APPENDICES

A NOTE ON THE BANGALORE CONSULTATION

The Bay of Bengal Programme's whole year of learning, about people's participation (PEP) in small-scale fisheries, was put to the test at a Consultation held in Bangalore, India, in May 1987. The seminar, to discuss 'People's Participation in Small-Scale Fisheries Projects', brought together 45 participants from the seven participating countries of the BOBP (the Maldives, Sri Lanka, India, Bangladesh, Thailand, Malaysia and Indonesia), the Food and Agriculture Organization, the development agencies of Norway, Sweden and UK, ICLARM (International Centre for Living Aquatic Resource Management), and some non-government organizations (NGOs). The participants included planners, social scientists, fisheries workers, development experts and members of non-government organizations.

Inaugurated by Mr. B.C. Sarma, Joint Secretary of Fisheries, Government of India, the Consultation helped sum up the learning from the several activities briefly mentioned earlier and detailed in the following pages. The process was aided by the keynote address of Prof. Richard B. Polinac of the University of Rhode Island, U.S.A.

The Consultation then attempted to define 'people's participation'. The phrase, as usual, seemed to mean many things to many people, Such diversity tended to confuse, but, on the positive side, it allowed the concept to be used in a wider variety of circumstances at the Consultation than a more precise definition would. There was, however, a general consensus on the more precise definition evolved from BOBP's year of learning and presented earlier in this report.

Discussions in small groups provided insights into the needs, possibilities and problems of applying the concept of people's participation in small-scale fisheries development projects. What emerged were some ideas, concepts and directions which agencies could take note of in evolving people's participation approaches in their own context. The strategies, recommendations and guidelines offered in Bangalore as well as the problems and pitfalls pointed out could, it was felt, help generate more effective people's participation in projects.

In the next few pages, Prof. Polinac's address is given in some detail together with the gist of the discussions that followed and the conclusions drawn. In subsequent appendices, the projects appraised are considered in some length. Detailed descriptions and analyses of the several activities studied in BOBP are also provided. For those more interested in a capsule presentation, the activities studied have also been summarized before the detailed presentation.

I
The Polinac View and the Bangalore Consultation

Delivering the Keynote Address at the seminar on 'People's Participation in Small-Scale Fisheries Projects', held in Bangalore, Prof. Richard R. Poilnac of the University of Rhode Island, USA, discussing possible definitions of 'people's participation', identified seven levels of participation:

Participation as ordered: At this, the lowest level, fishermen are 'ordered' to 'participate' in, for instance, building a dock for their community, but they had contributed nothing to the decision-making process that resulted in the decision to build a dock.

Participation in choosing between predetermined alternatives: At this, the next highest level, 'community leaders' and/or 'fishermen' are brought together and requested to vote on alternative fisheries development possibilities (e.g. building a dock, constructing a boat shed, or making a market place). The participants, again, had contributed nothing to the decision-making process that resulted in the alternatives.

Participation by providing some minimal input: At this level, fishermen and 'community leaders' provide some information and suggestions about their perceived needs to a representative of a development agency visiting the community to assess conditions there. On the basis of this information, gathered

in interview, the agency makes its own decisions on the development needs of the community.

Participation by providing extensive inputs: At this level, the representative of the development agency spends more time in the fishing community, interviewing more fishermen and 'community leaders' than at the preceding level and conducting a survey among the fishermen to determine their perceived needs. Once again, however, the information is used by the decision-makers of the agency to produce development plans, without involving the community in the decision-making process.

Participation in the critic3l evaluation of the development scheme: At this level, the fishermen and/or 'community leaders' are requested to evaluate the plans of the agency, which subsequently used these evaluations to modify the plans if necessary. The fishermen, in this case, are not passive acceptors of the plan and make some contribution to it.

Participation by working with the planners: At this level, the participants collect and/or provide relevant information, as well as contribute to the creation of the development plans. They also monitor and evaluate the project during implementation and follow-up.

Participation in the creation of their own development plan: At the highest level, the fishermen, helped by scientists, develop a plan that they voluntarily submit to the responsible development agency. Subsequently, the community gets not only actively involved in the project as it develops, but it also monitors and evaluates it.

These seven levels of people's participation, ranging from no input at the lowest level to full control at the highest, focus primarily on the *quality* of participation in the decision-making, Prof. Pollnac stated. But there is also a *quantitative* dimension, he went on. What is the proportion of potentially affected people who are involved in the process of participation?

What types of fishermen are involved? Is it only the well-off or is it only the 'community leaders' who may or may not represent

The seven levels of people's participation — Dr. Richard Pollnac's concept as interpreted by BOBP artist S. Jayaraj.

the desires of the common fishermen, or is there representation of all those potentially affected by the project?

In what part of the project phase does people's participation take place? During identification or planning, or implementation, or monitoring and evaluating?

How is the interaction in the course of people's participation formally generated? Through a cooperative or a fishermen's association, through a group of fishermen holding a meeting or through the agency merely interviewing some fishermen?

Professor Poilnac suggested that people's participation could, thus, be precisely defined in terms of the following six dimensions:

1. Quality of participation in decision-making, evaluated in terms of the seven levels listed above.
2. The phases of the project cycle in which people participate: e.g. project identification, planning, implementation, monitoring, and/or evaluation.
3. The proportion of potentially-affected fishermen actively involved in the project.
4. The rep resentativeness of the potentially-affected involved in the scheme.
5. The organizational form of the scheme.
6. The amount of participation in terms of work or money inputs.

Speaking of the role of people's participation in fisheries development, Prof. Pollnac cited two cases of fisheries development failing due to inadequate people's participation at various stages in the project cycle.

The first case was of a new market built as part of a West Asian development effort for small-scale fishermen. This market, a beautiful structure overcoming the problems of sanitation, storage and crowding associated with the old, never got to be used.

The Lilure of the project was a result of failing to note that the traditional fish market was located at a centre of population density a and commercial activity. The traditional market place was thus, a scene of intense social interaction. The new market, on the

other hand, was isolated from other marketing activities and away from the centre of population. It also isolated the new fish sellers in linearly distributed stalls – depriving them of the warmth of interaction with the customers.

If fishermen, fish-sellers and consumers had only been asked to contribute to the project design, these incompatibilities would not have occurred, subsequent interviews indicated.

In the second case, it was planned to establish a fishermen's marketing co-operative in a relatively isolated part of a Central American country. The government had negotiated a development loan; one condition was the establishment of fishermen's co-operatives. The government paternalistically guided the development of the organization from the top down, with little real input from the fishermen. Result: Fishermen were dissatisfied that they did not get paid for their catch on delivery and that no one was in the cooperative to deliver fish to the pick-up vehicle which frequently arrived at the co-operative late at night.

Government ignored the complaints, considering them trivial. Not long after, the organization collapsed, and fishermen returned to the traditional middlemen. If only people's participation had been encouraged in monitoring and evaluating the implementation phase of the project, the organization could have been saved.

The two cases, typical of fisheries development failures, could be multiplied many times over in all parts of the world. They both clearly indicate, Prof. Pollnac emphasized,

- that it is only the local people who can help identify specific changes necessary in fisheries projects to achieve the goals intended by the planners;
- that it is only they who can help design an appropriate project for the necessary changes identified;
- that they can play an important role by monitoring the impact of the changes and suggesting modifications where necessary; and
- that their evaluation of its impact is essential.

They may not have all the knowledge necessary to design adequate implementation strategies in every case, but their

technical competence should not be underestimated, Prof. Pollnac pointed out. The eventual solution, he suggested, was effective cooperation between the small-scale producer and the development technicians.

Discussing the role of fishermen's behaviour patterns, Prof. Pollnac cited several behaviour patterns in fishing communities that should be taken note of if people's participation is to succeed in these communities. These include:

Fishermen's mobility: Due to predictable variations in the availability of the target fish, fishermen either follow the fish or engage in other occupations during the off-season, which may also involve shift of residence. If the fishermen move, they may or may not be accompanied by their families. This kind of movement of people has obvious effects on the way an agency should structure a programme involving people's participation.

The role of women: Due to limited space on fishing vessels, the hazards of the workplace and child-care duties, women in small-scale fishing communities rarely go out to sea to fish. But there are other productive activities performed by them, such as shell-fishing along the shore, or in tidal pools, and buying, processing, and/or selling fish. This division of labour enables more of the profits from fishing to be kept in the family.. In societies where women participate in this manner, it is more appropriate to deal with fishing *families* in schemes involving people's participation rather than with fishermen alone.

A woman in a fishing community generally has more responsibility than in other communities, having to represent her husband, who is either absent on long trips or out fishing, when government officials arrive on fact-finding missions. She is also usually an active participant in the family fishing firm. Hence, her importance in programmes of people's participation cannot be minimized.

Co-operation within fishing crews: The relatively high degree of cooperation and egalitarianism within fishing crews

frequently leads to the misconception among development workers that fishing communities are characterized by a higher degree of co-operativeness and cohesion. But, in fact, there is intense competition between crews in many fisheries, due to the existence of highly competitive sub-groups based on crew-membership and kinship links. Hence, establishing an environment for effective, co-operative participation among fishermen may not be as easy as it appears at first glance. Rather than have multiple participative groups, it would he better to establish common grounds for co-operation between the competing groups by emphasizing that, while the fishermen may compete in harvesting fish, they should co-operate in making a development programme work.

Insulation of fishing communities: Fishing communities are generally insulated, both socially and geographically, from other occupational sub-groups. This insulation is enhanced by their separation from land-based society while at sea. Such 'social insulation' of fishing people can be a problem, because people who are isolated are frequently highly suspicious of outsiders who enter their community with promises of development and change. If properly handled, however, the sense of community that develops in an insulated group can be used to advantage to form effective people's participation groups.

Fishermen's organizations: That a fishermen's organization is involved in a scheme of people's participation does not necessarily mean that true people's participation will take place. Organizations frequently benefit only the already wealthy and influential. In other cases, groups which cut across local factions will either not he formed or will be short lived. Further, many of the communities undergoing development are traditionally authoritarian in one form or another.

In these cases, fishermen will either resist organization into egalitarian groups or the organization will reflect the existing social structure and perpetuate the types of inequalities that development should, ideally, eliminate. Keeping this in mind, it is clear that the most effective means of promoting and

sustaining people's participation is through the use of some sort of fishermen's community organizations, such as fishermen's co-operatives.

Discussing the types of information needed to implement participative projects, Prof. Pollnac suggested several specifics. But these will, of course, vary with the type of people's participation to be implemented.

The information needs suggested by Prof. Polinac include knowledge of the group structure of the fishing community. Intergroup rivalries and unequal representation of different social groups in participative programmes, which could generate conflict and inequalities, must, for instance, be known.

Information concerning traditional communication methods is also needed. Besides identifying the language to be used in communication, key individuals to be trusted as information sources should also be identified.

Knowledge about distribution of power in the community is essential. So key actors in community power relationships should be identified in order to deal with them. Data requirements include a *description of both official and unofficial political organizations, identification of opinion leaders, and individuals who have economic power* over the fishermen, such as middlemen and moneylenders.

Identification of potential participants is basic. Since most fisheries development projects are aimed at improving the status of the disadvantaged, they should be identified early so that the project does not miss this target group and, instead, helps the already advantaged.

Finally, comment from the intended beneficiaries should be sought on the type of people's participation proposed for their community, in order to assess its appropriateness.

It must be remembered, Prof. Pollnac pointed out, that apart from all this general information on the community there is other information required, which varies according to variations in the quality of the people's participation envisaged by the agency in the decision-making process.

If fishermen are expected to provide the information necessary for decision-making, then appropriate ways suited to the local context must be evolved to elicit the information. Similar considerations hold in involving fishermen in the decision-making process. In addition, it is important to fmd the appropriate method for presenting them with the information to be used in decision-making. A detailed study of traditional communication channels can help in all this, Prof. Pollnac felt.

'Whatever the manner of eliciting this information, some of the varying information that Prof. Poilnac felt was required includes:

The number of fishermen actively involved in the participatory process. This has important implications for the structure of the participatory scheme. Techniques that work with a few active participants become cumbersome with many. Observation of the decision-making processes in the fishing community might provide some insights into effective techniques to handle increasing participation.

The representativeness of the participation: Where there is concern about the representativeness of people's participation, a basic description of the fishing population, in terms of numbers, location, group membership, distribution of fishing types and wealth, is needed to identify potential project beneficiaries.

The representativeness of organizations: If an organization exists, how representative is it ? Existing fishermen's organizations also need to be evaluated in terms of their future potential. It is a well-known fact that the failure rate among fishermen's organizations, especially co-operatives, is relatively high. An indicator of the future of an organization is the members' perceptions of its success in fulfilling their expectations.

The money or work participants would put into the project: It is relatively easy to incorrectly evaluate the amount of time or work participants can donate to a project. Just because fishermen are seen sleeping during the day does not mean that they can use that time to work on a project. They may be sleeping because they fish at night, or they may be resting because malnutrition does not provide them with enough energy to do a full day's work.

It is also difficult to assess how much cash a fisherman can spare for a project.

Frequently, subsistence level fishermen have no slack capital for investment in a project. Interviews with key informants, on their perceptions of available time and capital, could help.

Pointing Out the many problems of organizations in fishing communities, Prof. Poilnac advised that, where fishermen's organizations have to be newly developed, a wide range of information is needed to maximize the organization's fit to the society and culture of the fishing community. This would include information of groups in the community, in case they are to be the basis for the new organization. Another consideration is whether the proposed size of the new organisation is compatible with traditional group size; this is necessary to ensure that traditional forms of group interaction can cope.

One problem frequently affecting the performance of fishermen's organizations (especially co-operatives), is that they are often based on models developed for farming or industry; hence they are not appropriate for the needs of fishermen. If the former's strict regulations cannot he adapted to the fishing community, then the development of another form of association more appropriate should be considered.

Residential mobility of the fishermen is another important factor to be considered. Inappropriate residential requirements should not be imposed on the organization.

The characteristics of potential members should be studied. Will only active participants in the fisheries sector be permitted membership? How heterogeneous are the proposed participants in terms of group membership categories? Do the fishermen have sufficient education to understand the routine operations of the group? If there is insufficient education, the organization should develop no functions that are beyond the ability of its members to understand (at least superficially).

Government support is also a consideration in developing fishermen's organizations. The organization must be congruent with government goals, if opposition is not to develop. The government

should also support effective programmes for such organizations. And, finally, if the government is involved and it makes more than one of its agencies responsible for aspects of the organization, problems could result.

As regards the operations of the organization, adequate leadership should, as mich as possible, be within the fishing community. Fishing schedules should be so arranged that organization meeting times pose no conflicts. And, to ensure attendance at meetings, they should be held only in culturally appropriate contexts.

Summarizing his position, Prof. Poilnac contended:

I. People's participation in development projects, though much discussed and advocated, is rarely successful.

2. People's participation, a complex concept composed of at least six dimensions, can vary according to the concept of each participatory project; hence, it is important to be specific about what is perceived as participation appropriate for a particular project.

3. People's participation has an important role to play in the successful implementation of fisheries projects.

4. Depending on the type of participation considered necessary for a project, the information needed for effective implementation will vary. But without the appropriate information, participatory programmes stand little chance of success. Most information can be collected in a relatively short time from key informants and small samples of potential participants. The contribution this information can make to successful people's participation will more than compensate for its cost.

5. People's participation is not, as suggested by some, time-consuming; in fact, the time taken to establish effective participatory programmes is not very much, considering the value of participatory inputs and their role in successful implementation of the development project.

DISCUSSIONS AT THE CONSULTATION

The discussions that followed emphasized that, since people's participation is something that evolves, the activities planned should be of the type that would enable the growth of participation.

But the more participatory development was discussed at the Consultation, the more it appeared that what was being talked about was the participation of people in the work of the development agency, whose intention, of course, was to develop the people concerned. This, it was agreed, was the usual reality and, perhaps, the only practical way of beginning development action, but a question raised by many was whether the right way wasn't participation by development agencies in the people's activities.

There was a need, it was felt, to shift from the developer-developee hierarchy to a working partnership, which would require the agency to hold back on what it believes to be true, scientific and modern, and begin a dialogue that, in time, will enable the people and the agency to come to the same belief. For this to evlove, both parties have to be willing to change from their initial positions on understanding and objectives to a negotiated *via media,*

This, however, raised other questions. If a fisherfolk community has the capability to negotiate and commands the respect of the development agency, it probably does not need developmental aid at all. But if it does, the process has tobegin between 'unequal' partners. How then could it be ensured that the less equal partner got a fair deal? Obviously, as in industrial relations, they would have to be empowered. But another method that can also help is to provide education about the negotiation process, training in presentation and negotiation skills, and knowledge about the subject of discussion, thus enabling the fisherfolk to make their negotiation with the agency the two-way process that it should be. This, it was agreed, was a responsibility that agencies must shoulder. But it was pointed out that the agency should get educated too, and ensuring this was the people's responsibility. Otherwise there was the danger of education about the negotiation process being reduced to one of educating the community to agree with the agency!

Another aspect discussed was how to organize people for participation. Participatory development, by its very nature, meant working with groups and communities and this implies formal and informal organizations. These organizations would have to be responsible not only for implementation but would also have

to be empowered to make the agency accountable through a process of monitoring and evaluation.

But with agencies working to deadlines, over short periods, the problem was what happened to the local organizations and projects when the agencies left. If an activity was to be self-sustaining and self-perpetuating, the organization created, or adapted, had to have permanence and the ability to sustain the community's participation. This was not easy. The general experience of agencies was that people's organizations were often reactive and short-lived, tending to act as advocates and brokers when external stimulating factors existed, but collapsing when they were no longer there.

The existence of organizations, however, did not ensure people's participation. What appeared to be important was the way people perceived the organizations and their functions. Co-operatives that were perceived as statutory channels for government benefits, functioned differently from those perceived as a collective means of fulfilling needs.

It was felt that imposing organization on people did not contribute to effective participation, the dismal record of co-operatives providing ample proof of this. Therefore, the alternate approach was to study and learn from the conditions under which authentic forms of organization could meaningfully emerge. Often a diversity of organizations was necessary considering the varied, often competing and changing interest in the fisheries sector, and the fact that a fisherman might enter into several alliances for different reasons.

The factors that appeared to have most often spawned organizations were many, but one that was becoming increasingly important was a concern for conserving resources and ensuring egalitarian access to benefits. Fisherfolk appeared to have organized themselves most often to control the resource and the market.

It was felt that, given the socio-cultural distance betweenthe agency and the community, the role of NGOs and service organizations, who, through solidarity, had built up confidence and rapport with fisherfolk, would become increasingly important as means of paving the way for agencies to work fruitfully in a difficult area. Given the disorganized state of fisherfolk, their social and geographic

seclusion and their lack of political entitlement, NGOs would be important in the transition period until real organizations emerged amongst fisherfolk.

CONCLUSIONS

After all was said and done, and the implications digested, one question remained. How does one DO participatory development? From the studies and cases read at the Consultation, and presented in the following pages, techniques, methods and strategies surfaced, but even as the participants came to grips with the concept of participation, the danger of cut-and-dried approaches was acknowledged. In the end, participation is a human act and grows out of beliefs and attitudes – those of the people and, even more important, of the agency. Participation, it was discovered, was more than a technique; it was how the technique was put into practice, the feeling that went into it and the attitudinal stance. There was a need for agencies, it was felt, to reflect honestly on what they wanted to do, why and how, before evolving techniques, methods and strategies.

Development, it was agreed, sets out to change people, hopefully for the better, and participation changes the manner of development. It also changes agencies and their approach to development. If those who participated in the Bangalore Consultation had absorbed these concepts, a successful beginning would have been made to ensure participation in practice in several countries in the Bay of Bengal region.

The high level official participation at the Consultation reflected the attention being accorded the subject. A result of this participation could well be the introduction, in all future fisheries projects in the region, of a special component designed to ensure active participation by target groups. That alone will ensure the kind of fit between project and people that results in success.

II
The Areas of Activity While Studying 'People's Participation'
– A Summary

1.0 RESEARCH ACTWITIES

1.1 A bibliography on people's participation in rural development in general and in small-scale fisheries in particular was produced, based on citations taken out of the FAO, Rome! (DIALOG) database, that of ICLARM (the International Center for Living Aquatic Resource Management, Manila), and **BOBP's** own library.

1.2 A Consultation organized by **BOBP** in 1979 had, in looking at the social feasibility of fisheries development, suggested factors that affect the success and failure of fisheries co-operatives. Using that as the basis, a socio-cultural and organizational study of fisheries co-operatives in Tamil Nadu, India, was conducted by a BOBP consultant. The study focussed on marine primary co-operatives, fisherwomen co-operatives and federations of co-operatives. It also analysed macro development trends in the fisheries co-operative sector, identified factors that may have affected growth trends between 1960-1985 and undertook detailed case studies of a few co-operative societies (and of organizations that are not legally co-operatives but which function as such). The prime objective was to understand the actual working of co-operatives and to study the perceptions and aspirations of various categories of people

(co-operators, fisheries department staff, politichi leaders and co-operative leaders) and analyse the relationship between the two.

1.3 BOBP contracted ICLARM, Manila, to undertake a study of indigenous and self-regulatory approaches to fisheries management which have been traditionally practised by some Asian fishing communities in 'unmanaged' fisheries. The investigation was a combination of a desk study of secondary social science sources and field-based case studies, and tried to identify the methods and strategies used, on the one hand, and the environmental, socio-economic and cultural factors that either enable or hinder such activity, on the other.

1.4 The Government of West Bengal in India has put into practice a unique experiment of participatory development planning at the village level by which its development planning in the state has been developed in a bottom-up fashion. A consultant in Calcutta undertook for BOBP a detailed study of the effort, including field analysis in villages. The study tried to understand participatory approaches in the context of government activity and focussed not only on methods, techniques and result, but also on the political philosophy and policy that gave birth to the strategy.

1.5 To learn from the experience of fisheries organizations in the industrialized nations and their efforts at fisheries management and development, Mr. RolfWillmann of the Fisheries Department of FAO, Rome, undertook for BOBP a desk based study. The idea was to understand processes and to identify factors which enable or hindered success. The study briefly describes various types of fisheries organizations; traces the origins of the organizations in order to identify conditions that enable such formations; and draws lessons from such analysis to present-day participatory efforts in the developing world.

Subsequently, these studies and a keynote address by a specialist in the study of people's participation in several parts

of the world were discussed at the May 1987 Consultation in Bangalore, and an attempt was made to arrive at a working, operational definition of 'people's participation'. This definition was used as a guideline to assess the other activities of the project, those listed below.

2.0 ACTION RESEARCH

2.1 The Tamil Nadu Government is interested in promoting seaweed culture, especially in areas where collection is already practised. Through a minor field study, BOBP had already identified the environmental and technical aspects which suggested the feasibility of such culture. It was decided that seaweed culture trials should be undertaken to determine technical and economic feasibilty.

Prior to the trials a participatory planning exercise was undertaken in 15 villages of Ramanathapuram District in Tamil Nadu, using three social scientists trained in participatory methods to explain to the community the resources of the region, the practice of seaweed culture and its implications to them, while, at the same time, learning about the communities. Two villages finally committed themselves to the activity. They formed organizations which would manage, supervise and work on the culture, they allotted space for the culture and came up with negotiated, written agreements of work plans.

The activity is now progressing as planned by the communities, with BOBP and the Tamil Nadu Government providing knowhow and some funds. The effort has also enabled the communities to identify some of their other problems, and work is now in progress that will enable them to organize themselves towards some solutions. This effort helped BOBP to develop rapid low-cost approaches to participatory development and planning.

2.2 In a village alongside the Chilaw lagoon in western Sri Lanka, BOBP started a shrimp pen culture with the

Fisheries Department of the Government of Sri Lanka. Local fishermen were hired to work on the project. A people's participation component was later added, to enable the local fishermen, through their Social Development Organization, to not only actually participate in the trials but also to identify other problems and come up with a plan to develop their village. The effort was undertaken for BOBP by Dr S P F Senaratne, Consultant Anthropologist, with two of his colleagues and it involved in-depth studies and discussions with the fisherfolk.

The effort is still in progress and is leading towards the SDO taking over the local management of the trials and learning about the technology in the process. It is also evolving towards the community developing a development plan for its village. Over six months of study, the participation levels have been seen to grow from indifference and hostility to one of tolerance and intrest. The learning from this activity continues.

Compared to the seaweed culture project, the effort in Chilaw was a more rigorous social science-based one and more time and cost-intensive. It has generated another approach to participatory planning and development.

3.0 APPRAISALS

BOBP's experience and the experience of several other projects, some sponsored by government agencies and some by international aid agencies, were appraised to develop a series of case studies. The objective was to understand their understanding of participation, the way it was operationalized and the factors that aided or hindered the process. The guidelines listed earlier were used by the investigators in their studies, which were based on field visits, discussions with staffand beneficiaries, and perusal of project documentation.

3.1 The experiences of BOBP which were appraised were:

a. *In aquaculture:* Finfish cage culture in Phang Nga, Thailand, and shrimp pen culture in Killai,Tamil Nadu, India.

b. *In fisheries technology:* Development of Beach Landing Craft on the east coast of India and the introduction of High Opening Bottom Trawls in Tamil Nadu, India.

c. *In extension:* The women's link-worker extension approach in Tamil Nadu, income-generating activity for fisherwomen in Sri Lanka, institutional credit for fisherfolk in Orissa, India, and non-formal primary education for fisherfolk children in Orissa.

3.2 The Ministry of Plan Implementation in Sri Lanka has a Change Agent Programme (CAP) meant to involve rural people in development. The project trains change agents who enter villages with the twin objectives of familiarizing the community with government benefits and schemes they can get, and of mobilizing small 'producer groups' of people with similar problems and backgrounds to evaluate their problems to collectively seek solutions.

The programme is unique because the change agents do not have any material goods or funds to distribute. They can only help people to think and act collectively. The other unique aspect of the programme is that it does not deal with the entire community and, therefore avoids the divisive nature of such efforts.

3.3 The Ministry of Fisheries of Sri Lanka in 1986 began to promote Social Development Organisations in all fishing villages with the aim of getting fisherfolk involved in planning and implementing development activities. The programme was intended to overcome the problems faced by co-operatives and the existing fisheries extension societies. The evolution and impact of SDOs were appraised as part of this study.

3.4 Norwegian Agency for International Development (NORAD) was requested by **BOBP** to prepare a case study of one of its projects which included participatory approaches. The case study highlighted significant issues and compared two NORAD-supported integrated rural development programmes in Sri Lanka, one in Hambantota district and the other in Moneragala district.

In the former, the activity began with little or no participation, but overt participatory approaches were later introduced with some success. In the latter, the experience of the Hambantota project led to participatory planning being incorporated from the very beginning.

3.5 in response to a similar request, Danish International Development Agency (DANIDA) prepared a case study of one of its projects in Bangladesh. This began joint activity of DANIDA and the Bangladesh Fisheries I)evelopment Corporation (BFDG). The aim of the project was to build mechanized boats, to replace boats which had been destroyed in a cyclone, and had a soft credit component to enable the targeted poor to acquire the boats. As the project proceeded, it became obvious that the targeted fisherfolk had not benefited from the scheme. To reorient the project, and to separate it from BFDC/ DANIDA operational control, the local staff was organized into an NGO to continue the effort in a more participatory manner which would benefit the target population.

3.6 The Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP), in Dhaka, Bangladesh, undertook an appraisal of a regional programme it had undertaken with governments to help fisherwomen through participatory approaches. The projects, on completion of the agency's terms, were continued with the help of local NGOs and support from national governments. The appraisal documented CIRDAP's experiences in the Philippines, Indonesia, Sri Lanka and Vietnam.

4.0 MEETINGS

The **BOBP,** during its first eight years, concentrated on developing appropriate technologies for fisherfolk and on extension activities, such as education and credit schemes, which could help the fisherfolk to improve the quality of their lives. There was some people's participation in all these BOBP projects, but the necessity for much more of such participation has been felt in the present stage of

BOBP activity, which has been concentrating on extension projects. To better understand people's participation and the role of NGOs in making such participation possible, BOBP has organised, from time to time, workshops and seminars in the anticipation that the deliberations of these meetings would help its learning on people's participation.

4.1 A consultation of groups involved in fisherfolk development in South India was sponsored in Madras by BOBP to discuss the strategies, methods and techniques that encourage or hinder participation by the people for whom the projects were meant. Identification with the fisherfolk, appreciation of the close-knit nature of the community, education of the fisherfolk to spot their problems and find solutions to them, organizing them, suggesting appropriate technology, protecting the fisheries resource and enabling the growth of a people's movement were all considered necessary for NGOs being successful in getting people to participate wholeheartedly.

4.2 BOBP representatives participated in a workshop held in Colombo to discuss 'Popular Participation in Fisheries Development in Sri Lanka'. That Fisherfolk must identify their needs and suggest the solutions that would meet those needs was considered essential; top-down planning was an anachronism of the past. A permanent fisheries sector NGO secretariat was also suggested and welcomed as a concept, but it was felt that any such structure should be a loose one and have no authoritarian powers over its members. However, these NGOs did not seem too concerned with the operational problems of people's participation; they appeared to he more concerned about resource depletion, environmental damage and craft ownership, all of which were discussed in detail.

III
Research Activities

Li A BIBLIOGRAPHY ON PEOPLE'S PARTICIPATION

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1.2. THE ROLE OF FISHERFOLK CO-OPERATIVES IN PEOPLE'S PARTICIPATION

As a matter of policy, the various state governments prefer to channel developmental and welfare inputs through co-operative societies. But the performance of co-operatives in the fisheries sector has generally been poor.

At a 1979 BOBP workshop, the reasons for the success of some co-operatives were listed as:

1. Mass participation
2. Strong and devoted leadership
3. Multipurpose character
4. Need for realising common interests
5. Homogeneity; and
6. Economic self-support.

And the reasons for failure were listed as:

1. Imposition from above
2. Exploitative leadership
3. Corruption
4. Infiltration by outsiders
5. Political interference
6. Complex and confusing legislation on co-operatives and
7. Dependence on subsidies and other external sources of funds.

Six years later, in 1985, BOBP undertook a study of a few fisheries co-operatives in an Indian state, in order to suggest methods and strategies that would enable co-operatives to achieve their objectives. During this study, the BOB? team discovered the common problems fishermen faced, what they needed to counter these problems and the role of the co-operatives in answering these needs.

Problems and Needs

Fisherfolk in the state, despite their different religious and caste backgrounds, had certain characteristics in common, which, in turn, gave rise to several common problems. These problems were, and still are:

a) The sea is an open access resource and managing it to ensure a sustainable yield is a difficult and complex community activity that is rarely undertaken.

b) The ability to earn depends on the ownership of assets such as craft and gear. These are inequitably distributed due to social and economic imbalances. Many fisherfolk are, therefore, dependent on other people's assets for a livelihood.

c) Fishing is a seasonal activity. Alternative sources of livelihood are necessary, but do not exist in most cases.

d) The biggest demands and the best prices for fish are from urban and export markets which fisherfolk cannot themselves reach. Marketing is increasingly in the hands of middlemen whose hold is more secure because they extend credit to those whose livelihood is fishing. This seizure of the market by outside forces particularly affects the womeii who, traditionally, sold the fish at the nearest market.

e) Fisherfolk are socially isolated, are low in the caste hierarchy and lack political clout and organization. So the infrastructure development benefits needed by any society do not often reach them.

f) Fisherfolk are very co-operative and egalitarian when working as a boat crew, but are unorganized and often un-co-operative as a community.

g) While the total catch is rising, the catch per fisherman is dropping. This may be due to an increasing fisherfolk population, poor resource management or overfishing by mechanized craft.

h) Fisherfolk are a poor business prospect for credit-granting agencies, having, as they do, few assets. Therefore, their usual creditors are middlemen familiar with the local situation, rather than the formal fmancial agencies which stick to rules unsuited to fisherfolk.

Faced with these problems, what the fisherfolk felt they needed were, in order of priority;

1. Credit to meet consumption and welfare requirements
2. Access to infrastructure facilities such as roads, better housing, drinking water, health service, etc.
3. Ways and means to increase the prices they receive for their catch
4. Means to generate income, especially during off seasons and times of poor catch
5. Insurance for themselves and for their craft and gear
6. Simpler, less bureaucratic and less corruption prone ways to obtain the above
7. Credit for craft and gear and
8. New technologies to improve fishing production.

Local experts, and others associated with fisheries, tended to agree with this list, but not the priorities. They also added a few other needs, such as:

- Better technology to ensure that better quality fish reaches the market in order to fetch better price
- Alternate income schemes and credit for it, – particularly for fisherwomen
- Elimination of middlemen
- The need to resolve competition from mechanized sectors

- Appropriate craft and gear technology, low in cost and easy to maintain, and which enable artisanal fisherfolk to move out of the inshore region and exploit as yet unexploited offshore regions and
- The development of fishery resource management schemes to avoid overfishing and to ensure optimal sustainable yields.

The Organization Needed

A hypothetical organization that would answer most, if not all, of the needs that the fisherfolk had mentioned, would have to:

- evolve from the needs of fisherfolk as they perceived them;
- be initiated, run and managed with credibility and strength;
- evolve methods of generating surpluses, creating savings and using the leverage of savings to attract outside credit;
- resist exploitation by middlemen and merchants, and assure fisherfolk of better prices for their catch by evolving alternative marketing and credit systems;
- develop processes by which problems are analyzed, options for solutions are generated, and actions are taken to implement decisions;
- ensure democratic means of management and equitable means of distributing benefits and surpluses that would invo!ve all types of fisherfolk, the rich and the poor, those with assets and those without;
- reduce dependence on outside sources of credit and support, not only to be self-reliant, but also to survive in a situation where such outside sources do not really exist; and
- do all of the above, using the strength of the group because, individually, the fisherfolk are weak and susceptible to manipulation and exploitation.

Theoretically, at least, co-operatives fit the bill. But what is a co-operative? To paraphrase the ICA definition:

> A co-operative is a voluntary socio-comrnercial formation.
>
> Its management ought to be democratic: both the elected members and employees ought to be effectively and continuously accountable to the membership.

A co—operative seeks economic viability through the patronage of its members; surpluses are generated through cooperative synergy and savings, and not from external credit and the investing of share capital for high interest; it ought to have a high equity-to-debt ratio, with equity being primarily from members.

There should be equitable distribution of surpluses and benefits.

Education and training should play important roles in making members better co-operators and in giving them work skills.

There ought to be co-operation among co-operatives.

A mix of perceptions

Govermnent sees fishermen's problems as shortage of credit for purchase of craft and gear, and inappropriateness of existing equipment. Therefore, it sees its primary role as providing fisherfolk with access to credit and modern technology. But th resources available are enough for only a fraction of the fisherfolk and selecting the beneficiaries is socially and politically difficult. Government, therefore, generally perceives the co-operative as a means to legitirnise sdection, and considers it a channel for credit and technology, with an identifying and screening process which also legitimises a socially and politically tricky act.

Co-operatives are, therefore, created by fiat, instantly, with an offer no community can refuse: credit and technology. Very little effort is made to train people to run cooperatives, explain to them what a cooperative is supposed to do, and inform them of the only two criteria to judge the success or failure of a cooperative, namely:

1. Is the loan repayment regular and sufficient? and
2. Is the cooperative conflict-free?

Politicians view the cooperatives as a channel for political gifts, with the added benefit that the gifts are being paid for by the exchequer.

Yet another government perception of cooperatives results from the large funds that are pumped into the system to benefit the people. With large funds flowing, there is a need for control and this results, in consequence, management by government, which steadily erodes the spirit of cooperation.

The fisherfolk as revealed in the study perceive the cooperative society solely as a source of funds. The lack of functional cooperation was obvious, for there was no change in the way fishing activity was organized. And where marketing was undertaken by the cooperative, change was only a means to ensure repayments and earn revenue for the society, not a means of encouraging savings.

The fisherfolk perceived the loans as gifts obtained through the good offices of the politicians and so seldom repaid them.

This mix of perceptions leaves the government in the awkward position of generally writing off the loans to "help people in distress".

With credit the sole activity of consequence, and repayment the criterion for success, the defmition of good cooperative leadership boils down to those who can arrange for regular and prompt repayments. But the key to repayment lies in the control of the market. The only successful cooperatives are those that control the market. But very few of them can do so in competition with local middlemen, who themselves are members of the cooperative.

Societies are managed by a few leaders and by government, neither of whom is accountable to the illiterate membership. With no training or education in cooperation offered, and very little otganization, the possibility of democratic and participatory management is remote.

There is no emphasis on cooperation as a way of overcoming problems or of helping and working with other cooperatives. There is no emphasis on cooperation being a self-reliant route to development.

For the fisherfolk (at least, to those who have benefited) the cooperative is a success. No other system can make available so much for so little with no real attached responsibilities.

For the politician, cooperatives are a success because they are a socially and ideologically legitimate way of channelling benefits to people. Real cooperation would, however, prove a political threat.

For the administration, the results are mixed. It is successful as an allocation identification process, but problematic with regard to repayment and its political ramifications.

For the financial institutions, the fisheries co-operative is a disaster.

The above points may give the impression that the existing co-operatives have achieved nothing. This is not so. Benefits in terms of loans and gear acquisitions have reached thousands of fishermen. The insurance scheme and the off-season savings-based payments do help. Overall production and incomes of the fisherfolk who are participants have certainly increased, even though the incomes of middlemen have increased even more. The problem is not that there is no benefit, but that there is no cooperative actvity. What has been achieved could have been done through existing government channels; the cooperative was not necessary.

The view of the BOBP study, however, is that the co-operative, if properly initiated and organized, if allowed to function in an autonomous, self-reliant manner, and if used by the people to solve their problems through the strength of collectivity, could still be the best available option for the kinds of problems fisherfolk face.

The Co-operatives Studied

Before arriving at this view, BOBP studied three primary marine fishermen's co-operative societies, two primary fisherwomen's co-operative societies, a fisheries related (boat construction) co-operative society and a federation of fishermen's co-operatives.

The three primary fishermen's co-operatives were organized through the initiative of individuals who had become aware. The two fisherwomen's co-operatives were initiated by officials of the Fisheries Department in areas where there already were successful co-operatives, success being measured by the level of loan repayment and lack of conilict. The fisheries-related co-operative was set up under a government policy decision to provide more jobs; the scheme included establishment of boatyards. The federation of fishermen's co-operatives was promoted by the Fisheries Department as an apex institution to support and enable the activities of the primary co-operative societies.

These co-operatives functioned in a state where most of the fishing communities are homogeneous in terms of religion and caste/community, but where the artisanal fishermen lead difficult lives,

falling easy prey to moneylenders and middlemen who exploit them (while providing a very real and necessary service). Mechanized boats, usually not owned by local fishermen, make their lives still more difficult by posing a threat through competition and over-fishing of inshore waters.

The major problem felt and perceived by the fisherfolk was, however, in all cases, the lack of cheap and easy credit not only for craft, gear and working capital, but also for day-to-day consumption, especially during the off-season and when catches are poor. They also sought access to mechanized boats, alternate income-earning opportunities, and such welfare facilities as health-care, schools, roads, transport to towns, drinking water, electricity and sanitation. The cooperatives were expected to provide the answers.

On the other hand, the main purpose and activity of all the co-operatives studied, it was found, was to obtain credit either for individual members, or groups, or for the co-operative as a whole. As a result, collection of dues was also a major activity of these co-operatives. Other activities included buying boats to be rented out to members, setting up relief and welfare funds and, to a limited extent, marketing fish. Where the cooperatives took up projects like coconut plantations and salt pans, they were seen purely as business ventures. Some of the co-operatives ran ration shops or retailed clothes to their members at discount prices. The co-operatives also occasionally negotiated with government on such welfare requirements as housing, but Fishing Department (FD) officials had explained to them that cooperatives could not solve such problems, they could only channel credit. Such activities were then dropped. Boat-building, on the other hand, had been successful in achieving quality, but was unable to compete with private firms.

All these co-operativeswere managed by a few individuals in co-operation with fisheries officials. Elections were non-existent or rare and the member had little say in the day-to-thy affairs of the co-operatives or in decision-making at any level. Most of the co-operative presidents had enjoyed long tenures, were persons of influence and power in the community and were available to members as individuals rather than as groups.

One criterion for success, keeping down conflict, had been achieved by centralizing power in the co-operative, the lack of discussion of problems, and by the president or the fisheries official exerting his individual influence through person-to-person contacts. The other criterion, the economic viability of the society, was in some cases artificially created out of subsidies and earnings from activities that did not depend upon either the savings or the integrated efforts of the members.

In all five primary co-operatives, members felt that only 10-30 per cent of them had benefited from the credit schemes. In some of the societies, the fishermen stated frankly that the co-operative was controlled by the president and his supporters in collusion with the government staff. While fisherfolk who had not benefited from co-operative credit stayed on, in the hope of future benefits, they were still very much in debt to middlemen. That their perceived problems were not being addressed by the co-operative was not considered unusual, because members felt the co-operative existed only to arrange for credit.

Members of the federation of co-operatives had no idea how it was different from a primary society except that it was higher and more "powerful".

Most individual members had joined because they saw an opportunity to acquire craft. Presidents of affiliated societies had joined because they saw an opportunity to channel funds to their societies. Loans were not repaid because members considered them as gifts through their political leaders. Members of the federation, as well as of primary societies, felt that the cooperative structure was a government organization and that they were to be joined to make possible government funds and development inputs.

An Informal Success

On the other hand, fisherfolk organizations have successfully functioned as cooperatives without being registered as such. Such organizations that were studied included a social service society, 19 village-level *sangams* (informal societies) and the federation of the district fishermen's *sangams.*

In one particular district, the levels of indebtedness were high at one time. The rural population was at the mercy of moneylenders and middlemen, the fisherfolk were met on the shore by fish brokers and merchants, to whom they were indebted, and on-the-spot auctions were conducted. The fish then moved inland either to local markets or to processors and exporters in the cities. The price increase up the market chain was dramatic.

The major problems the fishing communities in this district faced were:

- Lack of credit access, leading to bonded dependence on middlemen and moneylenders;
- No access to, or control over, markets;
- Lack of basic amenities such as housing, health care, sanitation, water supply and retail shops;
- Lack of alternate sources of income; and
- A diminishing fishery resource, yielding less for the same effort.

The Social Service Society (SSS), a unit of the Catholic Diocese, was established in 1962 for the socio-economic development of the poor of the region. Its intended activities were to provide credit for the fisherfolk to acquire craft and gear (unsuccessful because of the hold of middlemen) and to ensure welfare inputs (relatively successful).

In 1967, however, the SSS had a disastrous experience while trying to provide fishermen with mechanized craft through foreign funding. The scheme failed because (1) the fisherfolk, unused to technology and its proper use and maintenance, encountered frequent breakdowns, which soon put most of the engines out of commission; and, (2) when engines did function and catches did improve, they benefited the middlemen, who still handled the market, more than the fisherfolk did.

Deciding to attack the root of the problems, the SSS took control of the market,with a credit system that would look after consumption and emergency needs. More importantly, the SSS enabled fisherfolk to get involved in all of this and do it for themselves (instead of having it done for them).

Sangams (associations) were organised in three villages in 1973, by fisherfolk who had been trained for the task. The *sangams* were loose, informal gatherings which identified the market as the main target. With the SSS helping to guarantee their credit-worthiness to banks, they built up a marketing system run by themselves. It was a long and hard struggle, but rapport with the fisherfolk was built up partly because of Church support and partly because the organisers had no solutions to offer but were themselves searching for one.

Despite beatings, stabbings, riots and one murder, the *sangams* persisted, made their influence felt and grew in numbers. By 1978, the *sangams* were determining the price in the entire district. By 1982, there were 17 *sangams.* Tensions still exist, but the *sangams* seem to be holding together, not so much because of their economic power, but because of some form of cooperative chemistry and the taste of freedom.

The *sangams* now market the catch,, encourage savings – to attract credit – and make contributions to cover the emergency and welfare requirements of the group. They do not tackle the problems of production, because members feel strongly that it is not a cooperative activity; production amongst artisanal fisherfolk is a strictly personal activity shared by household and crew.

When the SSS decided to withdraw in 1982, leaving the *sangams* to run their own show, the *sangams* set up a federation to:

- run boat/gear and provision shops for fisherfolk;
- determine appropriate technologies to help fisherfolk and arrange for their production, sale and credit if necessary;
- organize a fund for emergencies; and
- act as a liaison for the *sangams* with government and banks.

The federation is now thinking of two other activities: establishing a pension fund; and setting up some co-operative ventures like post-harvest processing of fish products.

The *sangams,* at the village level, are consensus organizations. *Everything is discussed by the general body until a decision is taken.* There is no permanent leadership. Each task is given to the individual best suited to do it. The key to the success of the groups is absolute democracy in action and total freedom of information.

The federation is run by a general body, on which all the *sangams* are'represented equally, and a board which is elected afresh each year. The general body meets as often as possible, not only to hold the system accountable to the *sangams* but also to act as a communication channel back to the *sangams.*

The fisherfolk believe that the *sangams* and the federation answer their needs and help improve their quality of life. They realize that the Church and the SSS have helped, but believe the achievement their own and that they can continue on their own. They also believe the struggle will go on, but are confident of facing it. There have been conflicts and disagreements within the *sangams,* hut they feel they can resolve these problems too, through open discussion and debate.

The *sangams* are slowly spreading the message to other fisherfolk. They believe survival and success is due to their making their own decisions, including mistakes. They always had to work hard to generate their own funds. They had no short cuts, except organizational help and solidarity.

These organizations are co-operatives in deed and spirit, but are not registered as such and so have no access to the benefits and resources meant for co-operatives. They feel, however, that registration, followed by regulations and bureaucratic interference, would kill the very qualities that give them their strength and vitality, They also feel that, as government-supported cooperatives, their struggle against vested interests would be more difficult because of the political clout of those interests.

1.3 SELF-REGULATORY MECHANISMS FOR FISHERIES MANAGEMENT IN ASIA

The common property nature of most renewable resources, like fisheries, implies that users, or potential users, have free and open access to their exploitation. Such exploitative conditions lead to problems of overcapitalization, overfishing, incompatibilities and vulnerability.

In developing countries, during the last few decades, much money has been spent on acquiring knowledge about fisheries resources,

on formulating, implementing and enforcing management programmes, and on creating research and managerial capabilities to prevent the undesirable effects of excessive fishing.

On the other hand, several forms of resources management had been evolved long before the scientific approach, and their effectiveness has, in many cases, been considerable. They cost less and are very popular. This appraisal attempts to identify, characterize and discuss the nature of these types of self-regulatory mechanisms in unmanaged fisheries. Looked at in a different way, it is a study of indigenous or traditional management of resources.

Regulatory measures, policies, plans and programmes are the common kinds of intervention in fisheries management. At the micro-level, decisions on intervention aim to affect:

The production unit (fishermen, gear, factory, etc);

The community (fisherfoik, organizations, institutions, etc);

The fisheries (stock, industry, market etc); and

'The region (resource, factor endowment, etc).

At the macro-level, the decisions aim to affect:

- The fisheries sector (total resources, factor endowments, markets dc); and
- international affairs (legislation, agreements, dc).

Interventions may result from the people and/or the ecosystem and may function autonomously or be induced,

There are' several self-regulatory mechanisms characterized by spontaneous response to situations prevailing in fisheries exploitation. Their operation usually requires minimal inducement and enforcement by the management authority, arising as they do either from conscious or unconscious community behaviour or from the resource conditions. For instance, sanctuaries established by 'fishing communities to protect their fisheries resources is an example of self-regulatory mechanism based on community decisions, while cyclical 'fluctuations on migratory patterns of the resource is an example of an environmental self'-regulatory mechanism,

However, not every community-based decision for intervention constitutes a management intervention. This fact is important to keep in mind for a proper evaluation of indigenous and traditional practices as alternative management options for fisheries exploitation activities.

Since there is little control over autonomous environmental processes (interventions), this appraisal has focused on community interventions.

Self-regulatory mechanisms may be classified according to the specific elements they aim to regulate. These elements include:

a) *Access to resource*

Regulating property rights over fishing grounds;

– Regulating rights of use of resource andfishing grounds; and

– Regulating boundaries.

h) *Qualitative and quantitative aspects of effort*

– Regulating fishing performance and strategy by providing information on fishing grounds and equipment characteristics, and by controlling equipment size; and
Regulating periodicity and duration of fishing activities.

c) *Behavioural aspects offisherfolk and their institutions*

– Regulating fisherfolk associations and community groups; and

– Regulating community agreements on sharing and social, political and cultural priorities.

d) *Market conditions and the fishing industry*

Factors Affecting the Existence of Self-Regulatory Mechanisms

A study of written material on community-based management experiences in Asia, on government interventions within participatory approaches, and an analysis of their results suggest the following preventive and promotional factors that have had an important influence on the existence of self-regulatory mechanisms.

Preventive Factors

1. *Socio-political and cultural factors*

– Lack of sufficient organizational (managerial) capabilities;

– Lack of awareness and understanding of socio-political values of resource exploitation and use;

– Cultural barriers;
– Existence of conflicting interests;
– Lack of feedback information mechanisms or systems; and
– Population growth, development and social disruption etc.

2. *Economic factors*

– Lack of alternative employment;
– Wrong perceptions of market conditions, resource abundance. production structure etc;

New and powerful market mechanisms.

3. *Bio-zechnological factors*

– Lack of knowledge about relationship between effort and the resource; and

Lack of understanding of the impact of technological improvement on resources.

Promotional Factors

1. *Socio-poiitical and cultural factors*

– Understanding of the importance of the establishment of self-regulatory mechanisms for conservation and management purposes;
– Consensus of interests in resource use and benefits from their exploitation;
– Existence of traditional values on resource conservation and use; and
– Acceptance, credibility and involvement in the decision-process

2. *Economic factors*

Economic motivations and expectations; and

LOW costs and simplicity of implementation and enforcement.

Particular Aspects of Self-Regulation

The preceding discussion provides some general guidelines on self-regulatory experiences. The following specific cases shed light on particular aspects of the problem of self-regulation.

Indonesia

The problem in the South Sumatra Province arose from the increasing scarcity of swamplands and water bodies for agricultural production, due to population growth.

One of the strategies followed by the community was to regulate land and forest exploitation rights through resettlement and a leasing system administered by community groups, called *marga.* These coastal village resource management units controlled three primary resource uses (agriculture, forestry and fisheries).

Nonetheless, a certain dualism of the *adat* law (regulating *nzarga)* and the national law prevailed, leading sometimes to conflicting objectives in the same area. **In** *1975,* for instance, the *margas* were forbidden to alienate more land, by a provincial government interested in slowing the rate of forest loss. This conflict resulted in the *margas* becoming totally disinterested and the government losing control over them.

That these community-based organizations couldfacilitate government programmers, but ran the risk of having their effectiveness reduced through a conflict of interests, appears to be the lesson to be learnt.

The Philippines

A programme to promote conservation of coral reefs through community-based management was initiated by the Marine Conservation Development Program(MCDP) with the development of management plans and the formation of groups to implement these plans.

The general objective of the programme was to protect the coral reef resources from increasing destruction and overfishing and thereby enhance the resource.

The growing ethic and awareness among fishermen against destructive fishing methods were reinforced through community organizations, and, together with the creation of some alternative employment, led to successful resource conservation practices.

Sri Lanka

The case of the beach seine fishery in the southern part of the island clearly illustrates the importance of community-based decisions, customs and perceptions in the fisheries management process. Resource-use rights, ownership and maintenance of gear, income distribution, and rules governing access to water, were based on the traditional and customary law of the local community,

thus easily solving conflicts. But the advent of new technologies in transport and storage facilities brought about substantial changes **in the industry.**

Government interventions inconsistent with community interests led to disruptive reactions and resulted in violent conflicts. The emergence of a new institutional economic order then broke built-in mechanisms of conservation and equity with strong social disruptions.

Thus, where traditional and customwy arrangements were functioning with community interests, emergence or imposition of outside elements damaged the existing management system that had functioned efficiently.

North Sumatra

The project was to provide a long-term solution to overfishing and overcapitalization problems. It aimed at providing alternative income opportunities to fishermen, such as aquaculture, agriculture and cottage industries.

A system approach to planning at the village level was used, hiring consultant groups from foreign countries, which, working in close relationship with village representatives, government officers and private sector participants, developed comprehensive plans for development.

Effective leadership methods, reinforcement of community self-esteem and participatory involvement and sufficient legal, organizational and financial support within an integral and comprehensive approach were used. The focus was on getting the villagers to develop their own development plan and implement it in genuine cooperation with the government, the private sector, academics and volunteers.

Training has been a key factor in sustaining motivation. Practical leadership and organization have provided bases for the creation of a local community structure. *The experience demonstrated that establishing an organization may be easy, but fostering effective participation is a more thfficult task.*

1.4 PARTICIPATORY RURAL DEVELOPMENT IN WEST BENGAL

The main thrust of the Government of West Bengal's planning has been to help the rural poor, within the known constraints of land and non-land inputs. Thus land reforms and the provision of non-land inputs have been favoured to generate labour-intensive and local resource-based technology. This has been supplemented by encouraging small-scale industries (agriculture-based) and the allied sectors. But without adequate infrastructural development, such as the development of marketing networks and roads, the whole effort could be jeopardised and, therefore, this was also made a priority.

It was accepted by the Government that, for the formulation as well as the implementation of the planned projects, the rural people had to be involved in some organized but sufficiently decentralized form. The Government view was that these decentralized planning efforts should begin from the grass roots level.

These forms of people's involvement' are of two types.

Firstly, the elected panchayats, panchayat samitis and zilla parishads, introduced in 1978 as an exercise in grass roots level democracy, are meant to provide an organised form of involvement of the common people. Without elected representatives to the panchayats and without the watchdog role played by people's committees in the villages, both ensuring people's involvement in planning and implementation, it would not be possible to deliver the goods.

To ensure that a trained institution is the foundation for people's involvement in development, the panchayats have gradually been asked to undertake various new and unconventional tasks since their inception. The first opportunity to involve the panchayats in a major organisational activity came when the Government of West Bengal entrusted the task of relief to inexperienced panchayats.

Subsequent analysis of the experience has shown that, despite major mistakes, problems of accountability and inability to abide by government procedures, two positive results were achieved.

First, the burden of providing succour in a period of natural disaster was put squarely on the people themselves. The process involved in ensuring quick, efficient and equitable distribution of relief helped develop at the village level a competent organization of persons whom the others could trust. Secondly, it taught the elected bodies the norms to be maintained in dealing with the official machinery.

The second major involvement of the grassroots level institutions has been in the implementation of the land reforms programme. This programme was intended to:

a) regulate tenancy and ensure the rights of the share-cropper; and

b) identify, vest and distribute surplus land.

The people's organizations played a major role in identifying surplus land – that exceeded the land-holding ceilings imposed by law – and in distributing it. They were also actively involved in implementing the rural employment programmes.

By 1984, some positive features had emerged. It was seen that the voluntary time and labour given by the members were directly responsible for getting work done cheaply and on time, as against the wastage incurred when contractors were entrusted with it. But it was also found that much better coordination between the panchayat-run programmes and the rural development activities of government had to be achieved if planning and implementation of development projects were to be truly decentralized.

It was at this stage that the district planning strategy was formalized. District planning committees were constituted in all 16 districts and Block Planning Committees in all 341 blocks in West Bengal. The committees brought together the elected panchayat members and officials at the corresponding levels. Thus, a great deal of formal decision-making power was entrusted to political representatives, but with the insistence that there be effective collaboration between the panchayats and the officials.

The overall priorities of plan-formulation under this scheme are based on decisions being taken on which of those activities should be dealt with directly by the district and which of them must be formulated by the Block Planning Committee.

The block-level plans are integrated with the district-level schemes to form district-level plans. These are in turn integrated with state-level subjects to be included in the block plan; the district- or state-level *cannot* change it unless there has been a clear violation of priorities. This gives the lowest level of planning relative autonomy and a great deal of decision-making authority. It also concedes that once the plans are formulated, these represent the wishes of the people.

When the schemes are formulated, the implementing agency is identified through budget allocation. However, the monitoring is done collectively at the block-level by the Block Planning Committee and at the district-level by the District Planning Committee.

Since the inception of the District Plans in 1985-86, there has been a constant learning process on how to involve local people to a greater extent in both formulation and implementation. As a result, it has now been made mandatory that every gram panchayat holds two open mass meetings a year. The first of these meetings is held to discuss priorities before the block plan is formulated. There also have to be public announcements at this meeting of the schemes to be undertaken by different departments and panchayats in the respective localities. The second meeting is held at the end of the financial year and a statement of expenditure is publicly announced. These mechanisms have been introduced to prevent bureaucratization and mismanagement by ensuring that people's organizations keep a strict vigil on their elected representatives. People working at the grass roots level agree that the mere creation of a structure for participation does not ensure participation; there has to be consistent monitoring of the organization to make this a people's movement.

One of the major hindering factors has been the tendency of most **people to think only in terms of their specific areas. Localization leads to problems on how priortities should be set. Grassroots** level workers admit that **there is no short** cut to such problems. They can be resolved only through discussion, productive debate and the exercise of collective judgement. The only way to fight localism and the growth of vested interests is to hold as wide-based a discussion as possible. The more people get involved in these debates the more are the opportunities for learning.

Another major hindering factor has been the lack of inter-departmental and inter-agency cooperation at the district-level. Government departments have for so long been used to operating parallel schemes, autonomous of each other, and without compulsion to set targets and deliver on time, that this pattern of work is very difficult to break. People's pressure is the answer.

Two typical examples of such people's participation in West Bengal and their results are presented in the following pages. A third example, of a different type, is presented subsequently, to conclude this study of the West Bengal Government's efforts to promote people's participation.

The Birbhum District Plan

Because of the considerable inter-block variations in geographic features and in the economic conditions of the people in Birbhum district, decentralized planning was of utmost importance for the development of the district. The percentage of the rural population is 96.67 (compared to the West Bengal average of 73.51), indicative of the low level of industrialization in the district and its reliance on agriculture. But 66.1 per cent of the cropped holdings are less than one hectare in size and comprise 47.25 per cent of the total area under cultivation. Therefore, it is primarily a small and marginal peasant economy.

There are 2235 inhabited villages grouped into 169 Gram Panchayats under 19 Panchayat samitis.

By 1985, 26,130 hectares of vested land had been distributed in the district to 29,536 members of scheduled castes, 13,082 members of scheduled tribes and 16,292 persons belonging to other castes. The number of *bargadars* (tenants) reported was 95,850.

The district plan strategy was first adapted in Birbhum district in 1985-86. While the plan faithfully portrayed the demands and aspirations of the local people, an attempt was also made to draw up the plan in conformity with the following basic national objectives:

a) to significantly step-up the rate of growth of the economy;
b) to alleviate poverty;
c) to reduce unemployment;

d) to secure social justice through more equitable distribution of resources;
e) to provide the minimum basic needs to all;
t) to maintain the necessary ecological balance; and
g) to develop an infrastructure that would be of help to the rural economy in the future.

In doing so, it was necessary to draw up the action plan in such a manner as would convince the poorest sections, the financially handicapped, the land-poor and the socially backward that the plan was for their benefit. To achieve this, it was necessary to create employment opportunities, particularly in lean seasons, for the vast masses of agricultural labourers, share-croppers and assignees of vested lands, a big chunk of whom comprised the tribal population. Coupled with this, a flow of bank credit for economic development of these persons had to be ensured. Recycling of finance through timely repayments, followed by fresh and larger doses of credit, were therefore emphasized, Simultaneously, since the availability of water in the district generally shows great seasonal variations, optimum water utilization was also attempted.

At the same time, it had to be ensured that all the fruits of these hard efforts were not eaten up by an ever-expanding population. The good work done earlier in this district in implementing family welfare programmes helped considerably.

The provision of minimum basic amenities arising out of the felt needs of the rural population was another primary objective of the District Plan. In Birhhum this meant, in large measure, the creation of irrigation opportunities. Along with this, high-yielding varieties of paddy were increasingly introduced to reduce the need for irrigation water in the October season, allowing the water so saved to be used for the next season. Dryland farming was also encouraged in parts of the district. And a local sugar mill and a couple of stone quarries were urged to provide some non-agricultural employment in what is basically an industry-poor district.

A review of the protect from its inception has highlighted the following initial problems:

- Although the block plans reflected aspirations at the grass roots level, the link between block plans and budgetary provisions

was not clear, entailing misunderstandings at the grass roots level;

- While a number of Block Plan schemes were recommended for full funding by the government, adequate care was not taken to implement contributory schemes;
- Funds channelled through the District Plan outlay played a very important role in filling the gaps when programmes suggested at the grass roots level could not get departmental outlays;
- The inability of government departments to give a clear picture about their programmes and outlays ahead of time. Last minute schemes resulted in ad-hocism, which is precisely what the plan strategy wished to overcome.

Many of these problems still persist, but some positive achievements had been identified a year later. For example, it was found that those schemes for which the Zilla Parishad and Panchayat Samitis were directly responsible, had been executed as fully as the allocation permitted. This would seem to indicate that since the people's representatives had to be answerable at all times to the public, there was a necessity and urgency to deliver the goods.

The yearly reviews serve to point out where errors have been made so that they can be rectified in the following year. This is of crucial importance, since the whole planning strategy is dependent on people's involvement and accountability to the public.

The Earthen Dams of Rangamati

The problems faced by farmers in Thiba Gram Panchayat are representative of the predicament of thousands of peasants living in 50-60 villages in the neighbouring Gram Panchayat areas of Labpur Panchayat Samiti.

The two major problems in the area are: (1) the annual floods on the Knia river, making monsoon cultivation of paddy impossible and the area a mono-crop area, and (2) the total dependency of this high-yielding mono-crop in winter on the storage and regulation of water in the Kuia after the monsoons. The problems of flooding and, subsequently, of water retention and irrigation have persisted from time immemorial.

These problems were of such massive dimensions that they did not really fall within the capacity of a District Plan. Their solution needed a major project to be undertaken by the state, but resource limitations were a major handicap. In the meantime, however, the peasants of the 50-60 villages directly affected by this problem had to survive. So, they devised their own methods and strategies to organize regulation of water for irrigation.

From 1960, a major earthen dam was built every year, between October and December, at Rangamati in Thiba Gram Panchayat. Three smaller ones were also built lower down annually. The cost of construction was met by private collections. But this darn was not sufficient to irrigate more than 2000 acres, and that too inadequately. The protection of the darn consequently was crucial since those villages further away from the dam site were deprived of water and sought to destroy it. Inter-village feuds became common as a result. Often, even the meagre crops raised were damaged because of the destruction of the dam.

In 1983, the main peasants' organization in the area, the Krishak Samiti, took the initiative to organize the peasants and arrive at a solution within the capacity of the local people and their resources.

To begin with, village level meetings were organized by the Krishak Sabha in all the areas affected by the problem. The problems were identified and solutions offered. Eventually, several general meetings were held of representatives from the 20 villages directly affected and they resolved that:

1. A *bandh* (darn) committee, comprising fifty members, be constituted;
2. An executive committee of nine persons be elected;
3. The exact Location of the main earthen dam and the three smaller ones be decided on after open discussion, and the labour necessary to build them be provided by the villages concerned;
4. Each village should elect its own committee to keep its people informed at all times about the progress on the work, any problems arising from it and to monitor irrigation in their own villages;

5. The village committees maintain daily lists of labour provided for construction;
6. The total expenditure to be incurred for material purchase and for the repair of the inlet and outlet channels be presented to the Thiba Gram Panchayat for inclusion in their Panchayat Samiti's annual plan;
7. The outgoing executive committee present a statement of accounts for the previous year;
8. A special sub-committee be formed to regulate the flow of water, and to work with the irrigation Department in the Zilla Parishad;
9. Regular tours of the areas farthest from the dam site he made; and
10. A copy of the resolutions be forwarded to the Gram Panchayat Pradhan.

When the funds materialized, the project got under way in 1986-87. The villages began to provide 3500-4000 workers and maintain records. A sub-committee for water regulation now coordinates with the Irrigation Department and monitors the amount of water being released each day.

Since the areas farthest from the dam site are adversely affected, irrigation water is supplied from the lower portion upwards. The village level committees provide the *bandh* committee with a widespread intelligence network, whereby it receives early information about the problems of water distribution, facilitating decisions on the control of inlet and outlet mechanisms. No longer do members of the Panchayat and the *bandh* committee under-estimate the problems to be faced.

Not only have the *bandh* and other committees learnt a lot from this experience, but there have also been several positive gains from all this:

(a) The constant effort to resolve issues through widespread discussion has reduced the tension and conflict in the area. Furthermore, it has reduced the tendency of each village to think only of itself, and of each villager to think only of his individual irrigation requirements.

(b) The fact that there is now an organized body representing the people to look after irrigation has created confidence, and the voluntary labour provided by each village for the common cause has increased.

(c) Governmental resources have been mobilized through the flexibility provided by the concept of decentralized planning. People consequently feel that what is possible within the limited resources is now being done.

(d) The fact that Gram Panchayat members have had to publicly state why certain plans were sanctioned and how the money was spent or not spent, has increased the pressure on the local level planning institution to remain accountable to the people.

(e) Because of the organized manner in which the work of dam construction, regulation and distribution of water is being done, damage to crops has been reduced, an economic gain for the insecure peasantry.

An Experiment in Forest Management in West Bengal

Vast areas of forests in south-western West Bengal are virtually unproductive because of the unregulated collection of firewood by economically backward fringe dwellers. This has happened mainly because selling fuel wood is the only means of livelihood in many such villages in the absence of any other gainful occupation.

The solution to this problem lies in providing an alternative source of livelihood to this population. Coppicing, afforestation etc., provide some employment. But the people earn more by pilfering and selling forest produce. The only resources which could be utilized to solve the problem and provide employment are the forest itself with its young pole crop of Sal and afforested blank areas, both under government control, and the vast amount of non-arable land in the possession of the villagers.

If the villagers are to be enthused to come forward to help protect the forests, they have to be offered a better livelihood than they have had. A methodology has to be adopted which would assure fringe dwellers a part of the sale proceeds from the forests that need to he protected.

Such a solution has been successfully attempted in a socio- economic project taken up at Atabari in Midnapore District, where approximately 1250 ha of totally degraded forest have been afforested.

Before starting the project, the local staff of the Forest Division met the villagers and organized meetings to make them understand the aims and objectives of the project. The villagers were told that they would be given all possible forest-based employment in the area and the right to collect fuel, wood etc., for their daily needs, on payment of a *token fee.* They would also be entitled to some benefits at the harvesting of the production from the area.

Six hundred and eighteen families, out of the total population of 3607 inhabiting the fringe area of these forests, agreed to cooperate in rehabilitating the forests in the project area. These families were employed to coppice potential Sal areas and plant totally degraded areas with fast-growing species as well as with cashew, mahua, agaye etc.

Today, the area has excellent forests by any standard. The crop has attained the harvesting stage and the Forest Department has proposed that the government allow 25% of the produce to the villagers.

With people's participation, 1250 ha of valueless forest growth has been turned into a crop worth about Rs. 11.4 million! With proper management and rotation, this area is capable of yielding Rs. 1.25 million perpetually. Since 25% of this is to be distributed to the 618 families which participated in the scheme, each family's income will be Rs.505 on a sustained basis. Annual harvesting will generate an additional income of about Rs. 1044 per family.

On seeing the success of this project, afforestation of degraded forests in many other areas is being undertaken with people's participation. The 'target groups' selected by village panchayats from the forest fringe villages are **being assured** 25% of the sale proceeds of successful crops. These villagers are also being allowed to undertake intercropping, in the forest plantations being created by them, to generate extra income.

It should be noted that in both cases the West Bengal Government introduced panchayat elections to give people's participation an organized form. It used the institution to promote people's participation, and motivated officers supported it.

A favourable political climate made the situation more receptive to people's participation, with politicians being a *part* of the process. Since peasant organizations and political struggles, such as those for land, existed, they created greater group interaction and raised the participants' level of awareness. Mass meetings providing for an openness of information then set the stage for planned development.

The experience showed that the role of formal or non-formal 'watch-dog' groups could be very effective. (But a discussion of these cases indicated that in the case of the fisherfolk community development, co-operatives were likely to function more effectively than panchayats.)

1.5 THE EXPERIENCE OF INDUSTRIALIZED COUNTRIES

After trying the 'industrialization', 'green revolution' and 'integrated rural development' approaches, development agencies have discovered the 'people's participation' approach as an effective means to bring about development. Much of the related literature sees 'participation' as the 'missing ingredient' that needs to be *injected* into rural development projected for success.

Other literature identifies *authentic* participation as a result of some bottom-up process which generally focusses on distribution of income or, more seldom, distribution of access to resources. Participation, in this sense, is defined as a process by which the rural poor can organize themselves and, through their own organization, influence decision-making.

Past experience, however, indicates that where governments have imposed some form of organization, such as co-operatives, they have often not contributed to effective participation by the rural poor. Therefore an alternative approach seeks to *avoid* the introduction from outside of any organizational form, but, instead, is researching conditions under which an authentic form of organization may be made to emerge from among the rural poor.

It is in this context that the formation and roles of fishermen's organizations in industrialized countries is examined in the following pages. Despite the great economic, social, cultural and

political differences between these countries and the developing ones, these experiences could help in a better understanding of the nature of people's participation and how it might be promoted in the rural fisheries sectors of developing countries.

The kinds of organizations found among fishermen in the industrialized countries are largely determined by the structure of the fishing industry. In capital-intensive fisheries, characterized by large vessels owned and managed by companies or people who are not fishermen themselves, there are labour unions of the traditional type. The main purpose of such unions is collective bargaining with vessel-owners over wages and conditions of work. Such unions often also include workers in fish processing plants.

In large-scale fisheries there may also be boat-owners' associations or unions which represent the joint interests of the owners *vis-a-vis* the fishermen's unions. Such associations may also act as political lobbies to influence government fisheries policies.

In small-scale coastal fisheries, where the vessels are owned and operated by active fishermen, much more broad-based organizations, involving both boat-owners and hired crew, are found. Here, the distinction between 'capital' and 'labour' is rather hazy because the element of profit-sharing is much stronger; an owner may not earn much more than the ordinary crew member and the latter may be a relative of the former or may later become an owner himself.

The two principal types of fishermen's organizations found in small-scale fisheries are (i) local fishermen's cooperatives, which may be affiliated with a regional or national apex body; and (ii) fishermen's associations, or unions, on a regional or national level or by a specific type of fishery. Fishermen may belong to both.

These two types of organizations are distinct. The former usually performs economic activities, such as supply of equipment or fish marketing and processing. The latter's main functions are to represent their members' interest *vis-a-vis* government and other interest groups, and to coordinate the activities of the members. Such coordination often plays an important economic role, as, for example, in administering minimum fish prices, etc.

The great variety of organizations in fisheries are the result of varied, often competing and changing, interests in this sector, something not found to the same extent in other industries. Fishermen thus enter into alliances for widely different reasons.

On the resources level, their interest is to prevent encroachment by other fishermen, and to prevent the introduction of new and more capital-intensive technologies.

If they are boat-owners, they may, on the *technological level,* wish to introduce labour-saving devices to reduce costs, while as ordinary crew members they would ally with other crew to maintain employment opportunities.

On the marketing level, their interest would be to challenge the marketing power of fish merchants and fish-processing companies.

And at the level of government support to fisheries, boat owners, fishermen and processing companies may all loin hands to represent fishing interests' versus the interests of other sectors of the economy.

The problem of orgamzational diversity in fisheries is often further compounded by regional or provincial differences and by differing political alliances.

In the wake of the increasing influence of socialist and communist industrial workers' organizations in Europe and North America at the turn of century, a limited number of pure labour organizations also emerged in fisheries in the early decades of this century. but they have often not been very strong. Fishermen's organizations encompassing both owners and hired crew were much more common and emerged as a result of dissatisfaction with the fish prices obtained from fish merchants and processing companies. Many of these organizations were created in the 1910s and 1920s, when fisheries were in a depressed state. Such organizations may have initial!y been established at the local level, in the form of cooperatives, to directly counter the local fish-buyers and, later on, at the regional and national levels to exert political influence and obtain legal sanction to fix minimum fish prices.

Fishermen's orgamzations were also created to represent the interests of a particular section of fishermen (working owners and crew)

vis-a-vis other fishermen competing over the same fisheries resource or the same fishing space or the same marketing outlets. In several countries, the importance of such organizations has increased over the past two decades, essentially as a result of the increasing pressure on the limited fisheries resource and the consequent greater involvement of governments in fisheries management. Some governments actively supported the creation of such organizations as a means to facilitate the decision-making process for fisheries management.

In localized instances, fishermen's organizations also emerged to manage common property resources. Through a set of mutually agreed on codes and fishing rights, fishermen attempted to exclude others from entering the fishery, avoid gear conflicts among themselves and attain an acceptable distribution of the resource's benefits.

There are various factors which appear to have either facilitated or impeded organization among fishermen. Social factors include the emergence of local organizations closely-linked with the social background of the fishing communities. Co-operatives have often been grafted on to associations already existing in the inshore fishing industry by developing and institutionalizing the economic functions of these infirmal groupings. To achieve cohesion among members, co-operatives have often maintained the existing social hierarchy and other traditional values. Strong leadership, inspired by religious or socialist values, often lie at the root of their development.

Greater cohesion usually exists in organizations which emerged from traditional associations. However, the tradition itself may provide for a certain inflexibility which impedes the economic development of the co-operative. The co-operative, thus, has to often strike a balance between the 'economic' necessities of survival and the 'solidarity' required by its members.

Among the most prominent political factors have been the growing importance of socialist and communist workers' organizations in industries. Fishermen threatened by the increasing commercialization of the fisheries sector, and by the entry of 'capital' from outside the fishing community, have, through organizing, tried

to maintain or regain control over the means of production and over the sale of the product.

Economic factors are often the driving external forces which made, and still make, fishermen organize to defend their interests. Fishermen's economic interests are most vulnerable in two spheres, i.e. fish marketing and access to fisheries resources. Fish as a product is highly perishable, consists of a multitude of species and is irregularly landed in many scattered and, often, remote locations. These factors cause great price fluctuations, a high degree of uncertainty and low market power by the fishermen *vis-a-vis* fish merchants and processing companies.

Fishermen apply various 'organized' strategies to improve their market power. One is to regulate the supply of fish by coordinated landings. Another is to refuse the sale of fish below a minimum price agreed upon by the fishermen. A third is to increase the competition among fish merchants by ensuring fair auctioning practices. A fourth is to set up a fishermen-controlled marketing, processing and distribution organization, thereby excluding merchants altogether from the fish trade. The success of these different strategies depends on the ability of the fishermen to co-ordinate their activities and on their adherence to rules mutually agreed upon. Legal sanctioning of co-ordinated marketing strategies through government appears to be another important reason for success.

Fish as a resource is common property, access to which is open to anyone who has the means of exploiting it. Being a renewable, though limited, resource, the catch of one fisherman reduces the amount available to another fisherman. As each fisherman strives to maximize his catch, fisheries resources may be exploited beyond biologically sustainable levels. In many parts of the world, fishermen have organized to prevent the negative consequences of the two pitfalls of fisheries resources, namely, their open access and their finite nature. Such strategies have included the establishment of formal or informal territorial rights over certain sections of the sea, the exclusion of others from joining the fishermen communities or fishermen guilds, or the exclusion of others from acquiring or utilizing certain fishing technologies.

In most instances, these strategies were designed to ensure adequate catches and incomes for members of fishermen organizations. Preventing over-exploitation of resources is a recent concern.

The success of fishermen's efforts to close or limit access depends foremost on their ability to formulate, enforce and control appropriate rules and regulations among themselves as well as with regard to outsiders. Factors which facilitate or impede enforcement and control include aspects such as the size of the organization or group; group cohesion; the existence of a traditional system of social sanctions against trespassers; the ease with which sea territories can be delineated and supervised; the mobility of the resource etc.

On the institutional level, government policy towards fishermen's organizations appears to be the determining factor. In a number of European countries, governments actively supported the creation of fisheries cooperatives, especially in the early decades of this century.

Government's interest in the formation of fishermen's organizations is usually guided by economic and socio-political considerations. The channelling of government assistance to fishermen is often made easier when they are organized on a local or regional basis. Funds are more effectively administered and utilized. On the socio-political level, fishermen's organizations achieve a certain cohesion and balance between their members and government. By internalizing conflicts within the fishermen's organizations, government takes itself out of the battle line.

The following case histories of the emergence of fishermen's organizations in various industrialized countries document the various factors which facilitated the development of fishermen's organizations in these countries.

Norway

At the beginning of the 20th century, the fishing industry was one of the most important sectors of the Norwegian economy, being the country's largest export business. Even though the methods of fish harvesting and processing were primitive, a fisherman and his family could make a reasonably good living. While the herring

fisheries in southern and central Norway had been prosperous for several decades, the cod fishermen in the under-developed north had experienced rather low living standards for a long period. The fish export trade was in the hands of private companies and merchants, who bought fish on credit from the fishermen and paid them after the sale was completed. The beginning of cooperation among fishermen coincided with a crisis in the export market in 1917 and the years that followed, when prices obtained by the fishermen were very low.

In 1927, the herring fishermen in West Norway formed "The Large Herring Sales Organization". They agreed that buyers had to pay a minimum price for fish and that payment must be either in cash or guaranteed by the bank. In 1928, not one fisherman sold under the price set by the fishermen's price-setting committee.

Later, several other fishermen's sales organizations were formed and these jointly requested the government to legalize their system of price-setting. In 1929, the government enacted a statute which banned export of fresh herring unless it had been bought from a fisheries organization recognized by government.

In 1938, the government enacted more broad-based legislation. The so-called "Raw Fish Act" included these regulations:

- Government may prohibit preparation, processing, sale and export of fish or fish products unless the fish was initially bought with the approval of a recognized fishermen's sales organization.
- Recognized sales organizations may insist that buyers first obtain a buyer's licence from the organization.
- When market conditions so require, a recognized sales organization may place a temporary ban on harvesting or demand restrictions on fishing.
- Sales organizations can set minimum prices which buyers must pay, and they have the authority to change these prices.

Even with legislation, incomes of fishermen did not automatically increase as the sales organizations could not set prices higher than what fish merchants could afford to pay. However, the psychological impact of the shift in power, from the processors and fish merchants to the fishermen, was immense.

In the early decades of this century, larger and more efficient vesels were introduced into the herring fisheries by absentee owners, some of them foreigners. Fishermen using smaller vessels took this as a threat, mainly of over-production and lower prices. But they also agitated against foreign capital. The Norwegian Fishermen's Association, founded in 1920, claimed that the right to own fishing vessels should be limited to fishermen who had been active in fishing for at least three years. Foreign capital was not to be admitted to the fishery. The government generally accepted these claims.

In the 1930s, another important development took place. This time it was in the cod fisheries – new fishing technology, trawling, was introduced. This technique was already popular in neighbouring Germany, Great Britain and Iceland. In Norway, small-scale fishermen were worried by this development, fearing over-production, especially of fresh fish for the home market. In addition, they argued, trawlers would exterminate the cod brood, over-exploit the stocks, and cause capitalists to take over the fisheries. In response to this pressure, the Norwegian Parliament passed a law in 1936 banning trawling within Norwegian waters and also prohibiting the landing of fish caught with trawl outside the territorial waters.

This policy was liberalized in the 1960s, even though the majority of the fishermen were still against it. The fishermen, however, could not resist the growing power of industrial workers in the fish-processing plants, who claimed that the delivery of raw materials from the trawlers would give them more secure jobs than if they had to depend on the coastal fleet.

A decisive step towards increasing fishermen's say in state policy was taken in 1964 when a general agreement between the government and the Norwegian Fishermen's Association was ratified by Parliament. The agreement conferred a special status upon the Association as the guardian of all fisherman's interests and explicitly granted it the right to demand negotiations with the government in case fishermen's incomes fell below those of comparable groups of wage-earners. Such falls in income have occurred quite often since then, and subsidies to the fisheries sector

have become a common feature of Norway's fisheries sector. This has aggravated the problems of overfishing and over capitalization.

In summary, it may be stated that the initially spontaneous formation of fishermen's organizations in Norway has had a major and positive impact on the social and economic conditions of fishermen and has made them the dominant force in fisheries policy decisions. This influence has been mainly made possible by greater equalities of incomes among fishermen and the favourable comparison those incomes make with those obtaining in other sectors of the economy. The emergence of large 'capitalist' fishing companies has also been largely resisted, but this may have resulted in some economic losses owing to inefficiencies that have been created.

Canada

A special feature of Canada's fisheries has been the strength of the integrated fish harvesting and processing companies, going back to the 19th century. In the late 1960s, 12 companies owned the entire offshore fleet and accounted for as much as 70 per cent of the groundfish catch.

The power of fish buyers, and especially their control of prices, worked to the disadvantage of fishermen and gave rise to conflicts, especially in the 1920s and 1930s. The first attempt to counter this power was through the formation of fishermen's trade unions. Membership included both the small independent fishermen, seeking better contracts for their fish, and the crew of larger boats seeking more favourable share agreements. They also included shore workers. Strikes were frequent. Later, several cooperatives grew out of such trade unions.

One of the most famous fishermen's movements was started by William Coaker in Newfoundland in 1908. Coaker, no fisherman himself, directed his energies towards reducing the economic power of the trading companies in the port city of St. John's. These companies controlled Newfoundland's trade with Canada, Europe and South America. In those days, Newfoundland exported an unusually large part of its products and imported as much, giving trading companies a major hold on the economy of the colony.

One of the main export articles was cured-salted cod. And the cod fishery was almost unique as an industry, in that those who owned the capital had managed to throw the risk on the shoulders of the working classes.

The Coaker movement concentrated in the beginning on imports of essential supplies, such as salt, flour, molasses, coal etc., but also attempted to increase the price of fish and fish oil for fishermen. It also opposed French trawlers and the introduction of gasoline engines, and asked for regular price information and the construction of cold storage facilities. The political power achieved by the Coaker movement may be judged by the fact that when Newfoundland joined Canada in 1949, the provision of salt to fishermen and the establishment of a salt-fish corporation were pre-conditions.

In the maritime provinces of Canada, following a recommendation of a Royal Commission in 1928, government actively participated in promoting local fishermen's organizations. Within a decade, nearly 150 local organizations were created as well as a provincial organization, the United Maritime Fishermen. The UMF was sufficiently strong in 1937 and 1938 to organize a strike against the fish prices offered by fishing companies. It has since interested itself increasingly in commercial work, particularly in the export of lobsters on behalf of individual cooperatives, and the bulk purchase of fishing supplies for local branches.

Contrary to the situation in Norway, however, the influence on fisheries' policy by fishermen's organizations has been limited in Canada, with the exception of the Coaker movement. The political scene was dominated by processors' interests, which only in local instances were challenged by cooperatives. No strong fishermen's organization developed on the national level, due to structural divisions within the industry, especially as a consequence of discrepancies between regions and in resources availability, and the conflict between inshore and offshore interests.

In the light of growing government subsidies, unemployment and social security programmes, the cooperative movement itself lost its charismatic appeal in the 1960s. But the situation started to change drastically in the early 1970s when more and more fisheries

experienced serious economic difficulties owing to the over-exploitation of fisheries resources and the increase in the fuel prices. Fishermen's organizations became more vocal due to decreased incomes and lower catches, higher costs and poor prices. On the Atlantic coast, the best organized and most powerful organization which emerged at that time was the Newfoundland Fishermen's Food and Allied Workers Union (NFFAWU). Started by a lawyer, a prest and a businessman, the union consists of a confederation of organizations representing inshore fishermen, offshore trawlermen and processing workers.

To come to grips with the complexities of effectively managing fisheries, the federal government took steps to improve communications with fishermen. It decentralized management authority and placed fishermen's Community Service Officers in the fishing communities of the Maritimes. The fundamental aim of these steps was to provide a more respo nsive approach to fishermen at the grassroots level and provide a counterweight to advice coming from the more organized and centrally located processors.

The NFFAWU has been cohesive and strong enough to actively chart out a fisheries policy strategy rather than merely reacting to crisis. The policy's crucial elements are:

- Establishment of an effective management regime, incorporating social and economic as well as biological factors, to ensure equal access to the resource, taking into account social and economic requirements, such as minimum incomes and maintenance of fishing communities.
- The northern cod fisheries to be managed in favour of the inshore/near-shore fishery.
- Creation of 'Regional Fisheries Management Councils' with adequate representation of fisheTmen.
- Fishing licenses to be administered by a licensing board in which fishermen have a majority presence.
- Replacement of foreign off-shore fishing through national fleet expansion.
- Fish prices to be set at a level that would ensure a minimum level of income over and above production costs.

Organizations of inshore fishermen in other provinces, especially the Maritime Fishermen's Union, demanded a 50-mile zone (or 12 or 25 miles) for small-scale fishermen, which however did not gain enough support among the various fishing interests. Though the fishermen's unions also opposed the increasing concentration of economic power in the processing/offshore sector, they realized that such concentration provides good issue around which to orgamze, and, once organized, it is easier to bargain collectively with one or two companies rather than with many.

The strengths and the influence of Canadian fishermen's organizations may be assessed by the following criteria: (i) political or membership base; (ii) militancy and independence; (iii) access to existing patterns of consultative bodies; and (iv) leadership. A low rating on all these accounts is likely to imply that an organization would be entirely reactive to crisis situations, while a high rating points to an organization which is capable of sophisticated policy formulation with a long-term perspective. The latter has been achieved to a large extent by the NFFAWU (and by the United Fishermen and Allied Workers Union on the Pacific coast), while organizations in the other Atlantic provinces are weak in one or several of the above-mentioned criteria.

Maine (USA)

The waters along the .Maine coast are rich lobster fishing grounds. Lobster fishermen have traditionally divided these grounds into areas where only certain men, accepted by those fishing from a particular harbour, may fish — and that too only in the traditional area 'belonging' to that harbour. Each traditional lobster territory and the 'gangs' fishing it are, therefore, named for the harbour where the boats of these groups are anchored.

Initially rather small sea territories were typically held by a small group of kinsmen, and were passed down to descendants patriineally. Local rules regarding admission into harbour gangs and the maintenance of territorial boundaries were often enforced by violence (which is sanctioned locally). But neither individuals nor groups have rights to such areas according to formal laws.

Entry into harbour gangs is easier for a long time resident of the area, who is well regarded and who has some family connections

with a member of the gang. But the most important factor influencing admission is willingness to abide by the local rules regarding lobstering. Apart from adherence to territoriality, such rules may refer to the number of traps that may be fished or to fishing seasons. These rules generally aim at conserving the lobster resource, improving economic returns from fishing and ensuring equal opportunities for group members.

The organizational form of the harbour gangs is usually informal and unstructured. Even though the group members will fish out of the same harbour, they may reside in different communities. The only occasions on which the fishermen act as a group occur when a number of men agree that an individual has become a serious poacher or is pursuing a selfish and detrimental fishing strategy and must be driven from the fishery.

In areas where territoriality has been strictly enforced and the number of group members limited, catches per unit of effort, as well as average sizes of lobsters, are higher, resulting in higher incomes to the fishermen. In many other areas, however, where the traditional means of controlling resource access and fishing effort are breaking down, the lobster resource is economically and biologically over-exploited. Small-sized groups with strong kinship ties and a long-standing tradition of cooperation are often more militant and forceful in defending their territories.

The Maine lobster fishery demonstrates that the de facto 'ownership' of a certain sea territory (and its resource) can provide a strong and lasting organizational base for fishermen. It can also change their occupational attitude from one of hunting to one of conserving and culturing.

Japan

The emergence of fishermen's associations in Japan goes back to feudal times, reflecting the tradition of collective unity for the attainment of group goals in moral philosophy as well as in practice.

The Japanese, in feudal times, classified coastal villages as 'agricultural' and 'fishing' villages. It was reasoned that, if fishing activities were permitted in agricultural villages, agriculture would decline. So, only villages with small amounts of agricultural land

and where fishing alone offered a viable livelihood, were allowed to participate in the fisheries. Fishing rights were awarded to these communities and formed the basis for calculating the taxes payable to the fief lord. To limit the number entering the fishery from any particular community, thereby ensuring equity and viability, fishermen's guilds came into existence. These were the forerunners of today's fishermen's associations.

As the feudal era drew to a close in the middle of the 19th century, commercial fisheries were developed by both agricultural and fishing communities. Consequently, serious disputes over fishing grounds began to occur between fishing and agricultural communities. In order to arbitrate these conflicts, the government enacted the 'Fisheries Law' in 1902.

This legislation provided for the establishment of fisheries associations in each fishing village and assigned fishing rights to them, including the common or territorial fishing rights to mainly sedentary in-shore resources. The territorial rights to in-shore fishing grounds were extended in the l920s because efficient off-shore vessels began to intrude into in-shore waters, causing serious conflicts with in-shore fishermeD. Economic strains in fishing communities in the early 1930s intensified these conflicts. At this point, a movement arose to extend common fishing rights grounds further off-shore and to concentrate all fishing rights in the hands of fisheries cooperative associations. The intervention was to keep large off-shore vessels out of the grounds.

Following World War II, major revisions to the fisheries law were carried out by the government. Among the objectives debated were the expulsion of absentee owners from fishing villages, reservation of fishing rights exclusively for working fishermen, permission to company-owned fisheries to fish for migratory species, and the narrowing of the reserved zone of common fishing rights while extending the open fishing grounds (under licences) as widely as possible. In applying the current law, a compromise of the different views, fishermen's associations play an important role and Japan's littoral fisheries are thus essentially self-managed by individual cooperative associations or federations of such associations.

The case of Japanese coastal fisheries demonstrates how the initial establishment of fishing rights in feudal times, in combination with a moral tradition of collectivism, contributed to the emergence and growth of democratic, economically and politically powerful fishermen's organizations.

CONCLUSIONS

The case studies presented in the preceding pages of this section indicate that fishermen in all these countries organized essentially on the same issues now found in several Third World countries. These issues include monopoly practices in fish trade and in supply markets, introduction of large-scale fishing technologies and distribution of access to fisheries resources.

Several questions arise out of these issues.

- How can the organizing potential of resources issues be transformed from one of reaction to crisis situations to one of actively involving fish workers in the management and development of fisheries?
- In the context of the fisheries of the region, is the allocation of local territorial fishing rights a feasible proposition? What other measures are required to stimulate the emergence of organizations among fish workers?
- What roles can governments and national and international development agencies play in assisting such a process?
- Can the organizational base of fishermen's organizations be expanded to include workers in fish processing plants and workers on industrial vessels, thereby overcoming the division on technological lines and increasing their lobbying and bargaining force in fisheries' policy-making?

Answers to these questions could provide some insights into how the participatory process might develop in the Third World.

IV
Action Research

1.1 PARTICIPATION IN SEAWEED CULTURE TRIALS IN TAMIL NADU

The government of Tamil Nadu has been interested in promoting seaweed culture, especially where seasweed collection is already practised, to meet the demand for seaweed as chemical feedstock. Seaweed was also expected to provide considerable additional income to poor fisherfolk in the area.

A field study indicated that seaweed culture along the Ramanathapuram district coast was technically feasible. BOBP undertook to identify villages where seaweed culture trials would be feasible and to get the identified communities not only to think through the concept but also to plan and organize themselves to participate in it.

Using data from the Department of Fisheries and the Central Marine Fisheries Research Institute (CMFRI), 15 coastal villages in Ramanathapuram district were identified for the trials. A team of three social scientists then visited each of the 15 villages.

In each village, the seaweed resource situation was discussed: present availability for collection, scarcity due to excessive collection, proposed government restrictions on collection zones, and techniques of collection that were destructive to the resource were also considered. The researchers described the process of seaweed culture to the villagers and there was further discussion of the social, resource allocation (of common property), benefit-sharing and organizational aspects.

These discussions were expected to help the researchers in two ways. In the first instance, it would help them understand the socio-economics of the villages and the dynamics of the communities.

Such an understanding would then help them assess the commitment of the villages in the seaweed culture trials.

The researchers encouraged the people to articulate and think about their situation and seriously consider their attitude to the proposed activity. No decisions or suggestions were made by the research team on behalf of the community. It was emphasized repeatedly that communities participating in the seaweed culture trials would be partners and not workers; they would have to take full responsibility for local management of the activity. BOBP and the Fisheries Department would only provide some funds and technical inputs. Eventually, five villages were identified as places where seaweed culture would be socially and economically feasible.

The villagers were keenly interested in the possibilities of seaweed culture. In three of the villages, those ftvolved in seaweed collection were already aware of, and, to some extent, familiar with, the seaweed culture work of government organizations in the region. Considerable area for culture work was available; and no shore seines or cast nets were being used. These communities were also already well organized and homogeneous, or exhibited characteristics that suggested that they could be organized.

The researchers next conducted an in-depth study in the five villages. They:

1. met the leaders of the village community and organized a meeting of all those who were to be involved in seaweed culture trials, so that both the community and the research team would understand the extent of the community's interest in, and commitment to, the proposed culture trials;
2. assisted the village to form a committee to undertake the managerial responsibilities of the trials – such as maintenance and guarding of the culture area, marketing of harvested seaweed and sharing of the benefits – as well as to decide on the list of persons who were to be involved in the trials; and
3. ascertained, by discussion, how the community proposed to continue with seaweed culture in the future.

After analyzing the results of the study conducted during the second stage, it was decided to reduce the villages to two.

Of the three villages eliminated, one had to be dropped, despite the people's interest, because environmental conditions did not seem to be favourable; for about eight months in the year, the sea here is rough. In the other two villages, it became apparent that the communities were reluctant to commit themselves. In one of these villages, despite an interest in the project, the community leaders were unwilling to organize the community for the work because they had doubts about the profitability of seaweed culture. In the other village, the men were profitably engaged in fishing and coconut plantations, but the women were not allowed to undertake this work.

The two villages finally selected for the seaweed culture trials were Chinnapalam and Vedali. In both villages, seaweed collection is being carried out on a large scale, by men and women already aware of government's seaweed culture work. There are no shore seines or cast nets and the areas available for the culture trials are not used for boat landings. Both villages have formed committees to shoulder the managerial responsibilities of seaweed culture trials, to nominate persons to be involved in the actual work, to guard the culture area and to share the benefit of the harvest equally among all those who participate in the work.

in each case, the villagers prepared a signed document on the formation of the management committee and participatory groups, as an earnest indicator of their commitment to the project and their willingness to take responsibility for it.

The research team fdt that the time allotted for the first phase of the study was too short, as a result of which they were able to meet only a few persons in each case. Such a situation could cause resentment among any leaders left out.

During the second phase, the team found it impractical to stick to the schedules prepared; flexibility was necessary to suit the convenience of the villagers.

Once the list of participants was finalized in the two selected villages, the people wanted an indication of when the culture trial would begin. To avoid the impression that this was iust another survey, it was necessary to give a tentative schedule.

The researchers found that having one older person in the team was an advantage in gaining the villagers' confidence, because of their traditional respect for older persons. On the other hand, the lack of a technical person on the team was felt. Though the social scientists who comprised the team had received some training in the technical aspects of the project, they felt that a technical person would have been able to answer some of the questions with more authority and confidence.

The team collected data through unstructured, non-formal interviews and group discussions. In the process, it found it had developed a detailed schedule within the framework of the non-formal interview which was used in talking to all village community leaders and the other organizations in the village. The schedule sought information on the following aspects:

a. Village socio-economics;
b. Village political situation and factions in the village;
c. Relations with neighbouring villages;
d. Seaweed culture: existing conditions, extent of the leader's involvement and personal opinion about implementation and future prospects; and
e. Basic needs and problems of the community and the leader's suggestions on these.

During discussions, the research team's role was that of a catalyst. It made no promises and offered no solutions but by helping the villagers to state their problems and expectations, and by posing questions which impelled the villagers to work out the answers, it was ensured that the final commitment of these villagers was reasoned and voluntary.

The people's inputs consisted of factual information regarding their socio-economic conditions and the existence and extent of seaweed collection in their community; their opinions, based on experience, attitudes and arising out of discussion, of the nature of their needs and problems; the possible answers to these problems and to the question of the viability of seaweed culture in their community; and, in the two selected villages, their voluntary commitment to the seaweed culture trials.

The team recommended that, until implementation of the trials, it would be important to keep in touch with the villagers, through correspondence, to maintain their interest and confidence in the project. The team advised that the technical and extension staff implementing the project should be selected on the basis of their understanding of, and commnitment to, participatory development. It felt that it would be useful to involve the research team in the first phase of implementation to maintain liaison and establish rapport with the villagers.

The team felt that BOBP should keep an eye on the working of the village management committee with regard to payment of wages, sharing of benefits and guarding the culture work. BOBP could also help solve problems arising out of differences between corn-miuee members. It should also take the responsibility for marketing the first harvest of cultured seaweed, dealing direct with factories. It should then form a seaweed producers' cooperative society and advise the villagers on the successful continuation of the programme.

1.2 PARTICIPATION IN SHRIMP PEN CULTURE IN SRI LANKA

The village Merawala is located on the west coast of Sri Lanka. It is not a 'fishing village' in the accepted sense of the phrase. Only about 25 per cent of its families regard fishing as their major source of income. This income is obtained through net fishing in the lagoon. There is almost no skill in sea fishing.

A BOBP project is to develop a plan for the overall improvement of this village, with the fullest participation in it by the community. A significant component of this plan could be the growing of shrimp in pens in the lagoon.

Though the pen culture experiment was in progress at the time of writing, work on generating an overall plan would begin only after a study of the village was completed. As the study was still going on at the time of writing, only the approach is discussed here. It is an approach that might offer lessons for other participatory projects in similar villages.

Why was Merawala chosen? In many respects, Merawala is distinctly different from the fishing communities of this coast.

The percentage of fishermen is small and, unlike others, they do not fish in the sea or even combine sea fishing with the expiditation of the lagoon. The decisive factor in making the choice appears to have been the possibility of experimentation with pen culture, given the proximity of Merawala to the lagoon and its rights in the lagoon.

In one sense, the project had an unfortunate start. At the time of writing, the village had little knowledge of the real nature of the trial. In fact, there was a fear that this trial could well consolidate into a permanent occupation of their fishing gounds!

There were other complications. The first harvest was a fiasco; the shrimp had escaped through damaged nets and there had also been pilferage.

Despite this disappointing start, the project is continuing. A major focus of the project is participation by the villagers.

Assuming that the economic premises are sound, there are several other issues which influence the emergence and operation of participatory organizations in such projects. Some of them are:

1. Participation implies equality or, alternatively, presupposes a goal which is attractive enough to induce collaboration and suppress inequality. Many projects fall at this point.
2. While the participatory ideal requires that as many decisions as possible should be taken by the full membership, effective management often demands that many decisions will in fact have to be taken by a small group. If too much authority is given to this group, the project will lose a valued attribute. If, on the other hand, too little is given, the project may grind to a halt. The right balance is a difficult one to strike and many projects do not seem able to do so.
3. In terms of broad organizational classification, participatory organizations belong to that category in which the managing group derives its authority from below, that is, from the membership. But the external organization functions in some ways as a group in authority *over* the managing group. The consequence of this arrangement is that it often reduces the answerability of the managing group to the membership and gives this group a bureaucratic character.

But perhaps the most important influence of participatOry projects during implementation is the variety of ways in which individuals behave. Some respond wholeheartedly, performing tasks that involve time and effort. Others give it support, but fmd it difficult to give their time. Yet others sit on the fence,- while there are those who are actively hostile. Quite simply, there is considerable diversity of behaviour.

In this project, an approach to behaviour that was frontal rather than indirect was necessary. The position taken was that behaviour is amenable to social inquiry in a manner that is no different from other social phenomena. It was also agreed that behaviour referred not so much to a single relationship as to a network of such relationships.

The attempt then was to understand behaviour in the context of networks and explain it through strategies. It was the connection between these three elements which constituted the essence of this scheme.

This view of behaviour has a major implication. The relationships which form an individual's network do not operate in a vacuum, but take as 'their context the activities and institutions of the community – kinship, neighbourhoods, religious institutions, economic activities, factions, political groups, village associations and so on. Relationships are therefore not only a part of an individual's network, they are also the basic constituents of these institutions. An analysis of networks, in consequence, leads naturally to an analysis of institutions.

This was the approach directed towards the problems of Merawala. Unlike fishing communities, but like most agricultural communities, many Merawala households derive their income from more than one source. Three broad levels of income are discernible. In the upper category are the lime kiln owners, a few entrepreneurs who have recently moved into paddy cultivation, the large-scale distillers and some traders. In the middle group are the smaller traders, the majority of the distillers and the village's 50 net fishermen. The lower category is composed largely of those who sell their labour to the first two categories. They do so in a buyer's market and, in the interests of continued employment, have to maintain the right relations with their patrons.

The first pen culture project began here when an official of the Ministry of Fisheries sought the permission of the fisheries society in the village (to which the 50-odd fishermen belong) to use a part of their fishing ground for four months. He promised that this would in no way interfere with the normal activities of the fisherman. When the pens were constructed, the village thought otherwise and some adjustments were made so as not to interfere with net fishing. The village looked on the venture as one promoted by a foreign private company, and the fisheries society was blamed for allowing it the use of Merawala's fishing grounds.

When the shrimp began to grow, the village did show considerable interest. Ponds were constructed in the village and, more particularly, in the strip of land between the lagoon and the sea. However, the government stepped in at this point, since the strip of land was state land, and prohibited the villagers from using these ponds for shrimp culture. There was apparently an environmental consideration in this, in that the area is characterized as a mangrove swamp which should be preserved.

It is fair to say that in the initial stages of the experiment the village understood little about it. They were not informed about the technical aspects of the experiment and were quite perturbed when it ran on for more than the stipulated period. There was certainly little discussion with the village as to how its income might be improved should the experiment turn out to be a success.

It has been suggested that if thieving of shrimp did take place immediately prior to the harvest, it was in the belief that the catch belonged to a foreign company. The discussions which have taken place subsequent to the harvest have allayed some of the fears of the village. But the village has yet to understand the benefits that the community as a whole might derive from this project in the form of a stable source of income.

Ties of kinship, through intra-marriage, bind the residents of Merawala to each other. Such arrangements usually tend to produce leaders whose primary qualification is kinship, but this does not appear to have happened in Merawala. It is possible that the village's economy did not permit the concentration of wealth on which such leadership may have been founded.

This has had important consequences for patron-client relationships. It appears that dependence on patrons has decreased for a fair percentage of people. This is reflected in civic and political life. The older established leaders take little part, and have little standing in village-level associations; nor are they powerful enough to obstruct or otherwise hinder the activities of these associations. The initiative is taken by younger people who enjoy some independence in economic terms and who have attempted to rally the village through these efforts. But the rank and file have not responded in large numbers and see no particular benefit accruing to them through the activities of these societies. The village-level associations are thus confined to a few interested members. This is, for instance, the case even with the Fisheries Society; it is seen by most members as useful in a crisis or emergency, but not as one which can serve a continuing purpose.

When the first two phases of the study are completed, the major task, the third phase, which is to get the village to prepare its own development plan, will be embarked on. This is expected to be at two levels. The main forum will consist of the leaders of the village, the chief office-bearers of village associations and others who, by common consent, are accepted as leaders. At the other level, the interaction will be with the associations, family groups, neighbourhoods, work teams, in fact with any group which has a sectional interest. The attempt will be to produce a plan which can work best.

Merawala is far too diverse for a plan with a simple format. Each of the village's segments will probably argue for what its own emphasis is. The entrepreneurs, for instance, will probably suggest that the liquor business be wound down as the first step in any scheme of village improvement. If the big thrust is likely to be fishing, those who now leave the industry to its own devices may well want some share of its control. The improvement in services, which some may deem essential, might get low priority from others. And any attempt to raise the level of living of any one segment may arouse the resistance of those who see themselves in competition with this group. The big issue, then, is whether well-supported sectional plans can be synthesized into a form which has general acceptance.

The completed study will be able to interpret sectional proposals, not in terms of whether they come from the rich or the poor, but with reference to their networks, strategies and idiom of behaviour. It will identify the opposing interests and test their reaction to these proposals, It should then be able to assess at what level compromise is possible. When the plan takes its final form, it will be possible to forecast its implementation prospects.

There can be little guarantee that a satisfactory final plan will emerge through this project. But it will enable recognition of what it takes to stimulate a community into making its own effort for its own purposes.

Usually, projects which have either been completed, or which have been in progress for a substantial period of time, are examined. In other instances, the task has been to assess the feasibility of a project which is about to be implemented. On rare occations, studies have been made on the basis of which a project was to be planned. Without exception, the commissioning agencies have thought of such studies in very limited terms. They have seldom been willing to make an adequate investment in such a preparatory exercise, however logical and rational it may have been shown to be. In fact, the over-enthusiasm with which agencies have embarked on projects that are very expensive in terms of time and money is appalling.

The accumulated failures are too many for this approach to be acceptable any more. The complexities of participatory projects have been demonstrated often enough, even though they have not received the study they deserve. It is no longer reasonable to design projects whose foundation is limited to a suspect moral or ideological principle. The approach must be logical, systematic and constructive.

V
Appraisals

1.1 THE BOBP EXPERIENCE

a. In Aquaculture Projects

Aquaculture is a fisheries development activity that has certain individual characteristics. In whateyer manner pilot projects and technical trials are conducted, the activity has to be ultimately handed over to, and practised by, the fisherfolk. People's participation has, therefore, to be absolute. The socio-cultural shift from marine fishing to aquaculture could cause social changes in the community. And aquacukure involves privatization of an open resource, the privatization being legitimized if the whole community is involved.

Two experiences the Bay of Bengal Programme had with aquaculture provide usefu.l data for appraisal of people's participation. One was in Phang Nga Bay, Thailand, the other in Killai, Tamil Nadu, India.

Finfish Cage Culture in Phang Nga Bay

The northern part of Phang Nga Bay in Thailand was selected **for an** aquaculture project in order to improve the socio-economic conditions of the fisherfoik in the area. Fishing was the main occupation there, but fisheries were a dwindling resource. Industries in the area were also drawing away fisherfolk families from their traditional occupation.

Aware of these problems, the fisherfolk expressed an interest in aquacuhure, perhaps because a tradition of this kind of culture already existed in the area. There was, moreover, a considerable local demand for the kinds of fish considered suitable for cage culture. Preliminary surveys indicated sites suited for cage culture.

The project aimed at providing a viable alternative or at least a supplementary income source to small-scale fisherfolk as well as providing a model for an "extended development effort in the rural fishing sector".

To implement the project, BOBP organized the fishermen in groups, each group selecting a leader to liaise with the project staff and organize the daily work. Training courses on the spot and study tours were organized. And extension officers were always accessible to help out with problems.

From the inception of the project, when cage culture was demonstrated in two villages in 1979, Phang Nga fisherfolk worked in cage culture not as hired labour, but as partners. Two years later, at the end of the project's first phase, the overall picture did not indicate economic viability. At this point, the project staff considered scrapping the project. But the fishermen had noticed some individual successes and insisted on continuing with the project. They experimented with cage construction, using their own resources. This more than halved cage construction costs. Learning from observation and experience, the fisherfolk established the economic viability of the project.

In subsequent phases, it was found that groups did not function satisfactorily and cages were assigned to individuals. The project was then extended to cover villages in other provinces.

Finfish cage culture was only one element – though by far the most successful one of this project. The fishermen readily experimented with this new technology because they felt they could handle the risks associated with this small-scale venture.

The research team involved in the project was able to establish a close working relationship with the fisherfolk. This occurred without any specific planning for participation, but its other activities, such as putting up a water tank, helped establish this rapport. Thai fisheries officers also dealt with the fisherfolk on the basis of equality, possibly due to the Thai cultural pattern.

BOBP's involvement in the project ended in 1985. At that time, there were about 3,700 cages in 1,160 farms, the farms essentially being family operations situated on the doorsteps of

the fishermen's houses. This enabled all working members of the houshold to participate in the work, without giving up traditional occupations.

Family management limited the size of the farm to about four cages. Bigger farms, of more than 30 cages, used hired labour and managers working for absentee owners.

Socio-economic surveys revealed that cage culture could substantially increase the cash income ofsmall-scale fisherfolk. Small-scale farms have an advantage over large ones because labour and operating costs are not (or not totally) translated in an outgoing cash flow. When the government abolished subsidies to cage fish farming, it was essentially the bigger farms which went out of business.

The main negative impact of cage culture was the reappearance of push netters to collect feed. This very destructive gear had been banned for several years. Even greater over-exploitation of the available resources was likely because of the enormous amounts of fresh 'trash' fish required for cage culture. There was also a diversion oflow priced fish, like mackerel, from human consumption to feed for cage fish.

BOBP thus had accidentally found the real needs of the people. Thereafter, the hard work put in by the local government officials to get the message across enabled participation to a high degree. That the contribution of government officials having knowledge and understanding of the fisheries community's problems is important, when the problem identification is not orginally made *by* the people, was demonstrated by the Phang Nga experience.

People's participation was there in the project to a high degree, but participation was not the original aim. When an organization set up to fulfil a purpose failed, the change was made to a family-based operation and received participatory response. An understanding that orgamzaiions should be flexible and should change with time was demonstrated.

Pen Culture of Shrimp in Killai

In 1980, the Tamil Nadu government requested BOBP for technical cooperation in aquaculture development in the State's

coastal waters. A prdiminary study identified the sandy mud flats near Pulicat Lake and the Killai backwaters as areas where pen culture of shrimp could be profitably developed. A 21-month project was begun there in May 1982 as a collaborative effort of the government's Department of Fisheries and BOBP.

The sandy soil of the coast and the vast backwaters made the area better suited for aquaculture in pens than in ponds. Pen culture involves segregating an area of water with nylon netting held in place by casuarina poles and ropes. With the water body penned in, predators and other undesirable organisms are removed with fishing gear and by band-picking. Seed is collected, or juveniles are caught in their natural habitat, stocked in nursery ponds and transferred to pens when they reach a particular size.

During culture, the shrimp farmer has to concern himself with providing supplementary feed, regular inspection of nets followed by repair of any damange caused by crabs and other pests, and removal of such pests.

Hazard to the crop from disease or changes in salinity or temperature is infrequent, but when it occurs, the threatened crop should be harvested early. Therefore constant monitoring is necessary.

Data from the three trials conducted over 21 months indicated that shrimp pen culture in KiIlai was technically feasible. Three studies of the area and seed and feed availabilty were also undertaken.

With technical feasibility demonstrated by three harvests, problems of economic and social feasibility were considered.

The fishermen in Killai are Hindu Parathevars. The other community in the area who live off the backwaters is a tribal, semi-nomadic group, the Veddars. The Killai fishermen, who consider themselves a higher caste, see the backwaters as their own. The social study conducted on the spot found that it was the Veddars who were the needy people, not the Parathevars, who were better off than the average fisherfolk. But the Veddars could not be involved in the project except as labour (for work which the others would not do) because of the dominant community's attitude.

During the initial, experimental phase of the project, local fisherfolk were involved in the trials as paid labour. But when they were approached for further involvement, the Killai fisherfolk strongly opposed the introduction of aquaculture in the backwaters. They feared the loss of their captive fishing areas and believed aquaculture could not be successful or of benefit to them. This negative attitude was a result of their earlier experience with government trials in pond culture.

These fisherfolk also said they had not been allowed to approach the project site. A serious lack of communication had made the fisherfolk hostile to the project. Subsequently, a serious and concerted effort was made by project personnel, including a social scientist, to establish better understanding and communication. This was successful to some extent, but the attitude of fisherfolk to the project remained wary.

When it was found that the area available for culture would only be 85 ha., much less than the original estimate, a new problem arose. Cultivation in this area would benefit only a small portion of the target group and this meant privatization of what had been an open access resource. The Killai fisherfolk had always been strongly against individual ownership or activity. They therefore took an all-or-none stand: they preferred to have no shrimp culture rather than have the culture areas assigned to a few in the community.

Meanwhile, with the investment in setting up pens and procuring feed being high, the economic viability of the project was yct to be demonstrated.

The fundamental mistake at Killai, according to the appraisal, was not to involve the people at the beginning and identify their real needs. The idea was thrust on people, officials dictating terms to the fisherfolk and demonstrating no flexibility. Neither the fishing rights in the backwaters nor prevailing caste hierarchy were understood or accepted by the officials, who already had a bad reputation after a previous venture had failed. Studies were only conducted at a later stage and the problems realized too late.

Thus, BOBP started its aquaculture project in Killai with a very low level of people's participation and less interest.

If BOBP was to have succeeded here:

a. Socio-economic studies should have been done early to identify the problems;
b. Officials should have been flexible and respected the people's views;
c. The community should have been informed of aquaculture trials and it should have been demonstrated to them that aquaculture failures in other places need not be replicated;
d. Proper planning involving people should have been carried out and solutions to problems of fishing rights and caste dominance should have been found through discussions with various groups; and
e. Proper extension services should have been set up.

1.1 b. The BOBP experience in Fisheries Technology Projects

The bulk of marine fish landings on the east coast of India are from traditional craft (TC) manned, owned and operated by poor fisherfolk who operate from open beaches. Only a few thousand motorized craft operate from harbours.

Kattumarams, or log craft, account for 70 per cent of these craft; the other craft are the *navas* of Andhra Pradesh – plank-built canoes – and the *masulas,* a boat used seasonally for beach seines. *kattumarams* are severely limited in carrying capacity and mobility, while *navas* have carrying capacity but are restricted to near shore areas accessible with oar and sail power.

Beach Landing Craft (BLC) for India's East Coast

After the FAO/UNDP Project for the Development of Small Scale Fisheries prepared project descriptions of small-scale fisheries along India's east coast, including detailed analyses of fisheries, fisherfolk and their problems and needs, it was proposed in 1978 that the Bay of Bengal Programme should, *inter alia,* address itself to improving traditional craft, developing replacements for traditional craft capable of cress-beach operations, exploring the use of alternate materials for boat-building, and developing new types of motorized craft. It was subsequently suggested, in 1979, that BOBP should specifically improve *kattumarams* and develop

beachcraft. But the member countries, including India, where the project was proposed, did not clearly specify either the particular fisheries or the fisherfolk whose problems needed to be addressed, nor did they specify any constraints in terms of the cost of craft and, therefore, economic viability.

BOBP planned its activity using two consultants; one focussed on *kattumarams* and the other on developing Beach Landing Craft (BLC). The project was prepared by the consultants after extensive travel in the project area and discussions with fisherfolk. Not having witnessed any sustained and serious efforts at craft development prior to this, the fisherfolk felt that their craft could not be improved upon. Their craft, evolved over generations to suit the local ecosystems and their social and economic ways of life, are ideally suited **for** operations from open suribeaten beaches. A study of the technical characteristics of these craft gave the consultants a basis for their work.

The development of a BLC focussed on the craft's ability to function better than traditional craft in the local conditions and not on the social and economic aspects of the technology, especially its possible impact on the fisherfolk.

The idea of the BLC was not to replace *kattumarams* and *navas,* but to make faster and sturdier boats that would go further in the sea and carry back more fish than traditional craft. The additional cost, due to increased capacity and mobility as well as motorization, was justified by projected increases in catches, making the new craft viable.

The *kartumaram* improvement project concentrated on chemical treatment of logs, use of alternate types of wood and coating of logs to improve on the 5-6 year life period of traditional logs. But in the end it was found that the task of improving the *kattumaram* was technically very difficult, if not impossible, since the *katrumaram* was found to be a craft that had been technically (and socio-economically) perfected over several generations for local conditions. From this point on, therefore, the development of BLC, to provide improved craft for the *nava* and *kattumaram* fisherfolk, became the primary activity.

Four prototype craft were first developed. The IND 10 proved to be too heavy and difficult to handle on and off the beach and was rejected. The IND 14 was a twin-hulled craft whose bridge and crew were fully exposed to the onslaught of the waves. Controlling the craft during beach landing was also difficult. And the craft was difficult to assemble and dismantle. This craft too was rejected. The IND 11 was based on the *katrumaram* principle. The fisherfolk liked it and its similarity to the *kattumaram*, but structural problems and high costs made it impractical, so it was scrapped.

The IND 13 was next developed and proved sea-worthy. The *nava* fisherfolk liked its similarity to their craft and the protection it offered the crew, but after further trials along side three Navas, the fisherfolk felt that a longer boat would provide better crew shelter. Fisherfolk and the government were closely involved in these trials. This led to the development of a larger craft, the IND 20.

The IND 20 costs approximately Rs.1,10,000/- and cannot be afforded by fishermen. But 45 such craft are in operation in cooperative systems. Fisherfolk are able to get good catches and trials indicate that *in fisheries where it is possible to get good offshore catches seasonally (3-4 months), the craft is economically viable without* subsidy. With subsidies of 33-50 per cent, the craft is viable even without access to offshore fisheries.

The IND 21, a stronger version of the IND 11, was preferred by the *Katrumaram* fishermen and was tried out in two places. Simultaneously, two other aluminium versions, called the IND 23 and IND 24, were developed and rejected on the grounds of cost and manufacturing capability. When the IND 21 showed up structural problems, BOBP designed a smaller beach craft called the IND 25, ensuring that it would not cost much more than the IND 21. The craft cost approximately Rs.1,05,000/-. This craft is technically good, but its economic feasibility is perhaps not as good as that of the IND 20, since it would be more difficult to fish offshore with this boat.

Two technically sound craft, the IND 20 and the IND 25, have now emerged as final designs, the former to answer the needs of

nava fishermen and the latter to meet the needs of *kattumaram* fishermen. But these craft now need to find specific fisheries and fisherfolk in whose context alone they will be viable A technically fine solution to the problem of providing better beachcraft for those using traditional craft is now posing its own problems. From the people's participation point of view, BOBP received guidelines which did not specify target fishermen. In developing the craft, while fisherfolk were involved in the consultants search and learning, no fisheries or fisherfolk targets were introduced. The brief was purely a technical one. The governments of Tamil Nadu and Andhra Pradesh also were not wholeheartedly involved in the development, except for a bit during the trials and in making financial arrangements to enable purchase.

BOBP received no feedback from the governments on the relevance of the activity in terms of real fisherfolk or fisheries needs; nor did the governments make any attempt to influence the direction of the activity.

The fisherfolk were deeply involved in the trials and the changes in designs resulted partly from their inputs, but the social aspects were not considered.

The Beach Landing Craft project demonstrated various levels of people's participation. The survey that was done asked people about technical problems. People participated in the sense that they complained about the problems. But is this level of participation sufficient?

People's participation was not high during the planning stage. This was possibly because no special target group was identified for the new craft. To increase people's participation, it might have been better to improve on what the fisherfolk already used or have. Or if new craft is considered the solution, the target group might have been better defined to increase people's participation.

One area where there was complete participation was in testing the boats, for which fishermen were invited. But although technical testing with skilled crew is important, further tests aimed at more general acceptability should have been conducted. Participatory activities should have involved the whole community concerned and not only the direct users of the technology.

If people's participation had been there in developing the craft initially, there need not have arisen the question about what criteria should have been used to determine whether the craft was the one required. But once the question was raised, there was *re-evaluation and replanning with people's participation,* resulting in craft that met the people's requirements.

Though social service – to understand the needs of fisherfolk – and subsequent extension services – to enable proper maintenance of the BLC - were lacking, good monitoring, through frequent communications, followed by visits and seminars/workshops etc., enabled this project to be somewhat successful. But the project revealed the need for competent government technical officers who know about boats and who could keep track of the costs and benefits of the operation.

High Opening Bottom Trawls in Tamil Nadu

The 1970s saw a dramatic increase in the use of mechanized shrimp trawlers in India, fuelled by the lucrative international demand for shrimp. But while the demand and market have continued to be good, shrimp trawlers seem to have hit bad times in and around Tuticorin in Tamil Nadu.

Amongst the problems associated with shrimp trawling are two major ones: one, the bias towards shrimp tend to reduce the local availability of much-needed food fish at reasonable costs, and, two, shrimp being seasonal, the trawlers lie idle during the off season, since the gear they use tends to pick up only low-priced fish.

In 1980, BOBP decided to explore the possibilities of diversifying the fishing effort of India's small-scale trawlers. The intention was to get these trawlers to produce more food fish, thereby reducing, at the same time, the pressure on shrimp stocks. It was hoped that such diversification would also harness idle trawler power in the non-shrimp season.

After some developmental work, BOBP introduced for trial variations on the High Opening Bottom Trawis (HOBT).

A trawl, a conically-shaped net-bag that is pulled or towed by one or two boats, traps the fish herded into it. Conventional shrimp trawls

used in India have a maximum mouth-opening of about one metre. The HOBT, on the other hand, opens up 2 1/2 metres (about eight feet) high, when pulled by one boat, and as much as five metres (nearly 15 feet) when towed by two – a method offishing known as pair-trawling or two-boat trawling.

The HOBT uses larger-sized mesh and more webbing than the conventional trawl. On account of its light rigging, the trawl skims the sea-bed instead of scraping it, thereby catching very little shrimp, but a lot of food fish varieties. It is also fuel-efficient and can increase food fish supplies at relatively low fuel cost. Idle shrimp trawlers can, therefore, be put to good use during the off-shrimp season if they use HOBT.

BOBP got such a trawl fabricated locally under its close supervision. The webbing of the trawl bag was done by machine, everything else by hand. The new gear, and other locally fabricated auxiliary equipment to make the fishing operations safer, were then tried out using locally-hired crew.

The trials showed the distinct superiority of the gear. The local fisherfolk were particularly impressed that not only did the new gear bring in far more catch than they were used to, but that the non-shrimp species caught were also no longer low-priced.

There was no formal extension effort by BOBP except for demonstration. The word spread among the fisherfolk; there were increasing enquiries and demand for the gear and auxiliary devices.

Normal extension efforts would have had great difficulty in coping with such demands from the private sector. But in this case, every single piece of gear and mechanized device was developed in close cooperation with local artisans and manufacturers. They not only converted design drawings into fabrication, but were actually a part of the design and development process, which made it possible for them to incorporate new features, designs and modifications as they evolved from the learning during the trials. Local manufacturers, therefore, were able to supply the increasing demand (independent of any effort by either BOBP or the associated government departments).

The rapid pick-up and use of the new gear were testimony to the self-reliant participatory development and trial process that was

used in this case. But its success also created a fear that the efficiency of the new gear would affect adversely the productivity and, consequently, the living conditions of many fisherfolk employed in traditional non-mechanized fishing in the same areas, possibly leading to conflicts between sub-sectors.

An impact study on the biological consequences of introducing these trawling techniques in the Palk Bay and the Gulf of Mannar was later undertaken by a consultant of **BOBP** and showed no evidence of negative impact on the exploited and exploitable resources of the region. It appeared doubtful whether there would be any indiscriminate expansion of the technique. The large mesh nature of the gear also helped to conserve the resource by bringing in larger shrimp and fish, allowing the smaller to escape.

However, too much of a good thing can be bad. Any gear, appropriate or otherwise, used in large numbers, can deplete and destroy fish resources. Careful management is therefore necessary. And this is where associated government departments can and should play an important role.

The HOBT project underlined the need for more thinking about ways and means of fisheries management. In the final analysis, fisheries management has to be done by fisherfolk with the guidance of, and not policing by, government. In the HOBT project and after, some clear danger signals were seen.

Some of the trawl owners seem to have reduced not only the mesh size but also the opening in the trawl. These are detrimental to the concept and to the resource. It would be unfortunate if a technology that set out to relieve pressures on resources while enhancing food-fish availability and earnings, and which enabled fisherfolk to benefit by participation, turned out to be a danger to the resource because of poor management, particularly by government departments.

1.1 c. The BOBP Experience in Extension Projects

During the first phase of its existence, the Bay of Bengal Programme's main objective was to test and develop technology to benefit fisherfolk. When BOBP moved on to extension work, its concept of such work was wider than the traditional definition

of extension, which is 'to extend', or make available, to a target group the technology which had been developed and tested. BOBP saw it as including areas like education, credit, women's activities etc., which are not related to fisheries technology but are essential if real development is to take place.

In BOBP's extension activities, people's participation has not been an articulated objective. In some projects, participation was intended, but did not occur; in others, participation occurred without the intention or there was both intention and occurrence; and in still others there was neither. This is quite apparent in the following examples of BOBP's experience in extension work.

Link Worker Approach in Tamil Nadu

Following a 1979 BOBP workshop on the need for fisherwomen-oriented programmes, a survey of three traditional fishing villages in Tamil Nadu was carried out. The study revealed that techno-economically viable solutions to improve incomes of women in small-scale fisheries did not exist; to improve their economic condition, they had to be made able to fully utilize the services and subsidies available to them. These were not being utilized because most fisherwomen were uneducated, uninformed and unorganized. The link worker approach was seen as a means to organize and activate them.

Discussion and dissemination of information preceded all activity undertaken in this scheme. In each village, initial meetings were with the men, mainly the village leaders. Women were drawn into the meetings, or were met with separately, only after the men had understood and accepted the scheme.

Once the scheme was accepted, suggestions from the village headman and other leaders, men and women, formed the basis of discussion with those women who were seen as possible link workers.

Twenty-three trainees were selected. Amongst the selection criteria was their ability to read and write, their willingness to work with women and to accept new ideas, and their ability to be accepted and trusted by the poorest and most disadvantaged groups of women in their villages.

The link workers learned during training about the formation and working of cooperative societies, about disseminating information, about organizing women's groups and promoting discussion, and about what government welfare schemes offered fisherwomen and on what conditions.

After training, the women were to serve as links between government institutions and development agencies on the one hand and fisherwomen on the other. Besides organizing the women and educating them on government welfare schemes, bank development schemes, postal savings, family planning etc., as well as on how to benefit from them, they were meant to organize day-care centres, disseminate nutrition and health information and promote credit, savings and literacy.

In most villages, the unpaid link worker's first task was to establish a fisherwomen's cooperative society. In the perception of the villagers — both men and women, the cooperative society was the scheme's justification and was welcome as a channel of credit. Link workers also helped several women obtain credit from nationalized banks and from existing government schemes. They also set up health and day-care centres, primary schools and savings scheme.

The link workers have acted as initiators and catalysts in the formation of women's groups and in women's activities which, in turn, have increased the fisherwomen's awareness of the outside world. An example of activating women to find solutions to specific problems was the building of a primary school in one village. During a meeting with extension staff and link workers, the women of the village stressed the need for a primary school. The women found ways to raise part of the construction cost. The village headman organized actual construction. And through the efforts of extension staff, learning material was obtained from a Rotary Club and a teacher appointed from the Department of Education.

The role of the government's Fisherwomen's Extension Service field staff has been crucial. In villages where FWES staff had given priority to link worker participation in planning and implementation of schemes, the facilities were much better utilized than in villages where the officers had done most of the thinking and planning themselves.

It was also found that link workers were unable to deal directly with government and NGOs without further training, advice and guidance. Link workers required information, moral support and motivation from FWES officers for this.

At the end of the pilot project in Tamil Nadu, the link worker scheme was handed over to the FWES. BOBP assisted the government in preparing a proposal for state-wide expansion of the scheme, envisaging the training of 900 link workers in 424 villages and the establishment of district-level support units through the FWES. But if this scheme is to succeed, the link workers should be married and of middle age, though young women were found to be more open-minded. This is suggested because, in the period following the pilot project, most of the original group of link workers married and moved out of their villages. They did not function as link workers in their new villages, nor were they replaced in their old villages. BOBP had found it difficult to get married women, whose permanent residence could be assumed, for training during the pilot project; most of them had household and fish-marketing responsibilities.

In another BOBP pilot project (in Bangladesh), in which link workers were used successfully to activate women, the scheme collapsed after it was handed over to a local non-government organization. That the choice of a successor institution is a crucial factor if a successful pilot project is to serve its purpose became obvious from this failure.

Income-Generating Activity in Sri Lanka

An important consideration in formulating projects to promote development in fishing villages, by increasing fisherfolk's incomes, is that the woman's income is more likely to go towards family needs, such as food, child-care and health, than the man's income. There is, therefore, a need to increase women's incomes.

In 1980, BOBP conducted a survey in coastal villages in Sri Lanka to identify potential income-generating activities for fisherwomen. The survey indicated that only 8 per cent of fisherwomen were engaged in activities related to small-scale fisheries. Therefore, fisheries officers felt, promoting women's skills in fisheries-related

activities might not lead to better living conditions. It was felt BOBP should set up pilot centres to provide fisherwomen with training in other activities. Ulhitiyawa, a fishing village north of Colombo, was chosen for the location of a coir fibre processing centre.

The initial step was a meeting in the village, attended by more than 100 women from different economic and social backgrounds. They were asked for their ideas on improving their living conditions. The government's intention to start certain activities was also mentioned and the women's opinions on these activities elicited. When the coir industry was suggested, it was mostly the poorer women who were interested. About 30 women, under an enthusiastic local leader, formed a group to discuss the project. Though the original suggestion for the activity came from the government, only interested women became part of the group and there was active participation by them through discussion at every subsequent stage.

The offer to arrange for training was part of the project proposal. The group of interested women then discussed, and made known, their initial needs, which included a small fee during the training period for day-to-day expenses and a day-care centre for their children during the same period.

After training, the women decided to undertake production as a group, rather than individually, as none of them owned a loom. They laid down their own working conditions, in particular their working hours, and came up with useful suggestions regarding production. They produced both coir ropes and combed raw fibre, for which a market at a fair price was found with government help.

The coir production centre was started in March 1983. In March 1987, a visiting BOBP official found the women still active in coir production, the project working smoothly without any further help from government or other agencies.

Institutional Credit for Fisherfolk in Orissa

Traditionally, fisherfolk have made use of both institutional and non-institutional credit. The former is heavily subsidized, with several government agencies involved and poor coordination

between them. The loanee is a passive recipient awaiting 'selection' for the loan by the authorities. With political influence playing a part in selection, the loan is not always granted to the person most in need of it. Loans are seen as favours to selected fisherfolk and, consequently, as 'gifts' that need not be repaid. Recovery is, naturally, poor.

Non-institutional credit is obtained from middlemen, money-lenders and friends. Rates of intrest are high, leading sometimes to a kind of bondage and, certainly, to control of fish-marketing by the creditor.

Both institutional and non-institutional credit are short-term. There is no medium - or long-term finance available for expensive craft and gear.

The Oi-issa credit scheme, functional from 1982 to 1986 in all four coastal districts of the state, sought to change this situation. It was intended to demonstrate the practicability of providing artisanal fisherfolk with institutional credit, without subsidy and at financially viable rates of interest as well as with full loan recovery. The project also aimed at establishing lasting links between fisherfolk and banks within the area.

Two crucial features of the scheme were training and exchange of information. Fifteen marine extension officers received training in fisheries technology and extension as well as in banking and credit. As part of the training, the extension officers made detailed surveys of the flsherfo& communities. These surveys involved them in extended and intensive conversation with the villagers. Information collected in this manner not only gave all concerned in the scheme a clear idea of the situation prevailing but also brought the extension officers into a close and understanding relationship with the fisherfolk.

In supplying the required information, the fisherfolk were drawn into a participatory process. They stated and discussed their needs. They received information about banking and the credit scheme and helped shape some of the features of the scheme.

Bank officers too were trained in fishing technology, and in appraising loan applications from fisherfolk, as part of the project.

This three-way mutual learning and working with common understanding, which characterized the training and survey phases, was maintained in the implementation phase as well.

A minimum number of institutions was involved in the scheme: the participating banks, whose local branches had the authority to sanction loans without reference to any other institution; the marine fisheries extension service, which sponsored the loan-seeker, made a technical appraisal of his application and helped with loan recovery and the loan-seeking fishermen.

There were quarterly review meetings at which extension officers, branch and regional managers of banks, officers from the refinancing agency and the Directorate of Fisheries were always present. Problems were dealt with immediately: there was no need to refer back to higher authority, since the decision-makers had come down to field level, thus speeding up the process.

Fisherfolk could apply for loans at any time, without waiting upon a selection procedure. The loans were disbursed in kind, with banks paying suppliers of craft or gear directly. The fisherman could choose his supplier, with the approval of the extension officer.

Repayment was in 'equated' instalments so that substantially less money was due to be repaid during the lean quarter of the year. Both extension and bank officers visited fisherfolk to encourage repayment.

At the end of two years, Rs.6.41 million (99 per cent of the disbursement target) had been disbursed under the scheme, accounting for one-sixth of the annual credit requirements for replacement of craft and gear in the state, and covering 5.5 per cent of fisherfolk households in Orissa. Loan recovery was as high as 90 per cent.

The success of this project had to depend on several institutions (banks, fisheries extension service and BOBP), each with its own culture. Staff from each of these institutions, and the fisherfolk, had to work together on terms of equal dignity and mutual learning. Bringing all the participants together and ensuring co-operation at every stage involved considerable persuasion. This required an institution or, more particularly, an individual in the role of facilitator/organizer.

It is often assumed that participation is spontaneous; that it is a loose, informal, unrecognized activity. This project demonstrated that participation is a highly organized and planned activity.

Non-Formal Primary Education in Orissa

In 1982, as part of a BOBP pilot project in coastal Orissa, two studies were conducted: one, a techno-demographic' census; and, two, a study of the socio-economic status of fisherfolk. These surveys brought to extension staff a deep understanding of, and rapport with, the marine fisherfolk of Orissa. They threw light on possible areas of improvement and development aid. A primary education system for fisherfolk children was a need repeatedly expressed by the fisherfolk themselves.

In caste-conscious coastal Orissa, there is no real access to education within the formal system for the children of fisherfolk. Fisherfolk also found that the formal system of education did not give their children access to alternate ways of earning their living; at the same time, they were not able to remain as fisherfolk.

A non-formal, primary education system was, therefore, necessary for the fisherfolk of coastal Orissa.

BOBP, in concert with several government agencies (Central and State), set up a pilot project. Twenty centres for non-formal primary education were begun in 1983, and twenty more in 1985. The pilot project developed into an ongoing programme and, by the end of 1986, catered to 1200 students.

Learning material was formulated on the basis of information provided by the fisherfolk on local rituals, fishing technology, the seasons, the environment etc. There was a continuous testing of ideas in curriculum formulation and subsequent revision during use. The process involved trarifer of not just literacy, but of knowledge in all sorts of areas relevant to fisherfolk's lives. Lessons pertained to the marine environment and were need-based, local-specific and problem-oriented.

The result of such an education, geared to the children's needs and to their future vocation as fisherfolk, has been that parents have encouraged their children to attend school. There has also

been a high percentage of successes in examinations. This has increased the acceptability of these children in the formal school system, which they can choose to join at the Class VI level.

In all the fishing villages, the fisherfolk selected the site for the school building, built it themselves with local material, the whole village co-operating in the effort. The fisherfolk took charge of the school's maintenance and decided upon school timings. In many cases, fisherwomen have continued to informally supervise the running of the schools.

At the end of the pilot phase, BOBP handed over the project to the State government. Since then, a few schools have stopped functioning, usually because teachers are inadequately and irregularly paid and incentive payments offered by BOBP during its involvement are no longer available.

3.2 THE CHANGE AGENTS PROGRAMME IN SRI LANKA

The Change Agents Programme (CAP) in Sri Lanka, an experimental programme initiated under the auspices of U.N. agencies, was started after a seminar on rural development programmes was held in Colombo in 1978.

Until mid-1984, the programme made very modest progress, beset by conceptual confusions, internal dissensions and poor management. Since then, CAP has entered a dynamic phase, transforming itself into a vigorous development programme.

The Ministry of Plan Implementation, Sri Lanka, is responsible for this motivational programme. Its operational aspects are handled by a Management Committee composed of the Programme Director and Zonal Deputy Directors, the latter coordinating the work in each zone of the main field workers, called 'trainers' and 'change agents'.

The trainers are usually Rural Development Officers, seconded for this work. A trainer, on his own initiative, enters a group of villages (known as a duster) and proceeds to establish his identity as a friend of the low-income population. Through frequent meetings and discussions, both with individuals and groups,

he gets himself accepted while at the same time gaining an understanding of the village.

He then encourages the formation of 'producer groups'. These are groups of persons of similar socio-economic background. At meetings of the group, the trainer gets the people to think about and analyze specific problems and come up with common action programmes to improve their situation. He also encourages younger and more active members of the group to take on the role of 'change agents'. When change agents are identified, training for the role is made available to them.

When a trainer has identified and helped train enough change agents in a cluster of villages, he is expected to move on to another area to repeat the process.

Trainers and change agents receive some initial training. They also participate in a continuous learning process through regular meetings at the zonal level, where there is evaluation, exchange of experience and learning from each other.

As a successful rural development programme, CAP is characterized by its aim of (1) promoting self-help and self-reliance (economic) as an alternative to present states of dependency; and (2) encouraging participatory development organizations and collective development efforts among the rural poor in order to mobilize resources and take up a variety of activities for the benefit of the community.

CAP has a step-by-step participatory strategy in which the development initiative is transferred to the people, with each step following logically upon the previous one. The steps are:

1. External Intervention: The programme believes that motivating poor people needs specialized skills, commitment and patience. The trainers, government employees chosen for their commitment and attitudes, shed the identity of government servants to work as catalysts and motivators in the villages, with no official power or financial assistance. The change agents, selected from each village to perform the same motivating work, must have the same commitment, for they too do not receive a salary.

2. Awareness Creation: People are motivated by the trainer or change agent to start thinking about, and discussing, their present living conditions and poverty and to find collective ways and means of overcoming them.

3. Organization Building: Organized groups are necessary for collective action. Since the poor are weak and operate at uneconomic levels, this disability is overcome by pooling their resources and acting together. Each producer group in CAP (and there may be more than one in a village) is a small, homogenous unit capable of concerned action because of shared interests.

4. Acquisition of Resources: The producer group is encouraged to first mobilize its own resources: by membership collections, pooling of labour, or carrying out some activity, the proceeds of which go to the group fund. Obtaining outside credit is encouraged only after the groups have demonstrated their ability to use their own funds wisely on productive activities. Resources thus mobilized enable the groups to finance their working capital requirements, reduce their indebtedness, purchase inputs, acquire production assets and also pmvide personal loans to members. The groups then proceed to acquire other resources as well, such as technologies and government services and subsidies.

S. Group activities leading to social and economic benefits: The scope of activities undertaken by the groups is varied. While the trainer may suggest possible activities, it is the group, as a whole, which decides the nature and sequences of its activities. Some of these activities include promotion and mobilization of savings; mobilization of credit and grants; acquisition of government investments, subsidies and services; acquisition of technical training; pooling and exchange of labour; purchase and distribution of consumer goods; collective purchase of production inputs; production of inputs; improvement and diversification of products; acquisition of production assets; common processing; collective marketing; repair and improvement of members' houses; organizing pre-schools; health projects such as construction of latrines; and personal mutual help.

The income related activities among the above follow a basic strategy consisting of:

(a) Maximizing present income (by reducing wastefui expenditure like gambling and drinking, by purchasing consumer goods in bulk at lower prices, by reducing borrowing and promoting savings);

(b) Increasing production and product quality (by improving technology and management, organizing raw materials and input supplies, acquiring production assets);

(c) Reducing production costs (by bulk purchase of inputs in better markets and obtaining credit at fair interest rates); and

(d) Improving marketing (by selling in bulk over wider markets, for cash instead of surrender of previous loans, and thus acquiring bargaining power).

Today, there are 400 producer groups in the island with a membership of 7000 and assets of Rs. 700,000. Total coverage is about 250 villages in 38 clusters. There are about 85 trainers and 400 change agents active in the field.

CAP has not suffered from set targets or the need to prove a point by succeeding dramatically. Since the programme began with a low profile, without excessive political or official support, it could experiment, take risks, and, sometimes, fail, without raising too many eyebrows.

CAP has also disproved the commonly held belief that a participatory development programme cannot be successfully organized in the government sector. It shows that government officials with the right motivation, attitude and training, when given flexibility in their working conditions, can become successful development workers at the village level.

CAP has been most successful among small scale producers of tea, rubber, vegetables, coir etc. and not with agricultural labourers and other casual workers who possess almost no material assets or have no independent productive activity. CAP methodology cannot, therefore, claim to work too well among the 'poorest of the poor'.

CAP has been too slow at times, but it has its priorities right. Sometimes these targets affect vested interests and antagonize middlemen.

The Change Agents Programme, through meetings, has enabled participants to face their problems together with other participants, the initial process of self-selection being responsible for this, having facilitated people's participation and having helped to develop a high cohesiveness among the CAP participants.

The groups also appear to be able to influence other levels of the community, leading to an active participation of the officers involved.

But the experience also showed difficulties in the use of CAP strategy for mobilizing the *poorest strata* of the labourers and the *smallest* of small-fisherfolk. Further, some characteristics inherent in the fisherfolk communities' pattern of living could inhabit the application of CAP-strategy.

Due to the organizational nature of CAP – a rural development programme especially geared to the agricultural sector – it did not do much for the development of fisherfolk communities. But its experience of awareness, creation and organizational building should encourage governments to promote people's participation among fisherfolk as well.

3.3 FISHERIES SOCIAL DEVELOPMENT ORGANIZATIONS IN SRI LANKA

The Sri Lanka Ministry of Fisheries several years ago established a Fisheries Extension Services Society (FESS) in every coastal fishing village. This organization was to extend technologies and benefits to fisherfolk and enable them to participate in programmes meant for their benefit. The programme failed because it had no legal status, no finances of its own, and no ability to make its decisions binding at any level.

Deciding to scrap the programme, the Ministry investigated the possibility of creating another type of society which could overcome the problems faced by FESS. In January 1986, the Ministry established the Fisheries Social Development Organizations (FSDOs).

Each FSDO has three tiers: a primary (village) level, a district level and a national level. Work meant to be undertaken by an FSDO include: adult education; youth; cultural and women's activities; *shramadana* (voluntary social service) work; health improvement; housing; religious activities; and economic activities. The purpose is not only to enable fisherfolk to have access to programmes and inputs, but also to enable their participation in planning and programming for their own benefit.

The new dispensation is already facing problems for a variety of reasons.

Five hundred FSDOs have already been set up, but they have no legal status as yet.

The FSDO is imposed from above, just as the FESS was, and it has no fmancial backing of its own.

The duties of a Social Development Officer (SDO) are just part of many activities that a fisheries extension officer has to undertake. Working for two masters – the Marine, or Inland, Fisheries Division and the FSDO set-up – the extension officer/SDO is not only over-stretched in terms of capacity and time, but also has to play two contradictory roles: a regulating role in one job and an enabling one in the other.

In the perception of the Ministry, the FSDO should be a participatory organization, getting people to do the work with assistance from the Ministry. But in the perception of fisherfolk, it is something they join because all benefits are now routed through it. Everyone belongs, because not belonging means being left out.

The result is that the FSDO may turn out to be the final level of an extension department of the government rather than a participatory people's organization.

The FSDO project appears to indicate that the FSDOs might die gradually. In the meantime, the organizations might be used for other purposes than the one they were created for. The failure could be used for political purposes and negatively affect attempts to organize people or the planning of development projects at local level.

3.4 PEOPLE'S PARTICIPATION IN RURAL DEVELOPMENT IN SRI LANKA

Hambantota and Moneragala are two districts in the southern part of Sri Lanka, the former having a long coastline and considerable fishing activity and the latter landlocked. In Moneragala district, poor communications leave many communities relatively isolated, unlike in better developed Hambantota.

The Integrated Rural Development Programme was started in Hambantota in 1979, but it was not until 1984 that the programme was initiated in Moneragala. The five years of prior experience benefited Moneragala in many ways, most notably in the area of people's participation.

The Hambantota Programme

The Hambantota Programme started with a classic set of 'top down' infrastructure projects, but grew into an integration of local level projects, with considerable emphasis on participation. The first step towards this was to introduce non-government organizations (NGOs) into the programme to provide some of the community 'software' in, for example, settlement schemes.

This was not entirely successful, due to differences in the objectives of the NGOs and the government agencies on the one hand, and disputes with the local people on the other. Some NGOs were not happy acting as 'go-betweens' between the people and the government. One non-government organization initially wanted to 'do its own thing' and acted independently of the programme and government agencies. It later learnt to use its strength to find out people's needs, cooperate with government agencies and start a 'change agent' process.

The second step in the evolution towards true participation was to introduce a number of projects designed to benefit the poor families who were the target population. This was done first in single sectors in specific areas *(e.g.* vegetable cultivation in paddy land), then in specific areas *(e.g.* village development) and finally as local-level projects on a district-wide basis *(e.g.* home-gardening, latrines). Although much of the selection of activities was done by government officers, there was increasingly greater local-level

participation in the selection and implementation process as time went by. For example, all contractors were eventually eliminated from the process of construction of rural roads.

The home-garden project helped low-income households not only to assist national production but also to supplement the incomes of the participants. The identification of the households, the starting of local nurseries, the provision of incentives for proper cultivation, the distribution of thousands of plants and the extension advice and guidance given were all done by local (village-level) officers, thereby stimulating participation.

Administrative officers coordinated activities at village group (say Gram Panchayat) level and at divisional (say, Block) level. The amount of participation was found to be greatest in a project like this as well as in one for the provision of latrines, where the beneficiaries were individual households. Activities that were more community based, like rural roads and dug-wells, showed less effective participation.

The third step was to develop planning and implementation at the divisional (Block) level and at the Gramodaya Mandala (a statutory organization covering 5-10 villages) level, using a participatory approach through the existing government organizational set-up. Training courses on rural development were first run for the officers and Gramodaya Mandala members likely to be involved in this work. A comprehensive household survey of socio-economic conditions was then conducted, relating to household members and the environment in which they lived. This was often done as part of the training course. The purpose of the survey was to provide comprehensive data from which major problems, shortcomings, target groups and potentials could be identified. The villagers were made aware of the survey and its purpose, thus beginning the participation process.

The first project proposals were formulated only after a public meeting of the GM. They were then presented for public discussion. Three items are worthy of note at this stage:

- The socio-economic survey indicated the target groups;
- The training of GM members and officials helped develop organizational and management skills at this level; and

– A very flexible funding policy was made possible by the participation of an aid agency (in this case, the Norwegian Agency for International Development – NORAD).

Hambantota demonstrated that people normally expected government agencjes to provide infrastructure or services. It took time and a lot ofmotivation and discussion to initiate other kinds of proposals, such as income-generating activities. It also took time to reach the main target group, the poorest households. It was found that a programme too limited in nature, extent ortime could have negative effects for the real target groups. It was also found that people's participation in the public meetings varied considerably according to the approach ofthe local 'elite'.

When the first meetings were organized, often at the homes of the chairmen of the GMs, villagers were surprised by the opportunity to discuss their village problems openly, in public. But some GM chairmen saw the meetings as opportunities to extort finance from NORAD. It took some time for them to understand that, witbout some self-help effort, there would be no matching finance from the programme. The situation improved with the second round of public meetings.

The experience with people's participation in specifically fisheries-related activities was initially very limited in Hambantota. Significantly, it was the last sector to change from a 'top-down' approach to a 'bottom-up' one; the early involvement of NGOs met with only limited success. But later, change agents were introduced to motivate fishermen and met with greater success, a new fisheries harbour site and fibre-glass coating ofcatamarans being projects that were implemented. It, however, became evident that fishing households react differently from farmers; though some of their problems are common, the solutions are not necessarily the same.

The Hambantota Programme showed the evolutionary nature of the process, how by learning from past experiences and by gradually trying to get nearer to the real target groups, ways were found to help the target groups help themselves. Throughout, there was improving technical input, more training and better

understanding of the process and problems. There was alsosome 'outsider' evaluation, highlighting problems and weaknesses, but the most effective improvements were the results of internal reviews, workshops and self-analysis.

The Moneragala Project

The approach adopted in Moneragala was quite different. Initially, only a small part of the district was selected by NORAD, before more comprehensive activities over the whole district were started. In this 150 sq.km area with a population of about 6000, it was decided to start with a planning process that used participation to ensure that development proposals came from the bottom-up.

A selected group of 15 field officers was trained to conduct group consultations with the identified target groups (marginalized farmers, encroachers and second generation settlers) in the villages, and to carry out a sample household survey. Group discussions were then held in 18 villages and a document prepared detailing the needs, problems, solutions and priorities that emerged from these discu ssions. The views of officials and the NGOs on the development of the area were also taken into account.

Information from all these sources helped to identify common proposals and those needing further discussion between people and officials. A field workshop was then held to give the people (represented by three persons from each village, at least one of whom was a woman) a chance to explain their priorities to officials, officials the chance to talk to people and react to their views, and planners their chance to arrive at a consensus of views on major activities for the immediate future and an appreciation of future needs and requirements. The officials concerned then had to obtain formal acceptance at higher levels before beginning detailed planning of the agreed proposals or further investigation of other possibilities.

Having started a participation process, it was important to continue the involvement and dialogue. People were involved in implementation of various activities, giving voluntarily of their time and labour. Village organizations (Rural Development Societies) acted as contractors for road works, buildings and irrigation works;

village groups were formed to select sites for boreholes for drinking water.

Once people in the villages were aware of what was supposed to be done, they were able to monitor progress and report back to the project office *via* the GM. Further meetings and discussions were held to consider follow-up action and alternative proposals. Once motivated to participate, and fmding that what they said led to action of some kind, people in the villages became more active and demanding.

Looking back

The approaches to the programmes in these two districts raised contrasting problems. In Hambantota, the problem was to get down to the real target groups, through the formal and informal hierarchical system above them. Otherwise participation did not involve all the people. In Moneragala, the problem was to be able to continue to respond to the people on a large scale; something may have been started which cannot be copedwith when fully operational.

In Hambantota, the comprehensive survey of 10,000 households produced masses of data which required analysis. The confidentiality of this information raised other problems in a participatory approach: whether such information is to become available from one household to another and/or to officials charged with statutory functions related to taxation or welfare benefits.

In Moneragala, the emphasis on a direct approach to the target groups and the use ofgroup discussions, without a comprehensive survey, raised problems of bias and possible errors of omission.

These programmes also highlighted the fact that if more than one family is to be benefited by a scheme, then some consensus is necessary on what exactly should be done and what the conditions are for implementation. This tends to be to the disadvantage of the poorest people, who cannot afford to lose a day's wages while they do the voluntary work that many schemes require as matching contribution from participants.

Technical inputs also become even more critical in a participatory approach; people do not know all the answers to their problems, r or can they be aware ofall the wider implications. Participation

also demands that these technicalities be presented quickly, in simple layman's terms. Some professionals and technicians find it hard to do this and may even require special training in communication techniques before they can have a meaningful dialogue with people.

All this is not to say that participation is too difficult to be worth bothering about; it only shows that it takes time and needs a lot of patient understanding on both sides.

3.5 PEOPLE'S PARTICIPATION IN CHITTAGONG

A joint Danish-Bangladesh pilot project, run by the Danish International Development Agency (DANIDA) and the Bangladesh Fisheries Development Corporation (BFDC), was started in 1976 to build 550 forty-foot mechanized fishing boats. The use of ice and insulation of the fish-hold were also introduced with this project. It was felt that a boat-building yard was necessary in order to attain economies of scale.

The project also aimed at giving the poorer segments of the fishing community an opportunity to buy the boats by instalments, thereby helping them to avoid being exploited as cheap labour by middlemen investing in marine fishing.

The project was handed over to the BFDC in 1981, by which time the 550 boats had been constructed and sold. But it was dicovered during the first year itself that the boats had not been given to the target group, the fishermen; middlemen, taking advantage of the scheme, had bought the boats and hired fishermen to do the actual fishing.

So, in 1979, another pilot project, the Pilot Boat Rental Scheme, was started with five boats. After sociological studies were conducted, particular villages, consisting mainly of poor fishing families, were selected. Groups of eight people each were formed to crew the mechanized boats. information on the objectives of the scheme was given to the people involved and the crews were trained to operate the boats.

The entire concept was based on Danish social and cultural values and, as such, the whole idea was totally alien. Based as it was on

the perceptions of Danish expatriates, the technology certainly came before the needs of the fishermen.

The idea behind the project was simple: the crew selected would he given assistance to sell its catches at reasonable prices to the wholesale fish traders. The cost of fuel, ice, nets etc. would be deducted from the sales. Salaries would be paid to the crew. The balance would thereafter be deducted against the price of the boat. But only a few crew had any surplus for repayments on their boats.

It was soon obvious that handing over an asset worth Taka 200,000 (32 Taka = 1 US $ approx.) and asking the crew to repay it, even in instalments, did not make any sense. An amount of this size was beyond its comprehension; it was the equivalent of telling somebody in a western country that he could take a supertanker without any security or down payment!

Quarrels among the crew also led to boats having to be withdrawn and new crews trained for them. And the loss of nets, by theft or otherwise, was heavy.

The BFDC for its part saw the project only as a means to get more DANIDA financing; if the BFDC boat building yard continued constructing this type of boat, then DANIDA would agree to buying at least 300 boats from BFDC for distribution among poor fishermen. BFDC did not have the right field people for this type of project or the interest to work at the grassroots level.

The beneficiaries, in turn, it was said, perceived themselves 'as working for DANIDA'.

But with the realization that it would be impossible to give boats to each fishing community to the extent where every adult male would be employed in mechanized fishing operations, it became important to create other activities in the villages. This was necessary to avoid dividing the villages into two groups: a comparatively well-off group which received its income from fishing operations with modern equipment, and a group which was left with no possiblities for general improvement.

In 1985 the first step towards separating the pilot rental project from the BFDC-DANIDA boat-building yard was taken. With DANIDA's agreement with BFDC also coming to an end,

DANIDA suggested that its local staff register themselves as a non-government organization (NGO) to continue the wQrk they had started. They took up the challenge and, in October 1985, registered under the name Community Development Centre (CODEC). DANIDA agreed to sponsor this NGO for a five-year period.

CODEC has taken up a variety of activities in the fishing villages. It has started income-generating activities for women, introduced a sanitation scheme, initiated educational activities for women and children, including non-formal and literacy courses, and set up a village development committee in each village.

Fishing activities have been improved and, with an improved understanding of the objectives of the NGO, the boat crews have entered into regular payment schedules. Money is being saved and the loans on several boats have now been completely paid off.

Replacement of the old type of boat with a bigger 55-foot one is in prbgress. With the bigger capacity, it is possible to achieve a net surplus amounting to 50 per cent of the investment, which will enable repayment of 500,000 Taka in three years.

The plan for the future is to provide each fishing village in the project at least one such boat, in return for the crew surrendering 10% of its annual net surplus for a village development fund. The means for improving traditional fishing is also being looked into, to give as many fishermen as possible a chance to improve their major source of income.

At the beginning of the scheme it was found that the indigenous knowledge of the people was not being put to use, but now the villagers are gradually gaining confidence in their own ability to venture into new income-generating activities. CODEC helps in the following manner:

> The focal contact between the NGO staff and the villagers is the *weekly meeting.* From the outset, the villagers were told that the scheme would not give them any free money whatsoever. The NGO staff were to be considered as facilitators, who would assist the villagers in starting various activitiesonce they themselves had come up with a suggestion. *The initiative* to start any activity in an individual fishing village had to be taken by the villagers themselves.

The approach to the village is, first of all, through discussion with the leaders of the community about the purpose of the scheme. This is followed by the initiation of *an awareness campaign.*

Once the villagers have defined their needs, the next step is a *functional literacy course* coupled with an *income-generating activity.* As the group continues to work, natural leaders evolve from among them and, gradually, such people become the *spokesmen/women for the group in initiating other activities.*

In some of the villages where the activites were first started, the villagers have donated a plot of land on which to build a training centre. The project has supplied building materials and the villagers have given their labour on a voluntary basis.

At these training centres, weekly meetings are held where the project's field workers can meet to hear about new developments and possibilities. At weekly meetings with the village development committee (an occasion which, at the same time, is collection day for the common development fund and individual savings), suggestions for future activities are brought forward by the village group or the project staff, and practical implementation is discussed. Monitoring of progress also usually takes place during such meetings.

This experience of people's participation has been encouraging. Over the last couple of years it has also been gaining momentum. The general impression is that the villagers have realized their own strengths and have started to take decisions on their future. The problem, however, is to what extent they will be allowed to continue this way, given the hostile environment of the elite when they discover their influence dwindling as a result of such development.

The following factors have contributed towards the project attaining its present level of development:

- An NGO with a well-trained, dedicated project staff whose own future depended on the success of the project;
- Aid to the beneficiaries from local staff who are familiar with their own people's way of thinking and expectations;

- The application of tested models to raise awareness, and the participation of the people in their own development; and
- The NGO's 'no free money' approach.

If the CODEC idea is to become more than just an isolated attempt to promote the development of a few fishing communities towards a self-reliant and self-contained existence in the future, the concerned government must enunciate a clear policy in respect of the role of traditional coastal fisheries, now and for the future.

It has also been realized in donor communities that, in spite of the introduction of modern fishing facilities, with huge investment in hardware, the majority of projects have had a negative economic rate of return. For this reason, there is a need to concentrate on the traditional sector in order to see how income from this sector can best be improved. The need is to improve traditional fishing techniques and maintain the labour force, instead of replacing it with capital equipment. At the same time, possibilities for creating secondary income-generating activities, for those members of the community who are not involved in the fishing trade (mainly women), should be exploited. If this were done, the fishing communities would also survive in the slack season.

Since the scope for expanding the volume of catches is, in most cases, limited, there are no employment opportunities in fishing for an increasing population. It is, therefore, important that educational opportunities for the young in fishing communities be made available, so that they have the choice of another trade for survival.

Such NGO projects, however, face several risks:

- A hostile or ignorant government attitude, such as no protection for traditional coastal fisheries, which would lead to the extinction of this type of fishing.
- Efforts in fishing communities not resulting in self-reliance among fisherfolk.
- The development of a new type of patron/client relationship between the NGO and the fishing community, which might replace the present middlemen structure.

- A hostile environment, such as elite groups which have no interest in seeing the fishing communities develop into self-contained, self-reliant entities and which may, as a consequence, sabotage efforts towards that end.
- The lack of donor interest because such projects are slow in making measurable progress and do not consume much money.

Many other risks could also be identified, but the important thing, it would appear, is to find measures which can be taken to avoid, or at least limit, these obvious risks.

3.6 PARTICIPATION OF FISHERWOMEN IN DEVELOPMENT

The Centre on Integrated Rural Development for Asia and the Pacific(CIRDAP) in 1984 launched a three-year action programme for rural women in fishing communities in Indonesia, the Philippines, Sn Lanka and Vietnam. It received fmancial support for this from Japan and technical support from FAO.

The action programme had two long-term objectives. First, to help improve the living and working conditions of rural women and their families in fishing communities. This was to be achieved by collecting relevant data and information on their role and activities in community development, and by providing them the inputs and services necessary to meet their basic needs through action programmes. Secondly, it was intended to enhance the participation of rural women in development efforts by involving them in decision-making and the implementation of these decisions.

CIRDAP's link institutions in each of the participating countries designated the appropriate institutions to undertake the responsi-bliites of effective implementation of the programme, including coordination with the national authorities. The implementing agency (IA) in each country conducted socio-economic surveys in villages and, based on these surveys, organized field workshops to identify and select target women's groups to participate in the action projects. After the selection of beneficiary groups and the project sites, each country's IA deployed one field worker for each village. It also assisted in choosing women group leaders.

On-the-job training for women participants has been a continuous process. Their participation in the action programme was expected to have a greater impact on the implementation of the project. And the monitoring and evaluation of the action programme was to be conducted by three parties: the women's group, the implementing agency and CIRDAP.

The experience in each country has been revealing.

In Indonesia, 119 women beneficiaries from households below the poverty level were selected after surveys revealed their problems and needs. Divided into eight groups, these women from eight villages in three districts were involved in a broad spectrum of fisheries-related activities, such as retailing, fry-catching, fish processing and marketing. The action programme's activities were in tune with the Indonesian Government's development strategies.

The selection of the programme sites and the beneficiary groups in The Philippines were also based on the findings of a number of surveys. The selected fisherwomen underwent a few workshops and training programmes that provided them with the basic skills and know-how of fish processing etc. Individual loans were also credited to them to initiate their own income-generating schemes.

Village workshops were also held at the programme site, with the beneficiaries participating. The idea of these workshops was to provide a venue for interaction, a forum for exchanging information on the progress of programme activities, and to assess the performance of the women's groups.

The pilot projects identified by the women in these open discussions were mostly fish-processing and -preservation. These projects were found to be quite beneficial for the fishing community, since there was an abundance of fish catch.

The participatory approach introduced in almost all phases of the programme has played a significant role in getting the fishing communities to take the initiative on their own needs. Now several of their objectives have been realized.

In Sri Lanka, ten fisherwomen were selected from each of three villages as target beneficiaries. Factors considered while selecting the beneficiaries of the action programme were: their potential for involvement in fisheries activity; their poverty and disadvantaged

conditions; non-availability of institutional credit; willingness to participate in action programmes; support from parents and husbands; willingness to repay loans; and willingness to co-operate with officials.

Two seminars were held at each village. While the first introduced the action programme to the beneficiaries, the second, in which the parents and the husbands of the selected beneficiaries participated, discussed the implications of the programme and its implementation strategies.

Emphasis was laid only on those activities normally performed by women in fishing families. But some were also willing to take up dress-making, cattle-raising, poultry-farming and so on, in addition to fisheries-related activities.

The group work, it has been found, brought the villagers together and promoted their sense of participation in development efforts by involving them first in decision.making and then in implementing the decisions taken by them.

Since the Vietnam government had assigned high priority to developing shrimp production, it was resolved that the project here would involve CIRDAP funds being disbursed through co-operatives to the women for this purpose. Two villageswere selected for these credit schemes. In both villages, there were three main fields of fisheries-related activities: marine fishing, river and canal fishing, and shrimp culture.

Initially, 32 widows of one village constituted the target beneficiaries ofthe action programme. They were in financial difficulties and had little means of earning their livelihdód. Following several meetings and training seminars, the selected beneficiaries were provided with loans and allocated land for shrimp cultivation. A progress report indicates that the programme implementation contributed to the development offisheries in the region, improved the living conditions of the target families and increased their cultural participation.

LOOKING BACK

The idea of participatory action (PA) is relatively new. It is a developmental approach in which the underprivileged are

organized into formal and informal groups, deliberately referred to as 'target beneficiaries', and allowed to spontaneously find the way to participating in all stages of their own growth and development.

CIRDAP's six PA programmes, including that of the rural women in fishing communities, have been addressed to specific target groups, such as rural children and rural women as well as cover areas like social forestry, basic needs and ecology. In all these action programmes, conscious attempts have been made to involve the target beneficiaries in all stages of the implementation.

The three-year action programme for rural women in fishing communities was completed by the end of 1987. The midway progress reports provided ample evidence that the action programme had given the beneficiary fisherwomen the confidence to participate in almost all the important stages of programme implementation. This was because they had received training for the first time in different skills related to fish-processing activities, were fortunate to have close interaction with the local-level government extension workers, and had involved themselves in income.generating activities on a regular basis. The programme also provided them an opportunity to know each other through monthly meetings and in other forums.

The fisherwomen in all four countries have, it has been found, efficiently utilized the programme seed-money. The repayment rates are also reported to be satisfactory. After one year of programme implementation in Indonesia, the income of the target fisherwomen had increased 139.4 per cent and six out of eight groups bad moved above the poverty line. In Sri Lanka, the action programme provided flexibility by which the fisherwomen could utilize the seed-money to engage in a variety of other income-generating activities. The programme not only improved the living conditions of the target fisherwomen in Vietnam, but also increased their cultural participation.

This experience has indicated that poverty alleviation through people's participation could be successfully promoted by such action research programme.

VI
Meetings

1.1 NGOs' PARTICIPATION IN FISHERIES DEVELOPMENT

To better understand the role of the non-governmental organizations (NGOs), which are using a participatory approach to development, and to learn from their experience, a two-day consultation ofgroups involved in fisherfolk development in South India was sponsored in Madras by the Bay of Bengal Programme some time ago. The objective of the consultation was to reflect on the questions that a complex subject like people's participation in development raises and to try to understand the strategies, methods and techniques that encourage or hinder participation.

The NGOs' view may be summarized as follows:-

There is an essential *need of authentic identification with fisherfolk.* NGOs should begin by just being with fisherfolk; sharing their life and work, and understanding their situation. Thus, identification with fisherfolk will have to go to the extent ofjoining hands with them in all the hardships they encounter.

The aspect of *collectiveness is very strong in fishing communities* and they are used to organized labour. They have a high level ofinnovative technology deriving from their long tradition of working at sea. And they are closely knit communities. Hence, NGOs have to build fisherfolk *unions and organizations not on the basis of individual membership,* as in trade unions, *but on the basis of community and family.*

There are *divisions within fisherfolk communities* based on class, caste, methods of fishing,ownership of assets etc. To overcome

this problem, NGOs have to begin with issues and problems on which all the factions agree. But ultimately the time may come when NGOs will have to decide on which class, within the traditional divisions of fisherfolk, they will have to identify with.

Participation must begin with a search for fisherfolk's needs and problems. Education must be a process in which NGOs help fisherfolk to see these problems, analyze them, place them in the whole socio-economic context and help them to find solutions. This will necessarily involve politicization and organization of the people and training of a motivated leadership from among them.

NGOs must enable the people to realize that their problems have regional, and even national, contexts, and therefore, need to be addressed at all levels for a solution. There is need for a national perspective, and NGOs must help fisherfolk to look at their problems in the context of India's problems concerning environment, pollution, industry, trade etc.

The fisherfolk's organizations must also be trained to be concerned about other groups in society. Their understanding must have a broader perspective and they must appreciate that the root cause of all poverty and oppression, whether of fisherworkers, landless labourers, quarry workers, women etc., is the same: the injustice inherent in the system.

Fisherfolk must be made aware that some problems created in the fishing sector are not because of demand generated within the country, but mainly because of the export trade. There is a two-fold connection: acquiring access to fish resources which are not available in developed countries, and the introduction in India of medium-scale trawlers and purse seiners, which have already proved disastrous in other parts of the world. Both have an effect for the worse on local fisheries.

Appropriate technology must be in keeping with the needs and discoveries of the people in the context of their concrete situation. For participation in any new technology, NGOs must take into account the experience of the fisherfolk, their resources

and full involvement, and the ecology and local environment. The primary concern must be to ensure sustainable yields from the fisheries resource and to enable growth of the people's movement. NGOs must realize that the process of analysis, motivation and organization takes a long time and needs patience and perseverance.

While working at the grassroots level and organizing the fishing communities, it is also essential that some NGOs and individuals simultaneously *work at the higher levels of socio-economic and political system for the cause of the fishermen* and help get laws and judgements passed in favour of these communities.

The consultation group then discussed some specific questions that these reflections had raised.

Participation is not a question of the people participating in an agency's effort but the other way about. Unless the people are oriented to decision-making, the whole exercise is futile. Thus decision-making has to be decentralized so that the people are not just active partners in development, but are the subjects of planning, and primary agents in implementation, managing, monitoring and evaluating their own development process. In this, the role of the agency is merely that of a catalyst – and nothing more!

Among the obstacles to participation identified were the following:

- Internal factions within the fishing community and inter-village rivalry;
- Obligations to middlemen, moneylenders, religious institutions etc;
- Constant migration of fishermen from one place to another;
- Political interference in community affairs;
- Lack of confidence in the programmes of the agency and differences in the concept of development between the agency and the people;
- Massive capitalist propaganda on technology to which people become susceptible;

- Failure of earlier or pilot protects, leading to disillusionment in subsequent efforts;
- The agency's belief that it alone knows what is right;
- An attitude of elite superiority on the part of the agency, or the NGOs;
- Competition among different agencies in the same area;
- The possibility of NGOs being co-opted by the government, thus losing local credibility;
- The drive being target-oriented, not people-oriented;
- Confusion in the minds of the people over the priorities or the relevance of the programme;
- A lack of proper analysis on the agency's part of the development situation; and
- A thinking pattern and logic alien to that of the people, due to lack of real identification with the people.

The group felt that some of these obstacles could be overcome by:

- having at least one representative living in a village that was being helped, identifying with its residents and winning their confidence;
- demonstrating how the technology would work;
- building awareness and educating the people;
- networking among agencies; and
- being sensitive to the people's problems, adopting an interdisciplinary, integrated approach and involving only those who are fisherfolk by birth and profession.

Strategies and policies for participatory development in the future were then discussed and the following ideas emerged:

1. A basic analysis of the socio-political and cultural situation must be made with the people and be followed by frequent dialogues with them to evolve programmes in which there will be meaningful participation.
2. There should be proper selection of committed – 'progressive and militant' – team workers and local leaders who are sensitive to the community's problems and aspirations. They must then be given development orientation.

3. Training must be a continuous process for all the members of the agency.
4. Infrastructural facilities must be provided to the people and the workers residing in the village to ensure participation within the development context.
5. People's organizations should be created in the villages or, if they already exist, should be improved to ensure people's participation.
6. The agency must acquire and retain an organizational culture that is in keeping with the objectives of its work and which identifies with the fisherfolk. This should be done by maintaining a simple lifestyle and by making collective decision-making visible.
7. The agency should interact with scientists and knowledgeable people (even from within the fishing community) on all scientific and technical aspects involved in the programme.
8. The community's participation should be by way of contributing labour and money.
9. The people should have access to information on all transactions of the agency, including those involving funds.
10. The people's organizations should be managed by elected, or nominated, representatives of the people.
11. Women should be involved on an equal basis.
12. Conscious efforts to reduce dependence on foreign aid and technology should be made by looking for local resources, people and their capacities.
13. Alternative employment and vocational training for school dropouts should be organized.
14. The objectives of people's organizations should be evolved through discussions and consensus and followed up by an on-going analysis.
15. Planning of programmes must be effected through a process of negotiations between the people and the agency to ensure concerted action.
16. The agency and the people must decide at an early stage on the criteria for measuring results of developmental work.

1.2 NGOs IN FISHERIES DEVELOPMENT IN SRI LANKA

A consultation workshop on 'Popular participation in Fisheries Development in Sri Lanka' was held in Colombo in 1987, with 57 participants including representatives from the FAO's Bay of Bengal Programme. Despite the political disorganization resulting from ethnic conflict in the country, representatives of fisheries sector non-government organizations (NGOs) from the Tamil-speaking north and east of Sri Lanka joined with fisheries sector NGO representatives of the Sinhala-speaking north-western, western and southern parts of the country to discuss social and economic problems common to all the fisheries communities irrespective of linguistic and religious differences.

In his inaugural address, the Sri Lanka Minister of Fisheries, Mr. Festus Perera, expressed the hope that the workshop would result in the formation of a permanent fisheries sector NGO secretariat with which the ministry could systematically have a dialogue on fisheries.

Top planning, the Minister said, is an anachronism in today's context. The fisherfolk themselves must identify their needs and how best such needs can be satisfied. Otherwise, there is no guarantee that services delivered by the State would be useful. The Minister spoke of the village-level Fisheries. Social Development Organizations which had been formed in Sri Lanka not long ago to promote development planning, implementation and monitoring. He hoped these organizations would serve as catalysts in promoting group action and the active participation of fishermen in fisheries development. It was the intention of government to let the SDOs develop as proper peoples' organizations without government control, but with, in many cases, the assistance of NGOs.

Throughout the three days of the workshop, many participants expressed the view that the opportunity provided by the workshops should be consolidated into an ongoing structure which would bring together the fisheries sector NGOs on a continuing basis but they emphasized that such a network should be:

- A very loose network that does not in any way impose itself on its members;
- A structure that respects the independence and autonomy of each member; and
- A structure that relates to the government and to international organizations, such as FAO, as an equal partner and not as an organization that is dependent on them.

At the final session of the workshop, these ideas were incorporated in a resolution agreed on by all, and an action committee was formed.

The negative, but the very revealing, outcome of the workshop was the almost consistent failure of the participants to focus on the operational problems of popular participation in fisheries development indicating that they rated fairly low in the list of priorities of the NGO representatives present.

In the view of the NGOs participating in the workshop, the main developmental issues facing fisheries communities are: resource depletion, environmental damage and resource alienation, resulting from technological intervention by the government in fisheries resource exploitation, with assistance from organizations such as FAO.

Traditionally, fisheries resources were managed by fisheries communities without the intervention of external agencies and the government. The level of management of fisheries resources and of the sharing of the benefits of these resources varied with the degree of social and economic differentiation within a community. Since income levels and catches were low, government as well as external agencies such as FAO began to intervene in fisheries resource management, to increase both through the introduction of modern technology. But these technological changes were introduced in fisheries communities without consulting the very communities for whose benefit they were intended. The vast reservoir of knowledge of fishermen, relating to the resources of the sea, was not respected by the policy-makers and planners.

While it may be true that fisheries communities had not exploited the available resource base as best as possible before such intervention, it is equally true that government's technology-based

initiative, taken without utilizing the knowledge and the views of the fishermen themselves, had resulted in resource o&er-exploitation and permanent environmental damage to the fisheries resource base. This damage had particularly affected the resource base of the non-mechanized and minimally mechanized fishermen who exploit the near inshore waters upto a distance of about five miles from the shore.

At the same time state intervention in the exploitation of the brackish water lagoon resources for culturing shrimp for export had resulted in the alienation of fishing communities from the lagoons which were a resource base for lagoon-based fishermen who enjoyed a *de facto* control over the management of these lagoon resources. While the lagoon communities have been officially consulted by the Ministry of Fisheries before extents of lagoon landwere leased out to the national and multi-national companies for shrimp culture projects, it was revealed by NGOs representing lagoon-based fishing communities that these communities were not provided with information about the alternate technologies available for large scale capital intensive shrimp culture or small-scale, labour-intensive shrimp culture before being asked to decide whether they would like to exploit the brackish waters themselves or permit the government to lease out the lagoon. Small-scale shrimp culture can be managed by the communities themselves if only they are provided the know-how.

The priority problem facing fisheries communities therefore arises not from the socio-cultural factors internal to them but out of the relationship between government and the fisheries communities in matters relating to technological intervention in fisheries resource exploitation. All the decisions relating to technology, resource use etc., should be taken through the exchange of information and knowledge between development planners (including technical personnel, scientists etc.) and fisheries communities but the practical modalities of institutionalizing such a dialogue or the type of tools and methodologies appropriate for such a participatory process of decision-making in the fisheries sector remained undefined at the end of the workshop though the main problem had been iientified.

The participating NGOs saw their primary role as being one in which they could bring about a partnership in which the Fisheries Ministry and other external organizations such as the FAO joined hands with the communities of small-scale fishermen to work out systems and procedures necessary to exploit and manage the fisheries resources of the country.

Many participants pointed out that government's failure to continuously consult the fisheries communities before introducing new technologies for the exploitation of the available fisheries resource had resulted in fishermen with more powerful technology being able to exploit the resource in a manner detrimental to the interests of fishermen using less powerful technology. Nearly all the participating NGOs considered it their role to represent the interests of the fishermen using less powerful technology. They saw a role for the fisheries sector NGOs to intervene with the development agencies on behalf of these less sophisticated fishermen.

In terms of fisheries resource management, the NGOs saw the interests of the less sophisticated fishermen as being directed towards:

- getting access to more powerful technology; and
- getting official action that would make it compulsory for the relatively more sophisticated fishing craft to exploit a resource in an area of the sea further away from the coast.

While most of the attention of the participating NGOs was directed to their role in what was identified as the primary development problem facing fisheries communities today, little attention was paid by them to the role they could play in problems and situations internal to fishing communities, such as poverty, housing, education, roads, access to credit, marketing of fish, land-ownership, access to drinking water, sanitation, eleciricity etc.

Nevertheless, individual participants did from time to time make references to certain other tasks that could be undertaken by NGOs in a participatory development process in the fisheries sector. These tasks were usually identified and defined, but not worked out in practical operational terms by the participants. The more important tasks identified were:

1. The need for an effective institutional arrangement to enable an exchange of knowledge between fisheries communities and external development agencies. There is a tendency for the external agencies to feel that they alone possess the necessary knowledge for fisheries development. At the same time, fisheries communities which have knowledge of both the resources of the sea and the techniques of exploiting them, tend to view with disrespect and impatience the knowledge base of the external agencies. Neither the fisheries communities nor the external development agencies have a monopoly on knowledge. The knowledge of both is equally important and relevant for fisheries development.
2. The need to make fisheries communities self-reliant by reviving their lost creativity, initiative and innovativeness. In the historical process the control of the development process passed from the local communities into the hands of the local elite and then into the hands of a national and international elite and the bureaucracies. This resulted in the gradual destruction of the creativity, initiative and innovativeness of the fisheries communities in matters relating to their own development. In place of self-reliance, ties of dependency linked the local communities to the national and international centres of decision-making. The national and international development agencies responded to this situation by offering aid packages consisting of boats, nets, loans, subsidies, roads, houses, etc, to fishermen, thereby making the fisheries communities more and more dependent on outside patronage for their development. The fisheries communities in turn responded by projecting their poverty and helplessness in order to attract these aid packages. NGOs must endeavour to change this. Having entered a community and after winning the confidence of fishermen, NDOs should direct their activities towards making the fishermen aware of their own innate creativity, innovativeness and initiative and should convince them that they alone have the capacity and power to identify and solve their own development problems.
3. The need to tend and 'protect' the small-scale section of the fisheries community. Technological development has been

accompanied by an increase in social and economic differences in fisheries communities. The different interest groups within a fisheries community join together only in the event of an external threat to the common resource base of the community, but when such a threat recedes there is nothing common to hold the different groups together. Since NGO activities cannot be directed at all the different groups of a fisheries community at the same time, the target groups for these activities should be the economically and socially weakest segment of the community. Usually, this section consists of those fishermen who still use traditional fisheries technologies.

4. The need to transfer knowledge to fisheries communities about the technological options for fisheries exploitation that are available in the different parts of the world. This would enable the communities to take decisions on developmental issues in the fisheries sector on the basis of sound information. Some participating NGOs pointed out that it was only at this workshop that they even got to know, from BOBP participants, that small-scale shrimp culture, using low-cost backyard shrimp hatcheries, is possible.
5. The need to focus sufficiently on the social and economic problems specific to women in fisheries communities. The transfer to women of skills strictly related to economic activities such as skills in boat-repair, the repair of fishing nets and gear, knowledge pertaining to shrimp culture and other types of aquaculture, fish-processing skills etc., would result in a greater participation of fisheries women in the fishing economy itself. The work schedule of the men in fishing villages is such that they are largely unable to engage themselves in community-based development activities such as village infrastructure development and the development of health, education, sanitation etc. in the village. These tasks too could be undertaken by women in fisheries communities, NGOs might find it easier to organize the women in fishing communities as the women have both the time and a greater desire to participate in the economic and social activities of their villages.
6. The need for NGOs to play an important role in making government officials and planners understand the needs, aspirations and perceptions of fisheries communities.

7. The need for NGOs to provide the means through which technical personnel and scientists from external agencies, such as the government and FAO, could work side by side with practical fishermen to develop appropriate fisheries technologies.
8. The need for NGOs to brief politicians on the specific problems of fishermen. They could also inform the public about these same problems by establishing effective links with the media.
9. The need for NGOs to collaborate with the Ministry of Fisheries or with the FAO on specific local-level development projects. For this to be possible, structural linkages need to be developed between the NGOs, the Ministry of Fisheries and international organizations such as FAO. This in turn requires the establishment of a permanent and dynamic fisheries sector NGOs secretariat.

At the conclusion of the three-day workshop the participants agreed by consensus on the two main developmeiit problems of fisheries communities in Sri Lanka:

- The rapid depletion of the fisheries resource base on account of the introduction of inappropnate modern fishing technologies, particularly the use of trawl nets in the inshore waters; and
- The lack of access to the ownership of modern fishing boats and gear.

Other problems, in order of priority, concern:

- The monopoly enjoyed by one section of the community in the management of fish marketing;
- The lack of awareness among fishermen of their own problems;
- The need for an improvement in standards of health, housing, education and village infrastructure;
- The lack of access to new types of self-employment outside the fisheries economy;
- The encouragement being given to inappropriate fishing technologies; and
- The lack of encouragement for the development of a body of appropriate fishing technologies in Sri Lanka.

The causes for these problems, it was agreed, were:

- The destruction of creativity and innovativeness of the fisheries communities;
- The constraining of the processes through which the awareness and knowledge of fisheries communities about their own problems could be developed;
- The introduction of new technologies without a proper study of their ecological impacts on the fisheries resource base;
- The failure to conduct a comprehensive study of the fisheries resource base in both the inshore and offshore waters;
- The impact of the tourist industry in certain parts of the coastline which came under the *de facto* control of fisheries communities;
- The existence of indebtedness among fishermen; and
- The impact of the activities of the multi-national corporations and national large-scale capitalist enterprises on coastal fisheries communities.

In order to overcome these problems and facilitate a process of development in the fisheries communities, a number of solutions were proposed:

- While strongly enforcing existing rules and regulations relating to the management and exploitation of fisheries resources, government should immediately formulate and enforce new rules and regulations to prevent the destruction of the fisheries resource base of Sri Lanka by certain modern technologies.
- By providing institutional facilities such as ice plants, transport, storage facilities and refrigeration facilities, government must fadiiate the process through which the producer is able to obtain a stable price for fish.
- A new programme to identify non-fisheries resources in fisheries villages should be launched and income-generating activities should be developed around such resources.
- Institutional arrangements should be developed through which practising fishermen may participate in the fisheries

development projects of the government right from the planning stage through the stages of implementation and monitoring.

- A programme should be implemented which would enable the fisheries communities living in different parts of the island to exchange information about their experiences with the different types of technology, different types of organizations, different kinds of the income-generating activities etc.

The workshop agreed that in order to set in motion the necessary processes for solving the problems of fishermen as identified, a new organizational structure was necessary. This should have the following characteristics:

- While it would not be in any way controlled by the government, close co-operation with the Ministry of Fisheries was necessary for its successful functioning;
- The primary level should be composed of small groups;
- Such primary groupings of fisherfolk should be co-ordinated both at the provincial ani national level through a very loose network organization;
- The network should function in such a way that the autonomy and integrity of the individual organization are not in any way impaired; and
- The capacity of such fisherfolk organizations to handle fish marketing activities should be systematically strengthened with the necessary facilities for engaging in such activities being provided them.

Finally it was agreed that while these measures could be considered as short and medium-term measures to improve the condition of Sri Lanka's fisheries communities, the ultimate long-term solution to the problems of these communities lay in the successful unfolding of a long-term process through which the communities themselves developed an awareness of their own problems and identified their own solutions.

In order to set in motion the processes and activities agreed upon by the NGOs that attended the workshop, it was agreed that the following strategies should be adopted:

- The emerging network of fisheries sector NGOs should not be developed as an independent structure which then imposes itself on its constituent partners, the NGOs themselves.
- While the Ministry of Fisheries and international organizations such as FAO do play a decisive role in the fisheries development process in Sri Lanka, the emerging fisheries NGO network should not allow its independence and autonomy to be compromised by these powerful forces.
- While preserving its independence, the network should work in close collaboration with the Ministry of Fisheries and other national and international development organizations.