certainly be more viable in villages with larger fish landings.

In cooperation with the Fisherwomen's Extension Scheme, Tamil Nadu Fisheries Department, pilot projects have been started by the BOBP to improve the social and economic conditions of

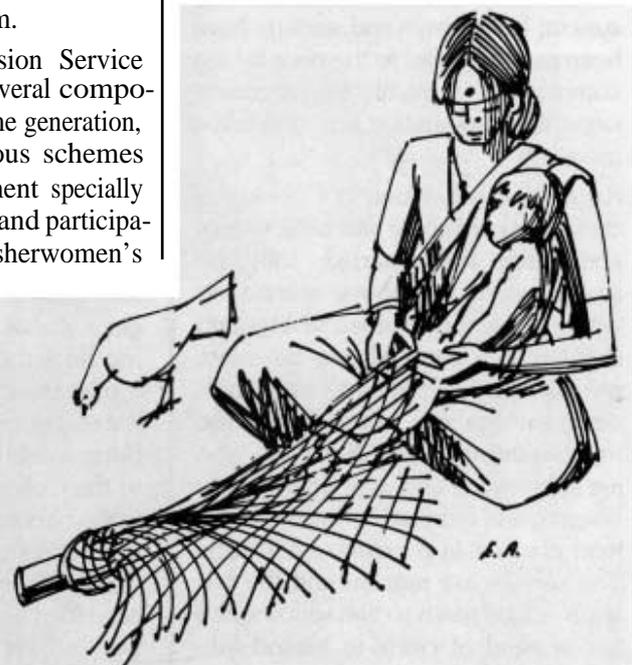
fisherwomen, of whom up to 97 per cent are illiterate.

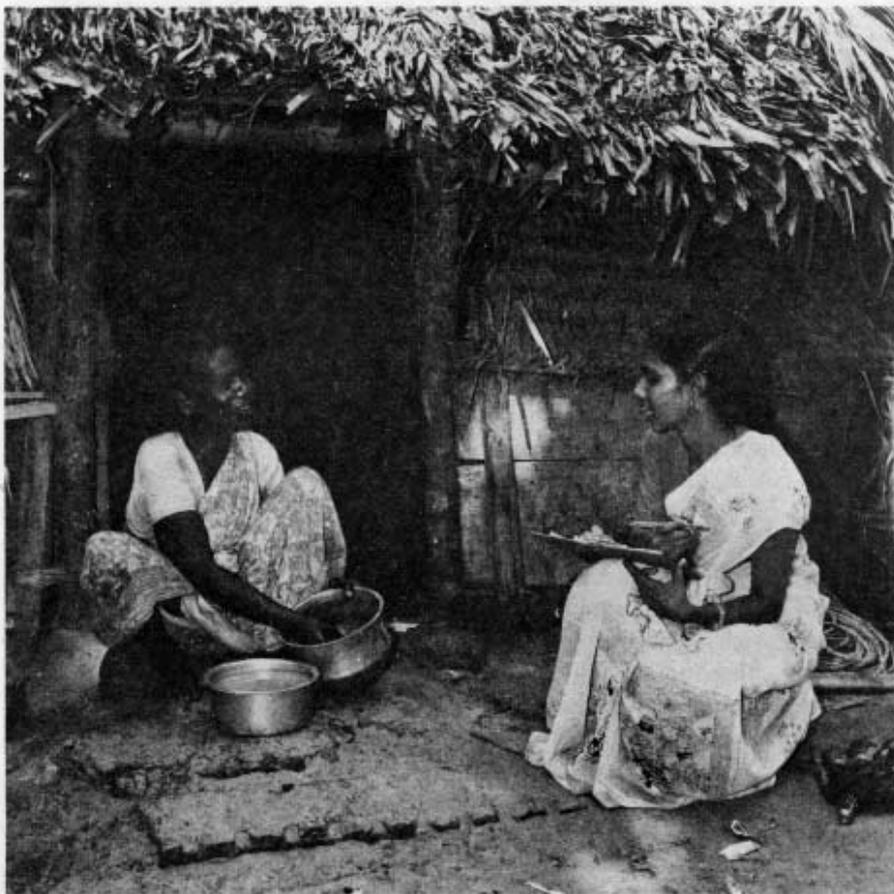
In Chemmencheri village of Chingleput district, an educated fisherwoman, trained in community development and given on-the-job training, was engaged

by BOBP in June 1981 as extension worker to stimulate and catalyze women's activities. Living in the village itself, she is helping the women to raise their incomes through net-making by hand.

To start this production unit, fisherwomen joined together to form a Mahila Samajam (women's society). There they discussed common problems and decided after several meetings to request a group loan to purchase nylon yarn and make nets which they could sell directly to fishermen in their village and in the neighbouring ones. The loan was granted, nylon yarn purchased and the nets are being sold. Repayment of loans has been reasonably regular because of group pressure.

Though net-making gives the women only a small side income in addition to their income from fish-selling, the





*The BOBP conducted a socio-economic study of three fishing villages of Tamil Nadu – Perianeelankarai, Chemmencheri and Pattipulam – during March-May 1981, with the help of 10 selected women investigators. Left: An investigator with a fisherwoman of Chemmencheri. Right: Investigators engage in a group discussion with village women.*

collective action and responsibility has encouraged them to join together for other activities. Through the Tamil Nadu government's cooperatives, the banking system has been introduced into fishing villages. Earlier these villages only had exploitative credit and savings schemes (chit funds) where the rich cornered the advantages. But under the banking system, both credit and savings have been made familiar to the poor fishing community – mainly to fishermen, since the cooperative has only male members.

Recently, fisherwomen of Chemmencheri village unfamiliar with bank savings and credit have started, with the assistance of the above mentioned extension worker, a small savings and credit union. Each Mahila Samajam member holds a passbook into which daily savings are entered. Elected representatives of the Samajam who are able to read and write do the book-keeping and deposit the savings into a joint account in a nearby rural bank. The savings are regular, and the first loans will be given to two widows who are in need of credit to extend fish-selling activities.

It is intended to diversify income earning activities in Chemmencheri, since in the long run the net-makers might not be able to compete with the large scale net making machines. Training courses are under preparation to teach new skills not directly related to the fishing economy – such as tailoring, embroidery, palm leaf work, etc. Fisherwomen have stood up firmly to the menfolk in demanding that their daughters be allowed to participate in training courses conducted outside the boundaries of the village.

The Mahila Samajam has taken up other problems too, besides that of low income. In joint action, fisherwomen have made use of their legal right to get a school for their children. At their meetings they prepared a petition for a primary school, collected money in the village and sent a delegation of ten fisherwomen to hand over the petition to the Collector. A smaller team went to the panchayat union office to discuss their school problem with the Education Officer. Several obligatory forms have been filled with the help of the extension worker. The chances of a school being set up for the 110 children between

the ages of 5 and 10 years are good. At present there is no common room and not even a shaded place where meetings of the Mahila Samajam can be held. The members have collected money among themselves to build a society shed to be made from local materials. Meetings can be held here and a day care centre for children can be run, which will enable the women to spend more time on fish-selling and net making.

The extension work has shown encouraging results in organising fisherwomen to cope with their problems regarding incomes, savings and loans and the education of children as well as in building bridges between the fisherfolk and the government officials. Moreover, uneducated women have been mobilised for collective action, thus building up their self-confidence – which will result in positive development of the fishing community, including men.

This small experiment in one village cannot have sufficient demonstration effect for future planning and programming. To achieve a demonstration effect, the fisherwomen's extension activities

## PLANNING FROM BELOW IN ADIRAMPATTINAM

*(Continued from page 27)*

Not only is the ball set rolling for the women, the men have also seen the possibilities now and they have organised themselves in 8 groups of about 15 to acquire a net for each member of the group instead of working as labour for someone else and 8 groups of 6 net owners who want to have their own boats constructed.

And again there was success. This time with the assistance of Gilbert Rodrigo, a BOBP contract social worker, and his government counterpart Robinson. Even greater success than expected! For a government subsidy was applied for, and a 30 per cent subsidy granted on all investment in nets and a 50 per cent subsidy on investment in boats.

*You may read more about the Adirampattinam project in the BOBP paper "Integrated Coastal Village Development in Adirampattinam Fishing Communities - presently under print.*

So it shows that the poor can be reached and do respond. The uneducated have-nots of Adirampattinam have taken up courage and intend to contact the appropriate institutions to fulfil their other felt needs such as non-formal education, security of building plot and water tanks. It shows that field workshops can be held and

unanimity can be reached in discussions between poor fishermen, the village elite, field staff and higher officials. It shows that cooperation between volunteer organisations and the government can strengthen each other's performance.

Does that mean we can already say that the Adirampattinam experiment is a full success? No, it is too early for that. The signs are promising — the costs are low, and the benefits already quite high, but a final conclusion can be reached only after an evaluation after, say, about two years of work. *Bay of Bengal News* will keep you informed.

### THE POOREST?

Widowhood, old age and sickness can reduce well-to-do fishing families to poverty in a short period. If we want to reach the old, widowed and those afflicted by disease, the social welfare system needs to be improved. The Adirampattinam project for coastal village development only reaches the able-bodied man and woman, but the poorest group can only be reached with social welfare schemes.

The schemes are there all right — on paper — but since the budget is too small many eligible people are on a "waiting list" and do not receive anything at all. And since even the most optimistic futurologists estimate that India will be able to pay for a covering welfare system only after 2,000 A.D., there is enough scope for funding agencies and donor countries to do a lot of good work for the poorest of the poor. Because as long as social welfare budgets are not raised, the most destitute cannot be reached. — F.W.B.

should also cover other villages around the pilot project village. Fisherwomen extension workers with basic education could be selected from the fishing community and given orientation and in-service training. One way of doing this would be to use the services of a voluntary agency that has experience in carrying out leadership and social awareness training programmes for women, as well as in running vocational training courses, and courses in health and family planning. Such an agency would work in cooperation with the Fisheries Department.

The Extension Service will then be able to improve the income opportunities for fisherwomen in the area; better their access to extension education for improved fish handling technologies; help access to low-interest institutional credit for productive purposes; and provide education and motivation for income and expenditure management and for decision-making in general.

Such activities, it is hoped, will enable fisherwomen to shake off some of the existing social and cultural constraints on their equal participation in social and economic development.

*A Rs. 100 loan — credit for fish marketing — being offered to a fisherwoman of Adirampattinam by the Collector of Thanjavur, Mr. S. Sundaresan. To his right is Mrs. Jaya Arunachalam, president of the Working Women's Forum.*



# PLANNING FROM BELO

*How can a development project help the vend poor? Bay of Bengal Programme's experiment in Adirampattinam, Tamil Nadu, described here by ex-*

So often it is said that assistance goes to those who do not need it in the first place and that those for whom help was really meant are not reached! This is not only said about programmes in fisheries in India, it is a world-wide phenomenon and extension researchers have paid a lot of attention to this paradoxical situation.

It was found that if specific attention was paid to the target group, and programmes drawn up in consultation with the villagers the "unreachable" could be reached and the paradox solved

To test this approach with small fishermen in south India we followed the FAO "Small Farmers Development Manual" and conducted field workshops in the fishing communities of Mirampathnam with all levels of the hierarchy involved to find out the most promising course of action. We found that four things are foremost in their

mind: credit, water, land security and education.

**Education** "You call it education" they told us "but we would rather say 'literacy training'. We cannot afford to send our sons to school for a full day - we need them out on sea - but we would like them to know reading, writing and calculation. But that can also be taught in one hour every evening. It must be possible for all of us to learn reading and writing in the next ten years.'

**Land Security:** The uncertainty about the right to stay on a certain plot sometimes results in cheap houses being built even if one could afford a better one. Because of the lack of available plots, some families cannot split up even though they would like to. If this security could be gained, then more houses could be built by the fishermen themselves, without any assistance.

**Water:** Especially near the coast, it is difficult to find fresh water. If you dig a well ten against one you hit brackish

water. So the only thing that can be done is Corporation water for drinking and a well-maintained tank for bathing and washing. If a water tank is far away, much time is lost every day. If water is not available diseases spread

**Credit** However important education land and water may be, the foremost demand is for small loans. For women, to set up fish marketing; for men, to buy fishing equipment for themselves. It is well known that banks are very hesitant to give out loans to fishermen, because they are notorious defaulters. Naturally! The loans are so difficult to obtain that they want to make use of it as long as possible.

Fortunately in Madras a credit organisation is functioning very successfully. It is called the Working Women's Forum, and was organised in 1970 by Mrs. Jaya Arunachalam around credit as a central theme. But credit only as a catalyst and encouragement to organise the women into groups and thereby create and develop leadership and



# W IN ADIRAMPATTINAM

*tension sociologist F. W. Blase, provides some answers : Involve the target audience; mobilize self-help and group action to generate social change.*

cooperation, and prepare for a social transformation.

The WWF organises everything to minimize costs and maximize opportunities for the women to come out of the slums and take up responsibility themselves. All women in need of a loan are organised in groups of 15 to 20 and they select among themselves a leader who will maintain group discipline and look after proper use of the money and regular repayments. As a result the banks have no complaints about defaulting and are willing to allow a higher loan after the first one is fully repaid. Members of the group may now take up leadership themselves and form a new group; and so the movement grew spontaneously and at present there are 340 groups in Madras alone and more than 10,000 members have been registered.

The Working Women's Forum is not concerned about what activities the women want to undertake. The women know their trade. Some are selling

vegetables or fruits, others fish or snacks. All of them start with small loans like 100 rupees and are able to step up their trade as a result of that, and later go in for amounts double or three times as high.

With their experience with fisherwomen in Madras, the Working Women's Forum had the courage to establish at our request a branch among the 600 fishing families in Mirampattinam in the summer of last year and the women with their group organisers – travelling up and down from Madras to Adirampattinam – overcame every possible obstacle put in their way by the bank. Loans were distributed in the last six months to all women engaged in fish marketing. And what is more, the first batch of 80 women properly repaid their loan and promptly went in for double the amount.

As the local moneylenders require ten rupees *interest* a month on every 100

rupees, it is not difficult for the women to meet *repayment* conditions of Rs.15 20 a month. The distribution of higher loans to the first 80 women is a strong incentive for the others to be regular also. The women are amazed that such cheap credit is available through a nationalised bank. The word is already spreading and women from neighbouring villages have come to enquire whether they can participate as well.

*(Continued on page 25)*

Small Farmers Development Manual. Volume 1, Field Action for Small Farmers, Small Fishermen and Peasants, Bangkok 1978, 206 pages; Volume II, the Field Workshop: A Methodology of Planning, Training and Evaluation of Programmes for Stateless Farmers, Fishermen and Landless Agriculture Labourers, Bangkok, 1979, 78 pages.



*Traditional fish merchants of Adirampattinam pause by a lake.*

# ASIAN FISHERMEN VOICE DEMANDS AT MADRAS WORKSHOP

Traditional fishermen from three countries – India, Philippines and Sri Lanka – who held a 12-day-workshop in Madras last November, agreed on a common 12-point charter of demands and resolved to set up a wider Asian Forum to unitedly press these demands. The Asian Forum will seek to “coordinate and expand the struggle of traditional fishermen in different Asian countries” and build up an information network to facilitate sharing of experiences.

Workshop participants – 26 fishermen and representatives of agencies that work among them – visited coastal areas of Madras and fishing villages of Kerala, then debated the problems of small fisherfolk on the basis of country reports.

They then drew up a list of 12 common demands as follows:

1. Reservation of a 50 km zone along the coastlines for the use of small fishermen and prohibition on the use of trawlers in these waters.
2. Strict implementation of the 200-mile Exclusive Economic Zone.
3. A total ban on purse-seining in the 200 mile EEZ.
4. Genuine representation for small fishermen in all levels of decision making and implementation of policies and programmes affecting the fishermen and the fish industry.
5. Abrogation of all unequal and unjust:
  - a) treaties with foreign governments and companies which adversely affect the national economy and the lives of the small fishermen.
  - b) laws relating to the fishing industry.
6. Effective and stringent measures against environmental and ecological destruction of marine wealth, particularly due to the pollution of rivers, seas and inland waters by the erection of effluent treatment plants.
7. An end to all eviction of small fishermen from their residential



areas in the name of:

- a) Tourism
  - b) Development programmes
  - c) National security
  - d) Industrialisation
8. Cancellation of all previous loans and creation of new credit schemes without onerous and usurious conditions.
  9. Development and provision of intermediate and appropriate technology to small fishermen.
  10. Higher wages for all workers in the fishing and allied industries.
  11. Provision of agricultural lands to augment the income of small fishermen which is eroded by the depletion of the natural fish resources and destruction caused by trawling and purse seining.
  12. Nationalisation of the fishing industry. (It was noted that the term nationalisation had different meanings in “each national situation”).

The workshop also elected a working committee to carry forward the proposal to set up an Asian Forum. Besides working to establish the Forum, the committee would keep up communication between groups of fishermen in each country, and establish contacts with groups in other Asian countries.

Ten days before the Madras workshop, an Indian association – the National Forum for Catamaran and Counfrl, boat Fishermen’s Rights and Marine Wealth

– met in Trivandrum November 1 to 4 for its third annual meeting. The Forum demanded that the Marine Regulations Bill, 1980, which has been passed so far only in three states – Kerala, Goa and Maharashtra – should be passed and implemented in the other maritime states of India – Tamil Nadu, Kamataka, Andhra, Orissa and Gujarat. It also urged insurance and compensation benefits for traditional fishermen “in view of the high risk and loss of life, as well as damage to fishing equipment, while fishing”.

Other demands of the Forum were similar to those made later at the Madras workshop. The Forum resolved to carry out a nationwide agitation to press its demands and decided to observe July 25 each year as “National Fishermen’s Day”.

On October 28, 1981, representatives of the Chingleput District Traditional Fishermen’s Movement, Tamil Nadu met at Madurantakam, 50 kms south of Madras, and drew up a 12-point charter of demands, a few of which are listed below:

- The community of fishermen in Tamil Nadu and elsewhere should be recognized as a scheduled caste community. All benefits and privileges offered to scheduled castes must be given to the fishermen.
- Fishermen should be given security and shelter during severe cyclones, floods and droughts, and losses incurred to life or property must be compensated by the government.
- Educated youth from the fishing community should be given preference in employment since most of them are at present unemployed.
- The government should nominate at least one leader of fishermen from Chingleput district to the Legislative Council to plead the cause of fishermen.
- Old age pensions should be offered to aged and resourceless fishermen, and vocational training to the disabled among the fisherfolk.