SMALL-SCALE FISHERIES IN BANGLADESH: SOME SOCIOECONOMIC PROBLEMS AND ISSUES

M. Mahbubur Rahman

ABSTRACT

The paper discusses the role of socioeconomic status of fishermen, village power structure, village money lenders in fishery credit, ownership pattern of ponds and inefficient control on public water bodies, and of government regulations on the development of fisheries resources. The paper also describes the role of CIRDAP in the development of fisheries and outlines priority research and action areas.

I. INTRODUCTION

The fisheries sector in Bangladesh contributes about 5 per cent to the gross domestic product, and accounts for 6 per cent export earnings and nearly 6 per cent of the total employment. About four-fifths of the country's animal protein supply comes from fish consumption (Planning Commission 1980, p. XII-54). These simple statistics are quite explicit to show the importance of the fisheries sector in the economy and hence the urgent need for development of the fisheries resources in Bangladesh.

Bangladesh is ideally suited for small-scale fisheries activities. During 1983-84; it was estimated that 79 per cent of the total fish supply comes from inland fisheries which is mostly labelled as small-scale fishing, while 21 per cent represents large-scale production, i.e., marine fishing. But it is alarming to note that the inland fish production declined gradually from 729000 metric tons in 1970-71 to 525000 metric tons in 1980-81 (BBS 1984, p. 242). Though the production marked little increase to 593000 metric tons during 1982-83, the corresponding growth of population resulted in a reduction in per capita fish consumption from 36 gms in 1965-66 to only 21 gms in 1983-84. In view of the importance of the sector and its gradual shortfall in production the government of Bangladesh

*Action Research Fellow, Centre on Integrated Rural Development for Asia and the Pacific, Dhaka. The comments and observations made in the paper are of the author; they do not necessarily represent those of the Centre.
has shown great concern particularly after the independence. While the estimated expenditure during FFYP and SFYP were Tk. 19 crore and Tk. 158.3 crore respectively, Tk. 330 crore has been earmarked for the fisheries sector in the Third Five Year Plan in the public sector alone. Apart from the government, some non-government organizations have incorporated fisheries development schemes with other programme activities. Bangladesh, among four other countries, also comes under the Bay of Bengal Programme funded by the Swedish International Development Authority and executed by the Food and Agriculture Organization of the United Nations.

Despite all such efforts the overall scenario of the fisheries sector in Bangladesh continues to be at a precarious state. Development of some physical infrastructures, establishment of a few more training centres or renovating some ‘demonstration farms’ can hardly go a long way unless at the same time the deep rooted psychocultural ethos at the community level are attended to and the socio-political structures in the country recast.

The present paper briefly focuses on the socioeconomic factors pertaining to the development of small-scale fisheries in Bangladesh. However, in an effort to analyse the socioeconomic variables while the author does not claim to contribute altogether an original idea to the on-going debate but brings some of the crucial factors together for greater awareness of the researchers, policy makers and the administrators towards realisation of development goals in the fisheries sector. At the end the author also focuses on the role of the Centre on Integrated Rural Development for Asia and the Pacific in fisheries development with particular emphasis on its action programme.

II. SOCIOECONOMIC CONSIDERATIONS

The inland waters in Bangladesh are characterized by high natural production due to a combination of intensive solar energy and nutrient laden soil; the inshore waters in turn get enriched by silt deposits carried by the rivers making them very rich areas for tertiary production from organic matter (BOBP 1985, p.1). With the presence of these natural conditions it is possible to develop the fisheries resources in Bangladesh provided concerted action of all concerned are diverted also to focus on the socioeconomic factors deeply rooted in the village communities. Some of them are reviewed here keeping in view that the scholars interested in the subject and the practitioners implementing the programmes will think for several alternative ways to seek solution to them.

Socioeconomics

Anthropologically perceived, the low caste Hindus constituted the fishing communities in Bangladesh. This fact gives rise to at least two valid propositions: first, since from the caste standpoint the low caste Hindus were the most neglected community their fishing
Small-Scale Fisheries: Rahman

occupation was also to be least recognized and respected. Though over the years many sociological variables have changed no one probably like to take up fishing as a permanent source of livelihood; in most cases these are just ‘distress adaptations’. Secondly, since in a feudal system the low caste Hindus were traditionally subordinate to the upper caste ones, their economic conditions were naturally bound to be depressed. Therefore, it is not shocking to learn from the recent surveys that the bulk of the fishermen are virtually the utter poor. A survey conducted by the Bangladesh Jatiya Matrubhumi Saabaya Samity during 1974-75 showed that only about 10 per cent of the fishermen had land holdings of more than one acre, while 25 per cent had one acre or less (BJMSS 1975). Preliminary data of a survey in two Chittagong villages show nearly 90 per cent of the households own land only above 10 decimals (CIRDAP 1986a). By computing Engel’s coefficient it is found that the nation as a whole and more particularly the small-scale fishermen have a very low standard of living (Haq and Haq 1985, p. 91).

Other than the Hindus, among the Muslims who have lately entered the occupation suffer from additional problems: (1) they are not as skilled as Hindu fishermen; (2) they have less commitment to the occupations; (3) they are not fishermen in their totality as in the case of a typical jute community (where everybody’s parents, brothers, sisters, sons, daughters and other relatives belong to the same occupation); (4) they have incurred a psycho-cultural risk of being socially isolated from other members of the Muslim community; (5) they can not be assimilated overnight with the Hindu community of the same occupation; (6) organization and co-operative ventures among them are limited as their entire community is less likely to migrate en masse to the newly acquired occupation and so forth.

Significantly the social stratification, economic position and standard of living are some of the factors that determine the extent of a community’s participation in development activities. Most fishermen particularly those who are involved in small-scale fishing barely possess any of them. The lack of their possession of power resources makes them directly subordinate to all other lives of village communities. Therefore, the whole socio-economic guant that surrounds the fishermen negatively affects the development of fisheries resources in Bangladesh.

Power Structures

It was reported that during Ziaur Rahman’s regime a sizeable section of a population traditionally engaged in small-scale fishing in an important location of the Kishoreganj district were denied their right to fishing by a group of musclermen simply because the latter did not obtain their support in electing their candidate to the Jatiya Sangsad. Though it would be difficult to substantiate this report with adequate data, nevertheless such evidences are quite common in every walk of life of the fishing villages in Bangladesh. Thousands of fishermen of the Bhera of Salthira district have been facing manifold problems.
Those included...grubbing of fund of the fishermen's cooperative societies by a section of powerful and influential people..." (Bangladesh Observer, 16 June 1986). These are the type of news items published frequently in the national dailies in Bangladesh.

The traditional power groups are active in all spheres of rural life, the fishing villages are not immune to them. Indeed, the irony of the socio-political fact is that rural power structures are entrenched in a community to the extent that its masses are characterized with poor or no power resources.

The existing power structures in fishing communities which thwart any development effort at the grassroots have hardly been examined. In his case study of Jamuna fishermen, Mahbubullah has noticed how conflict arises among the different parties over the issue of leasing in the rivers. He observes to what extent the lessees coming from the vicinity of particular river segment resort to recruiting and maintaining a private police force, locally known as latfals, and use them to de facto consolidate their own positions over the river segments discouraging the outside holdiers to take advantages (Mahbubullah 1985, p. 213).

Explaining the Catiris-Bangladesh experience in small-scale fish culture, Petera (1986) has discussed how the pond owners or the landed gentry who constitute the bulwark of the power structures of their respective villages wanted to strike a hard bargain with Catiris groups albeit they contributed their share of the investment required to commence fish farming in what were once derelict or unused. Petera observes that no sooner the pond owners saw the groups making good money from their fish farming activities the former began agitating for the return of the ponds for their own use or threatening to forcibly take them back from the groups. Jamalpur Women Programme under the auspices of the Bangladesh Rural Advancement Committee had a similar experience during 1983-84 when the disadvantaged women were organized to take up pond-fish culture in a village.

Credit Needs

The average fishermen in Bangladesh need credit not only for running their fishing operation but also to buy their daily consumable items. But out of the institutional and the non-institutional sources of credit only the latter is approachable by the poor fishermen. In a society like Bangladesh the institutional credit is normally available to those who have either economic assets or socio-political influence.

The small-scale fishermen obtain non-institutional credit from a variety of sources, namely the village mahjain, fish traders, lessees, village shopkeepers, friends and relatives. Generally they charge exorbitant rates of interest ranging from 100 per cent to 300 per cent. Instances are reported that at times there are places where the village mahjain charge even more than 700 per cent rate of interest on their investment for the purpose. In
such cases, many poor fishermen are in a ‘vicious circle’ because they can not even pay the interest during their life time. As a result they are forced to loose their lands, houses or whatever small assets they have in possession. The political economy of the perpetuation of landlessness in Bangladesh due to unjust credit operation is more or less well documented. But the harsh reality is that the small-scale fishermen or such other underprivileged groups are the most hard hit by the non-institutional credit systems.

The poor fishermen are exploited in a variety of ways under the non-institutional credit operation systems. Two such means of exploitation notoriously known are credit against advance labour and credit against obligation to sell their catch to the settled fish traders. If a poor fisherman borrows from a rich fisherman-wahabas under the former kind of agreement then he is bound to accept any unfavourable terms of conditions to sell his labour to him for a stipulated period. As to the second means the fish traders advance credit to the small-scale fishermen with an obligation that the latter must sell their catch to them until the principals with interest are repaid. Muhubullah indicates to the variable extents of interlinkages among the relations of right to fishing, labour-bargaining relations, credit relations, and the disposal of catch relations among the Jamuna fishermen in Bangladesh (Muhubullah 1985, p. 216).

Unlike power structures, the sources of credits, their operation systems and their impact on the small-scale fishermen in rural Bangladesh have not been thoroughly examined. But this is one of the most important socio-political variables that has to be taken into account for policy decision because the widespread non-availability of institutional credit for the marginal fishermen and the irrational operation of the non-institutional ones among them are directly associated with their disability to participate in the fishing activities. Consequently, this disability of the fishermen has a serious implication on the overall fisheries resource development in the country.

Water Bodies

The total area of 1.47 million hectares of inland fishing grounds in Bangladesh is distributed as: rivers, streams and canals - 56.6 per cent; natural depressions (baors, baras, beth, etc.) - 20 per cent; brackish water - 12.4 per cent; ponds and tanks - 5.2 per cent; and lakes - 6.1 per cent (Chiragong University 1977). Since there is an open-access for fishing in most part of these water bodies particularly the rivers and the natural depressions, nobody has a commitment to develop the resources but to exploit them to their maximum benefit. The existing system of leasing out the fishing grounds on a yearly basis is one factor that heavily contributes to the depletion of the fisheries resource. While the government is convinced to lease out some of the water bodies for a longer duration, appropriate measures for giving them to the real fishermen are yet to be sorted out.

The professional fishermen are reported to have gradually shifted away from their traditional occupation in Chalan beel, Kishongari, Netrokona and the Sankhira host area.
Later also, two reasons are more explicit to explain the situation: first, with the presence of the non-professional crowd the depletion of fisheries resources in the area is taking place at a fast rate; and secondly, the professional fishermen cannot always compete with the non-professionals in terms of numerical preponderance and socio-political influences. The domain of this power is derived not so much because of their organizational strength but for their collusion with the politico-bureaucratic structures.

Shrimp cultivation in the coastal areas are becoming quite popular in Bangladesh. To exploit these resources certain socio-cultural interactions among the local people must be duly considered in the planning process. First is the 'land-use' conflict: whether or not the local people will use their land for crop cultivation or shrimp culture. While their beliefs, customs and traditions are deeply embedded with the practices of agriculture, how do they embrace the new occupation of shrimp culture? It is also noticed that most owners lease out their lands to the outsiders for shrimp cultivation, but once the lands are leased out the owners feel alienated and frustrated for losing grip over the physical possession of the lands. The small farmers are even more afraid that they cannot get back their lands from the lessees in time of their need. Such land-use and land-lease conflicts are reported from many shrimp cultivation areas, particularly from the Satkhira district. These sociological factors are detrimental to the prospect of shrimp cultivation in Bangladesh.

Like shrimp cultivation there are potential physical facilities to develop inland fisheries through pond-fish culture. There are 163,000 village ponds in Bangladesh but the average yield is far below the expectation. The formidable problem with the intensification of pond-fish culture is institutional with respect to both私人 ponds and private ponds (Planning Commission 1985, p. 196).

The major obstacle to use ponds for fish culture in Bangladesh is their multiple ownership. Under the Muslim law of inheritance lands are divided among the descendants. But since ponds cannot be subdivided into pieces they are owned by all the inheritors, and because ponds are used for common washing purposes the inheritors normally do not like to surrender their proportion to others in exchange of another piece of land. While the rich partners can afford to retain their shares of the pond, the poor too do not normally want to lose their pond shares albeit they are ready to sell their precious lands elsewhere.

The multi-ownership of ponds is a socioeconomic phenomenon which gives birth to a number of impediments hindering pond-fish culture in Bangladesh. These hindrances are caused due to the fact that (1) the owners may have unequal shares in the ponds; (2) they have varying degrees of financial abilities; (3) all of them do not live together; (4) conflicts and distrust do exist among them; (5) every shareholder does not equally realize the importance of pondfish culture; (6) Islamic culture and ethos discourage commercial fisheries activities; and (7) a combination of some of these issues
are directly associated with the reasons for having more than one-fifth of the total ponds in the country as destitute.

Poverty, landlessness and population growth are also the factors that call for attention while planning for fisheries development. According to a recent estimate, 54.7 per cent households are found to be virtually landless possessing only 1.2 per cent of the total arable land in Bangladesh (BRAC 1984, p. 11). Others report even beyond 60 per cent. During 1963-64, only 40 per cent of the rural population were below poverty line, in 1975 the figure shot up to 62 per cent and according to the BRAC report the figure is horrifying 81 per cent (BRAC 1984, p. 20). The fact is that the growing poverty has exerted a tremendous pressure on land and its marginal utilization over the years has gone up manifold. In greater Mymensingh and Sylhet areas, for example, people have started cultivating boro paddy even on the best beds which hitherto been only rainy season waterreservoirs. Crop cultivation on the canal and river beds during the winter season is almost a common scenario in Bangladesh. Under these circumstances, the survival of the fish species in the natural grounds itself is in danger let alone the efforts in fish culture. If this situation continues unabated the water-ecology will be so seriously disturbed that by the turn of the present century Bangladesh might turn into a fish-desert.

For increased food production and safe human settlements a number of water development projects have been implemented in Bangladesh during the last few decades. Embankments for flood control, drainage and irrigation (PCDI) have a negative impact on fisheries because they reduce floodplains and obstruct fish movement from rivers to the remaining floodplains for breeding and feeding purposes (MPO 1985, chapt. 8). For example, the overall fish production from the openwater resources within the Chandipur PCDI project area declined 35 per cent over the past two years of operation of the project (MPO Technical Report No. 10). Since the construction of the embankment, 18 species of tilapia or eutrichous origin fish are now obstructed from entering the river by the project regulators and embankment. Hilsa, previously a good commercial fishery in the South Dakhia River, disappeared (MPO 1985, chapt. 8). The MPO Report (1985) has also shown how the Chalan Beel Project - Phase I negatively affects the fish habitat and how the embankments impede recruitment and migration of fish into the area.

While using the term 'integrated' many people are either confused or biased to refer it to 'rural development' only, which is complicated and often limited to a mere intellectual exercise. Instead, an integrated approach to development in a few selected production sectors might show better prospects for realization of its physical goals. Such sectors are, for example, water and fisheries. In presence of a good political will, a suitable group of experts drawn from the discipline of irrigation and water resources, fisheries and social sciences could have sat together to work out a plan for water development in which not only the depletion of fisheries could have been prevented but also the expansion of fisheries resources might have been accelerated. But it was quite surprising to learn that only towards the end of the second plan that fisheries came to be recognized as an integral part of water sector development projects (Planning Commission 1985, p. 194).
III. PRIORITY IN THE FISHERIES SECTOR

The Second Five Year Plan of Bangladesh admitted that the fisheries sector did not receive adequate priority in the past, and also that there was no central control and coordination for fisheries activities (Planning Commission 1980, p. XII-55). The administrative limitations in the fisheries sector included a lack of management of fisheries resources, lack of enforcement of fisheries regulations, absence of minimum inter-agency coordination for integrated water use planning and limited baseline data on fisheries (MPO 1985, p. VI : 15, 21).

"To expand employment opportunities for rural youth, women, landless people, fishermen through productive activities" and "to improve the socioeconomic conditions of rural people in general and fishermen and fish farmers in particular" were two of the six objectives as set out in the second plan for fisheries development. These social objectives were quite important because without the development of the fishermen it was hardly possible to develop the fisheries sector. The Third Five Year Plan did not, however, review how far these objectives were achieved during the second plan period.

TFYP has rightly emphasized more on the social variables, namely the nutritional status of the country, welfare of the fishing communities and public health. The plan has suggested a number of strategies and programmes, for development of the fisheries resources. But the strategies do not seem to be highly consistent with the plan objectives. Though there are talks about the landless people, community consciousness, extension and motivation, there is no sufficient mention for action-oriented programmes that directly contribute to ameliorating the socioeconomic conditions of the genuine fishermen in the country.

Other than the government, the importance of the fisheries sector in overall economy of the country has been duly emphasized by the non-government as well as inter-governmental organizations. Many NGOs like Bangladesh Rural Advancement Committee (BRAC), Christian Commission for Development in Bangladesh (CCDB) and Caritas-Bangladesh have launched small-scale fisheries development schemes along with their regular rural development programme activities. The Rotary Club of Comilla has been successfully implementing a fisheries development programme, "Inland fisheries in Bangladesh," in 171 unions of present Comilla district. The five-year programme has been financed by the Rotary Foundation of the Rotary International and approved under the RI 3H (Health, Hunger and Hamality) project.

Both in terms of quality and quantity the Inland Fisheries in Bangladesh at Comilla has generated genuine interest in fish farming among the villagers. Fifty one Union Fish Culturists have so far brought 193 ponds covering about 131.56 acres under fish nurseries. These ponds are now being intensively used for raising fish fry which hitherto remained either unused or underused. This has created full-time job opportunities for 168 persons and part-time job opportunities for 370 persons (see CIRDAP 1986b).
IV. CIRDAP ROLE IN FISHERIES

The Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP) is a regional inter-governmental and autonomous institution. It was established in 1979 by the countries of the Asia-Pacific region, at the initiative of the Food and Agriculture Organization of the United Nations and with support from the UN bodies and donors. Facilitating alleviation of rural poverty and participation of the rural poor in development process are the major concerns of CIRDAP programmes of research, action research, training and information dissemination. CIRDAP programme priority areas are therefore set as (1) development of disadvantaged groups such as small farmers, fishermen, ethnic groups; (2) people's participation and institutions; (3) women and youth in development; (4) rural development planning, implementation, monitoring and evaluation; (5) agrarian reforms; (6) ecology and resource development; and (7) development support communication.

CIRDAP over the last few years has concentrated only to a few selected areas of urgent concern, fishery is one of them. CIRDAP recognizes that fishing community is one of the most disadvantaged sections almost in all the countries of the Asia-Pacific region including Bangladesh. It attaches more importance on the socioeconomic development of the fishing communities rather than on the improvement of fisheries resources per se. With this general emphasis, CIRDAP has launched a few research and action research programmes in fishing communities and based on these initial experiences it plans to intensify its activities in the area for a longer duration to realize in concrete terms some tangible results. Its action research activities are intended to combine theory with practice in the formulation of innovative experimental projects in rural development for improving the conditions of the rural poor and the most disadvantaged groups, such as the fishing women, tribal people, rural children and youth.

Action Programme on Rural Women in Fishing Communities

The Second Technical Committee Meeting (CIRDAP 1982, p. 31) recommended that ‘Development of Disadvantaged Groups i.e., Women, Children, Landless Labourers, etc.’ should be one of the priority research project areas for the Centre’s Third Biennium, 1983-84. As a follow-up of this recommendation, CIRDAP launched its first Action Programme in Fishing Communities in Indonesia, Philippines, Sri Lanka and Vietnam with financial and technical support from the Government of Japan and the Food and Agriculture Organization of the United Nations, respectively.

The 1979 World Conference on Agrarian Reform and Rural Development (WCARRD) recommended to increasingly recognize the importance of women in rural development activities. On the WCARRD follow-up, the second Government Co-
tions for Asia and the Southwest Pacific observed, "In view of the potential contribution of women to agricultural production and rural development, countries should consider launching and implementing special programmes and activities for raising the economic and social status of rural women". CIRDAP was convinced with these recommendations and believed that the women groups in fishing communities, inter alia, in many parts of the Asia-Pacific region were the most disadvantaged areas which did not so far receive adequate attention of the researchers and policy makers resulting in their total alienation from the mainstream of national rural development strategies. Hence, it was a part of CIRDAP's genuine conviction to design and implement an action research programme aiming at economic progress and social welfare of the women in fishing communities.

CIRDAP's Action Programme for Women in Fishing Communities has two long-term objectives. First, to help rural women and their families in fishing communities improve their living and working conditions by collecting relevant data on their role and activities in community development and by providing required inputs and services to help meet their basic needs through action programmes; and secondly, to increase rural women's participation in development efforts by involving them in decision making and in implementing decisions taken.

The programme revolves around four immediate objectives: first, to develop a model of participatory data collection on women's role and activities in fishing communities as a basis for planning, monitoring and evaluation to be replicated or adapted in other fishing communities. Data collection includes the socioeconomic and demographic situation of small-scale fishing communities, with specific emphasis on women's roles in fishing activities; second, to assist participating member countries establish pilot action projects for women to improve traditional income-generating activities especially in fish processing and utilisation, marketing, fish farming or fish breeding as may be identified at country level; third, to help strengthen women groups' linkages and access to support services available in their respective communities; and fourth, to assist rural women establish their own economically viable income generating activities.

As regards the operational phases, the implementing agency (IA) in respective countries would conduct village socioeconomic surveys to establish benchmark data of fishing households and the activities of the women. Based on these surveys, IAs would organize field workshops to identify and select women target groups as participants in the action projects. After the selection of beneficiary groups and the project sites, each country IA is to deploy one field worker for each village. It should also assist in choosing women group leaders.

On-the-job training for the women participants has been a continuous process. The choice of training modules depends on their needs defined by them and takes into account the availability of resources. It is anticipated that learning-by-doing should characterize the improvement of technical skills of the fishing women. Their participation in the
action programme is expected to achieve a greater impact and demonstration effect on successful implementation of the project. There is also a critical need to engage the women participants in data collection and analysis in order to involve them in planning, implementation, monitoring and evaluation of the pilot action projects.

The three-year action programme now under implementation in all the four countries has already shown some positive results in terms of beneficiary women roles in baseline data collection, identification of the pilot projects, in attending training programmes and implementation of them as income generating activities in a participatory development process. Based on these initial success CIRDAP has proposed to expand the action programme on rural women in fishing communities in five of its member countries. Bangladesh has a chance to be included in the programme for three years.

Socioeconomic Impact of New Fishing Technologies on Traditional Fishing Communities - Bangladesh

The study has been jointly sponsored by CIRDAP and the Asian and Pacific Development Centre (APDC), Kuala Lampur, Malaysia. The main thrusts of the study were: (1) determine the existing technologies for marine fisheries (2) focus on the present levels of technology adoption in marine fisheries (3) analyse the impact of major technological innovations with respect to a number of socioeconomic variables namely, productivity of fishermen and the community, income, income distribution, employment and division of labour, labour mobility, standard of living, community self-reliance in the context of development, social structure, resources sharing system, input output markets, and capital investment; (4) examine the factors that explain the differential impact, if any, of the technological innovations on the fishing households and the various sectors of the community such as input sector, marketing system, processing sector, etc. (5) delineate the delivery mechanism and processes through which these technological innovations have been introduced and sustained, e.g., technical assistance, credit (government and private), infrastructure, input availability, marketing facilities, and processing; and finally (6) to recommend measures that would, in the process of modernizing a country’s fishing industry, protect and develop the welfare of fishing households and communities.

CIRDAP has selected two villages in the Chittagong district to conduct the study. The first and the second round of data collection have already been completed, and the data are now being processed.

Study of Integrated Crop, Livestock and Fish Farming System in Selected CIRDAP Member Countries

CIRDAP has recently initiated the study of Integrated Crop, Livestock and Fish Farming System in its seven member countries including Bangladesh. In order to improve
the quality of life of the rural poor and the marginal farmers, an integrated farming system with crop production and non-crop production activities like livestock and fishery will be quite useful. But the major constraints in development of the integrated farming system are the lack of basic information and infrastructural supports.

The study intends to get a better insight into various aspects of the integrated farming system and find out feasible and profitable ways for the small and marginal farmers. To achieve these goals the immediate objectives of the study are to: (1) examine the present integrated farming system with special reference to crop, livestock and fisheries, (2) delineate the linkages among the three activities which are presently existing in the rural areas and the potentials, (3) identify the economic and technical aspects of integration of these three activities, and (4) recommend viable means and follow-up action of the integration of the socioeconomic condition of the small and marginal farmers.

In addition, CIRDAP, along with some other important bodies (i.e., UNICEF and the Government of Bangladesh Directorate of Fisheries), had been chosen as cooperating organization with the Rotary Club of Comilla and was later considered as an appropriate organization to act as member in the Project Advisory Committee for ‘Inland Fisheries in Bangladesh.’ Currently CIRDAP is assisting in preparation of audio-visual materials on the project to be used for training of the fish culturists as development support communications.

V. CONCLUSIONS

The paper has been presented in a few sections albeit its major portion is devoted to the exposition of the socioeconomic problems and issues. Though indicative in the context, the paper does not, however, offer exhaustive and concrete plan of action for solution of these problems. This is not done partly because these issues have not been thoroughly examined and sufficient data are not so far generated. Moreover, how legislations could be amended protecting the rights of the genuine fishermen, how others could be prevented from entering into the occupation, how the water bodies could be directly leased out to the deserving fishermen, if credit could be advanced to the poor fishermen without collateral, how certain part of the fishing grounds could be kept reserved from being used for irrigation purposes, and so on are some of the crucial issues which call for political actions. Those have to be also considered in the context of the political system in the country.

The government plan documents have emphasized the need for fisheries research, survey and feasibility studies. But most research seem to be heavily biased towards technological aspects such as fish-breeding, conservation techniques, innovation of fishing crafts and gears, etc. While Bangladesh at the moment cannot afford to ignore the importance of such research, side by side efforts should also be directed to examine the socio-
Small-Scale Fisheries: Rahman

economic issues as outlined in the paper. In the process of organization of its various research divisions the newly established prestigious Fisheries Research Institute (FRI), Mymensingh may consider to have separate research division fully devoted to conduct research and action research on the social, cultural and political aspects pertaining to the fisheries resource development. Eminent social scientists in the country can help FRI to organize this research division.

Fisheries development to be successful in the country, the 'people behind the net' should be the central focus. Their socioeconomic problems can be solved only through socioeconomic means; technological improvements and their innovative applications disregarding the people in their socio-cultural milieu may even lead to negative consequences. In order to address these plethora of problems action should be taken both at the macro and micro levels. At the macro level the government should amend suitable legislation and formulate appropriate policies not only for protecting the fisheries resources from the man-made disasters but also to safeguarding the rights of the fishermen for their free participation in the national development strategies.

At the micro level, however, the government should integrate the fishing communities in its regular rural development activities. NGOs should vigorously involve them in the small-scale fisheries and judiciously devise action research programmes to ameliorate the social, economic and political conditions of the fishing communities. Government recognition and encouragement to them with financial and technical supports could be expected to go a long way in the direction.

REFERENCES


Chittagong University (1977): Background paper on the problems and prospects of inland fisheries in Bangladesh. Chittagong: (Mimeo.).


----- (1986a): Socioeconomic Impact of New Fishing Technologies in Traditional Fishing Communities - Bangladesh. Dhaka: CIRDAP.


