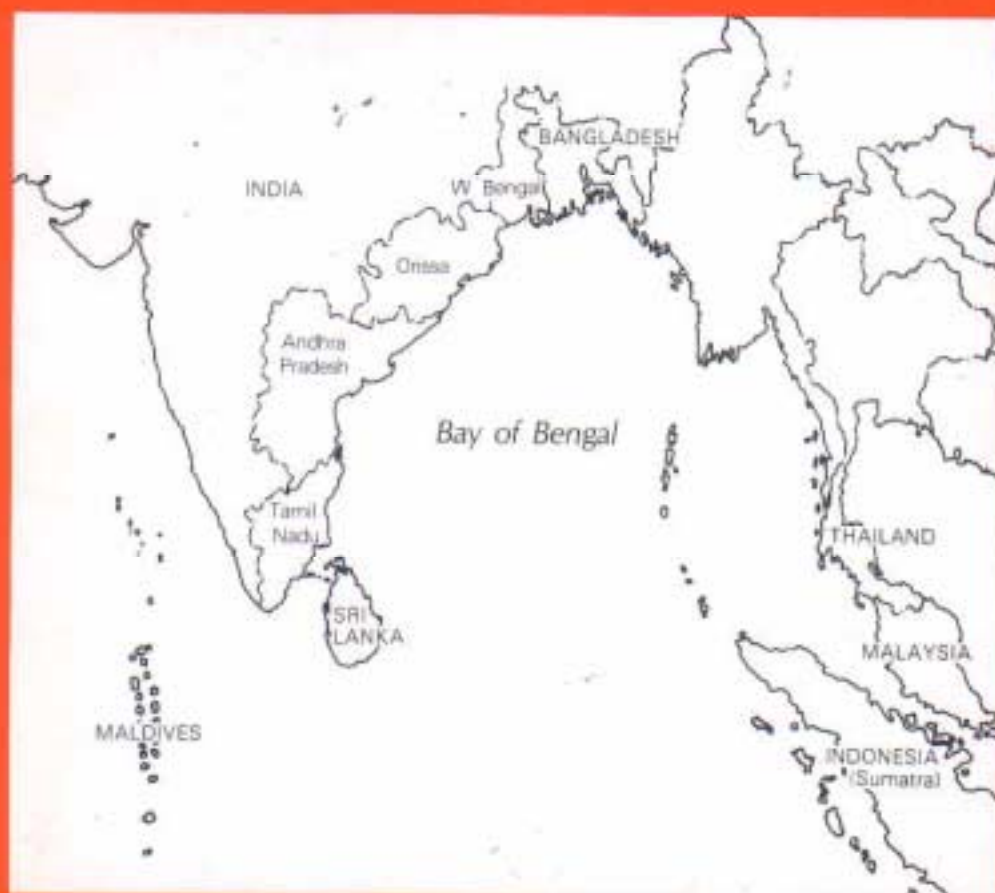


Fisherwomen's Activities in Bangladesh : A Participatory Approach to Development



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FOOD AND AGRICULTURE ORGANIZATION
OF THE UNITED NATIONS

FISHER WOMEN'S ACTIVITIES IN BANGLADESH :
A PARTICIPATORY APPROACH TO DEVELOPMENT

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This paper describes and discusses a pilot project to improve the living standards of fisherwomen from two villages near Chittagong, Bangladesh. The project tried out the 'participatory approach': groups of fisherwomen led by 'link workers' took active part in the project at all stages: planning, identification of activities, implementation. The paper highlights the project methodology, achievements and failures, problems, and lessons for the future.

Under the project, several activities to generate income-such as net-making, fish culture, poultry and goat rearing-were organized. Activities to improve the nutritional status of fisherfolk were taken up. Loans were distributed to project members for investment in income-generating activities. A savings scheme was launched.

Carried out from 1981 to 1985, the project was implemented by the small-scale fisheries project of the Bay of Bengal Programme (BOBP) in cooperation with the marine fisheries department of Bangladesh. It was coordinated by a BOBP sociologist. Two field workers engaged by BOBP and two officials of the marine fisheries department worked with the fisherwomen groups. BOBP's role in the project was terminated in 1985, and a voluntary agency, Nijera Kori, took over this role.

The project coordinator (author of this report), thanks the two field workers, Mrs Mushida Begum and Ms Gouri Dutta, for their sincere efforts in helping the link workers to organize the fisherwomen of Jaldia-Shamipur.

She also thanks the nine link workers, who displayed remarkable qualities of leadership in helping implement project activities. They showed that given guidance and opportunity, they can take up development work on their own.

The project coordinator is grateful to the women of Jaldia-Shamipur, the target group, for their keen interest and active participation in the project, and for the sincerity they showed in repaying loans taken by them for various activities.

The small-scale fisheries project of the Bay of Bengal Programme began in 1979. It is funded by SIDA (Swedish International Development Authority) and executed by the FAO (Food and Agriculture Organization of the United Nations), and covers five countries bordering the Bay of Bengal-Bangladesh, India, Malaysia, Sri Lanka and Thailand. Its main goals are to develop, demonstrate and promote appropriate technologies and methodologies to improve the conditions of small-scale fisherfolk in member countries.

This paper is a technical report and has not been officially cleared by the Government concerned or the FAO.

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SUMMARY

This document reports on a BOBP-assisted pilot project concerning activities by fisherwomen in two fishing communities near Chittagong, Bangladesh.

The project tried out the participatory approach to improve the standard of living of marine fisher-folk. How was this done? Women from the fisher-folk community were helped to organize themselves into small groups; income-generating activities for them were identified and implemented. Education-cum-action programmes on health, sanitation and nutrition were also launched. In the process, women were encouraged to discover and develop their own leadership abilities and to fortify themselves in their effort to better their condition.

The project became a process of mutual learning : development workers engaged in the project learned about the fisherfolk's attitudes towards work, life and living ; the latter in turn acquired new knowledge and skills relevant to their lives.

The project started out with a socio-economic survey of two fishing communities-at Juldia-Shamipur and at Mohara, 40 miles from Juldia-Shamipur. While the survey was on, net-making was started as an income-generating activity. Other activities followed, such as the raising of chicken, ducks and goats. Loans were distributed to the women for these as well as for their regular activities-fish marketing and fish drying. Meanwhile, detailed interviews and conversations were held for a whole year with selected families representing different socio-economic strata in the village. These helped the project to know the fisherfolk better, and to understand their ideas and attitudes.

Another activity that received emphasis was health and nutrition. Sixteen lessons on preventive health care were organized for fisherwomen-members of the project. Their health status was surveyed. Training was provided to them on basic nutrition and on supplementary and weaning food.

The structure of the project was simple. Two women field workers based in Chittagong frequently travelled to the village to guide project activities. They were well-educated but required some training in field work plus some on-the-job experience in applying the participatory approach to work with rural women. These field workers organized several small groups of 5 to 6 members each. Every group had a coordinator selected from the members, called a link worker, who was usually young and had the time and inclination to organize project activities. Each link worker was paid a monthly wage of Tk 100 to 250* for her part-time effort, depending on her performance. In three years, 178 fisherwomen were organized into 13 groups with nine link workers. It is estimated that eventually each link worker will be able to handle two fisherwomen groups of 15 members each. Apart from the link workers, there also emerged leaders in each group who took on responsibilities like teaching primary health care, for which they received a token wage. When a few link workers left the project for other work, voluntary leaders took their place. The link workers and voluntary leaders, now well-trained, are a valuable human resource in the village.

The project used local expertise for training inputs. As many as 13 agencies or organizations assisted in some phase of this pilot project, the important ones being BRAC, CONCERN, Grameen Bank and the Dhaka University's Institute of Nutrition and Food Sciences. According to a survey conducted during the initial stages of the project, indebtedness was a major impediment to improving the lives of fisherfolk. Breaking their dependence on usurious money

*One U.S. \$ equals about 25 Bangladesh taka.

lenders, the project made available to group members small interest-free loans ranging from Tk50 to Tk300 to invest in income-generating activities. In addition to repaying loans, individuals were encouraged to save 10% of their profits and build a resource fund for investing in other economic activities and for meeting emergency expenditure. Before loans were given, discussions were held to help the fisherwomen think through problems they might face and modes of overcoming them, the profit anticipated, and the mode of repaying the loans.

Net-making: One hundred and sixty four fisherwomen-members engaged in net-making. By the middle of 1985, 392 nets had been made and they had earned a total of Tk 63,918. Though loans were given on good faith with no fixed repayment schedule, 62% of the total loan had been repaid. A majority of these women had also saved about Tk 100 each from their net-making incomes. Their total savings amounted to Tk 16,350.

Chicken-raising: The loan amount varied from Tk 48 to Tk 125 per member for raising poultry. Forty three members raised 160 chicken for eggs and meat. One male chicken and four female chicken were distributed per member. Earnings for a member per year amounted to Tk 720.

Duck-raising: The loan amount for ducks was Tk 100 to Tk 124 per member. Forty six members were engaged in rearing 2000 ducks. Earnings from duck eggs were similar to those obtained in poultry.

Goat raising: The loan amount for goats was Tk 200. Twenty-four members were given 24 goats for rearing young ones, which were ultimately sold for meat. Each goat gave birth to a baby goat every year whose value was Tk 150 when it was six months old.

fish marketing: Thirty seven members were given Tk 210 each for fish marketing. Incomes fluctuated quite a bit according to seasons. A rough estimate of income is Tk 15 per trip on a capital of about Tk 200.

Fish culture and tree planting: Two of the project activities did not succeed. When seedlings of guava and cocoanut were planted by 75 members, most of them were eaten up by cattle. The other activity (significantly, the only activity not suggested by the fisherwomen) was the renting and stocking of a fish pond. Inexperience, inadequate management skills and lack of involvement by fishermen were probable causes for the failure of fish culture.

Health improvement: The project arranged for training of project personnel; 120 women were given training on preventive health care and 70 women on supplementary and weaning food. The training was conducted with expertise from the Institute of Nutrition and Food Sciences, Dhaka University. Efforts were made to introduce nutritionally rich foods which were available locally. However, it should be noted that changes in food habits (i.e. cooking and eating) take time and require consistent and long-term reinforcement.

Community hall. The fisherfolk expressed the need for a community hall. 'This space could serve as an office for field workers, as a meeting place for fisherwomen, and as a store house for twine and nets, they said. A village leader donated land for the purpose, and BOBP provided funds to build a community hall.

Transfer of the pilot project: Nijera Kori (NK), a popular non-governmental organization, noted for its community work emphasizing human development, was identified and consulted about taking over the project, building it further, and extending activities to nearby villages.

One of Bangladesh's major rural credit agencies, Grameen Bank, was persuaded to open a branch near the village. It was surmised that this agency would provide small low-interest loans to women from project villages for income-generating activities,

1. INTRODUCTION

Juldia-Shamipur constitute twin 'paras' separated by a small canal. Juldia village is situated 20 km south of Chittagong on the banks of the Karnaphuli river. After a tour of 10 fishing villages in three coastal districts, Juldia was selected for implementation of the pilot project. The reasons were:

- It is a place where BOBP was already active, through experiments with improved fishing gear.
- The village is fairly representative of marine fishing villages in Bangladesh, from the standpoint of living standards.
- It is situated near Chittagong where the office of the Marine Fisheries Department is located.
- The village is accessible from Chittagong. Hence, monitoring of the project by BOBP staff is possible without much time lost in travel.

Other organizations working in the same village need to be mentioned to understand the project's development context. A Catholic mission active here for some time had set up the Kalidaha Fishing Project (KFP), which engaged fishermen from Juldia and neighbouring villages to work on its boats. The Miriam Ashram which runs a school and dispensary was located one and a half miles away from here. Ashram nuns used to conduct adult education classes for Juldia fisherfolk, but these were discontinued a couple of years ago. CARITAS, a voluntary organization with its zonal office in Chittagong, had given loans to fisherfolk and encouraged the idea of savings. Project activities started in 1981 and BOBP's support was phased out in 1985. A list of events during this period is given in Appendix 1.

2. BACKGROUND

In 1981, the BOBP conducted a socio-economic survey of the living conditions of marine fisherfolk in Juldia-Shamipur. The survey consisted initially of interviews. Once the project got under way, the daily activities of eight selected families of varying socio-economic strata were studied over a year. This provided a better understanding of fisherfolk, their beliefs, customs, behaviour, feelings and attitudes. The findings in brief:

The 114 fisherfolk households who constituted the target group were Hindus and lived in a small pocket in the village amid Muslim merchants and cultivators. About 67.5% of them were very poor, with no assets save the hut they lived in. They earned money by working as labourers on fishing boats and by selling fish.

At the time of the survey 62 persons were engaged in small-scale fish marketing. Of these, 43 were female and 21 of them widows. Fish marketing was strenuous work. It meant long waits at the shore for fishing boats to arrive, tough bargains to buy a few fish, carrying headloads of fish for sale either to the local market or to towns nearby, from door-to-door. To add to their hardship, boats recently stopped landing near the village. They now had to take ferry,

bus and rickshaw to cover the distance of 20 km and await boats that arrived at odd hours -2 p.m. and 2 a.m. The women slept on the sidewalk by the dock several nights in a week. Indebtedness and high interest rates imposed a crushing burden on them.

On days without profit the women had to borrow to buy fish for marketing, and during the lean fishing season when there were no coolie jobs on boats and no fish to sell, they were again forced to borrow to feed their families.

Interest rates charged by money lenders or shopkeepers were as high as 2% a day. At the time of survey, 62% of the fishing families were in debt and 35% had no savings.

It was no surprise when anthropometric measurements of 95 children under the age of five in Juldia-Shamipur showed that only 6% of the children had a normal nutritional status, while 23% suffered severe (3rd degree) malnutrition, and the others some degree of undernourishment.

Forty persons, representing a cross-section of the community, were interviewed. Everyone agreed that the economic situation in the village had deteriorated in the recent past. People could not afford even two meals a day. Reasons were the loss of the village landing centre and fewer job opportunities and to some extent, population pressure on limited resources. Another reason cited was modernization of fishing technology-available only to a small section of the community. Poor fisherfolk used only traditional fishing equipment and engaged in traditional marketing practices that could hardly cope with the competition. When asked to state what in their view connoted development, the men mentioned education, economic improvement and health. It was interesting to note that none of the women interviewed mentioned education. They emphasized economic phenomena such as 'more scope for fish marketing'-obviously their economic plight was such that their thinking didn't go beyond it. They also believed that although they (i.e. women) worked as hard as men, they were denied equal status both in the family and in the community. The men did not concede that women could be good leaders.

3. THE APPROACH

3.1 Basic beliefs/assumptions

The project started with some basic beliefs and assumptions :

(a) Development which leads towards self-reliance must be 'process-oriented'. This means that project activities must not be predetermined, but must flow from discussions with the participants. The organization that intervenes-in this case, the BOBP in cooperation with the Directorate of Fisheries-must understand the community and the people before launching the activity.

At the outset, some ideas and possibilities should be prepared and proposed to the target group. Discussions may be held with them and the process of working together initiated. Once it is started, the full participation of the target group must be encouraged to determine the project's course and direction. A few initial activities with the target group would provide the opportunity to learn more about its problems and needs and its way of life. And the target group in its turn will get to understand the organization and its purpose. In other words, the relationship between project personnel and the target group is that of counterparts in development. The ideas, knowledge, advantages and limitations of both parties are weighed when activities are planned..

(b) Emphasis should be on the group, not on individuals. The group or community commands more weight than individuals, and an individual counts only as a member of a group. This principle enhances group unity. The decision of the group should be respected by all members.

(c) The basic attitude of project personnel must be one of respect for and trust in the target group. Such an attitude will improve the self-confidence of group members, their sense of responsibility and their critical thinking. Otherwise, the target group will adapt itself to the project personnel's way of thinking and doing things-which is wrong, since it will engender dependence and passive acceptance of the project.

Further, it is always emphasized to field workers that they should keep improving their skills in listening to local people and be sensitive to their feelings, needs and problems. They should spend some time with any member whenever needed. They should be friendly with everyone in the community. They should take pains to explain the project to whoever is interested.

(d) In-service training was conducted for project personnel as and when needed. But it is believed that important practical skills needed for development work are acquired only by actual project experience in the field.

Development workers seem to assume that some inputs of knowledge and skills through a course will be enough to solve people's problems and improve their living conditions. Such inputs are usually based on needs identified by the development workers themselves-one has to be cautious about the utility of these inputs. The development process envisaged by the present project, on the other hand, is one of helping the people discover their own abilities through activities that reveal their potential. It is a process of mutual learning-the development workers learn from the target group, its attitude towards work, life and living, and the target group members acquire new knowledge and skills relevant to their lives.

3.2 Objectives

The main objective was to experiment with the participatory approach to improve the standard of living of marine fisherfolk. The specific objectives of the pilot project were :

- to gain a better understanding of the community-the fisherfolk and others
- to assist fisherwomen to organize themselves and work in groups, thus developing their leadership abilities
- to assist fisherwomen groups in identifying and implementing income-earning activities
- to strengthen their abilityto improve the standard of living of theirfamilies through education-cum-action programmes such as health, sanitation, nutrition.

4. PROJECT ACTIVITIES

All project activities centre on fisherwomen. Some discussion conducted with fishermen did not lead to any specific activity.

Identification of activities in villages for a process-oriented participatory approach to development usually takes time. But in the present project, the time spent to identify the initial activity of net-making was very short. The experiences of a BOBP fishing technologist already in the field showed a high demand relative to supply for small-mesh driftnets (SMD) of 6 ply nylon twine 4" mesh. The idea of net-making by women was mooted in this context.

The initial project activity for a group of people living in extreme poverty should be able to answer the question 'Can it help us earn more?' Ideally they should be able to earn more with skills they already have. Thus net-making which had potential to raise incomes was a very suitable first activity, and the village women agreed.

It was believed that if the women could earn more through their own skills, they would gradually acquire self-confidence, vital for improving their own living conditions. The process was one of gaining control of a life dominated by extreme poverty.

The fisherwomen's activity started while a socio-economic survey of fishing communities at Jaldia-Shamipur and Mohara was on. Marine fisheries officers (government counterparts) helped BOBP, while English-speaking field personnel of the Kalidaha Fishing Project (KFP), run by a Catholic mission, provided occasional assistance.

In April 1982, Ghashful (GF), a women's organization based in Chittagong, was contracted to work with the fisherwomen and ensure closer guidance and quicker progress. Ghashful began work with the existing group of net-makers. Later, more village coordinators were designated as link workers and trained in basic rural development work and leadership. More women in groups of 8-12 members each were involved in the project. Voluntary leaders were selected from these groups. Depending on their ability to associate with fellow women, they were encouraged to shoulder responsibility as leaders for particular tasks.

In June 1983, the services of Ghashful were withdrawn. By then there were 78 members in five groups plus two field workers hired directly by BOBP to continue work with the women. By the end of 1984 there were 13 groups with some 200 members.

In May 1985, project membership strength rose to 178 (13 groups and nine link workers.)

The activities undertaken by project members are listed in Table 1 and described in detail in the following pages.

4.1 income-generating activities

4.1 .1 Net making

Since net making was considered to be one way of raising the income of women, a message was sent to the village, asking those interested to attend a meeting where the scope of net-making could be discussed in detail. Some 30 women responded. The subject was discussed for about three hours. The women were initially very skeptical, but finally one of them agreed to try it out. Three village coordinators (later known as 'link workers' since another BOBP project in Tamil Nadu uses this term) were identified from the community, and trained in net-making by Kalidaha Fishing Project (KFP) personnel.

Though the women knew how to make nets even earlier, they were not professional net-makers, unlike some of the people in Chittagong and other coastal villages. Therefore it was necessary to train them to make this particular type of net. The village coordinators then organized the women interested in the experiment into *small groups* of 5-6 *persons*. They earned a little income while also helping meet the high demand for such nets in their own village. The most needy women were given the first priority. They took nearly four months to make these nets (500 x 1000). There were four groups with a total of about 25 women at the beginning.

Later, when BOBP began promoting new large mesh driftnets (LMD) of 27/30 ply 7" mesh nylon twine-30% cheaper than the traditional net-the women got engaged in making this type of nets.

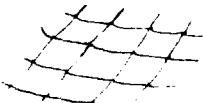
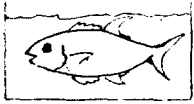








Initially the nets produced by the fisherwomen were sold to the KFP. Later, they were sold to large-mesh driftnet fishermen outside the village, through an Extension Officer from the Marine

Table 1

Fisherwomen activities in Jaldia-Shamipur & North Jaldia (as of May 1985).

13 fisherwomen groups : 178 members

2 field workers and 9 link workers, 2 marine fisheries officers /counterparts.

 <p>Net Making</p>	<p>164 members engaged in net-making [large mesh drift net 210d 30 PA twine, size 1000 x 52 210 mm meshes double knot). They earn Tk 165 per net made Up to June 1984, 392 nets were constructed, and the net-makers earned Tk 63,918 (\$ 2567.00)</p>
 <p>Fish Farming</p>	<p>In one village two fish ponds were leased, 2410 fingerlings of various carps were released in July 1983. One pond was harvested in June 1984. Earnings barely covered expenses. No profits. (77 members involved).</p>
 <p>Chicken Raising</p>	<p>43 members reared about 160 chicken to sell eggs as well as meat.</p>
 <p>Duck Raising</p>	<p>46 members engaged in rearing some 200 ducks.</p>
 <p>Goat Raising</p>	<p>24 members reared 24 goats. Young ones sold for profit.</p>
 <p>Fish Drying</p>	<p>6 fisherwomen given loans of Tk 300 to 500 for fish drying and storing and sale for profit during the lean season.</p>
 <p>Fish Marketing</p>	<p>37 fisherwomen given loans of Tk 210 for fish marketing.</p>
 <p>Savings</p>	<p>Savings of Tk 100 by each. Total savings up to April 1985 : Tk 16,350 (\$ 555.18)</p>
 <p>Fruit Trees</p>	<p>Two fruit trees (guava and coconut) were distributed to 75 members. Very few survived.</p>
 <p>Health Improvement</p>	<p>a. Training on preventive health care for 120 women. b. Training for 70 women on supplementary and weaning food plus follow-up practical training.</p>

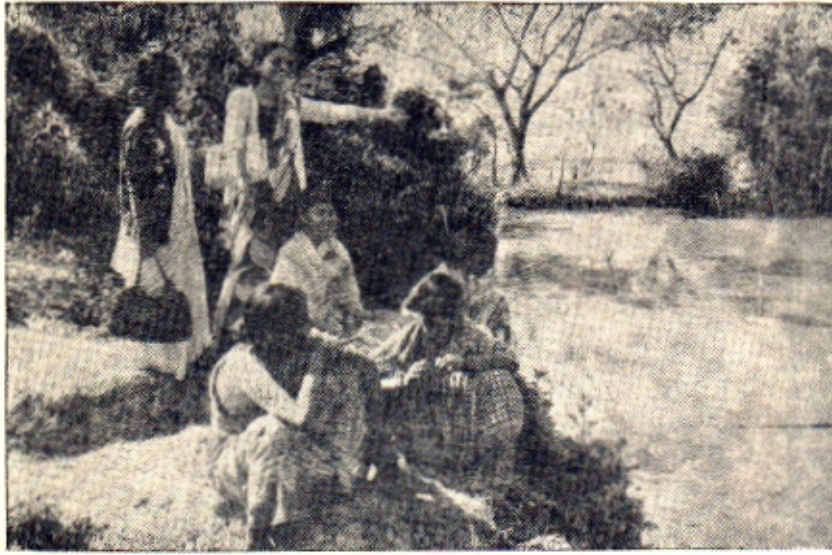


*Link worker Ratna with her child (right), and
in discussion with her group of fisherwomen (below)*



A typical fishing family of Juldia.

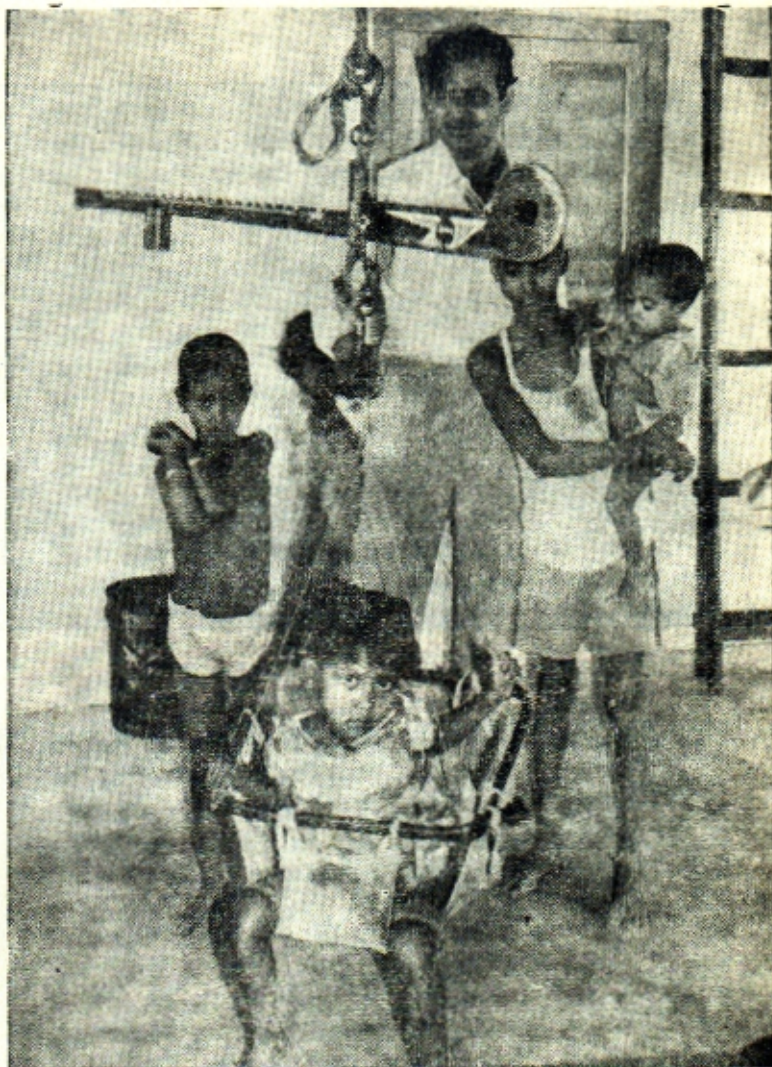
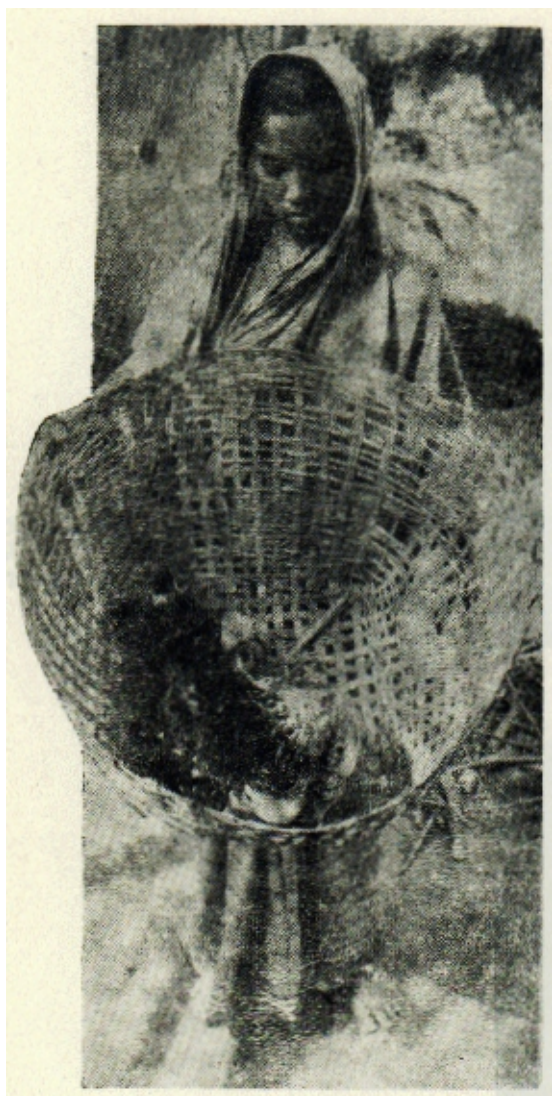




Fish culture was one of the activities tried out by the project at Juldia. BOBP social workers and link workers meet at the fish pond under culture.



Net-making was the project's main income-generating activity. Two fisherwomen make net webbings, using twine supplied by BOBP.



Some of the fisherwomen took up poultry rearing (above left). A child is being weighed in the course of a health improvement activity (right). Fisherwomen cook a low-cost nutritious recipe recommended by the project (below).



Fisheries Department (a BOBP counterpart working directly with those fishermen). The market for LMD nets was limited to about 15% of the fishing units in Chittagong. At this stage, project members did not want to make SMD nets because these took more time and offered less returns. However, the market for SMD was larger, and the long-term earning possibilities of SMD nets were repeatedly discussed with them. Discussions were also held on the feasibility of making the popular tyre cord net. But the women preferred to work with large mesh driftnets.

Earnings varied for the LMD and the SMD. It took 4 to 6 weeks of part-time work to finish half a piece of a large mesh driftnet. Earning per piece was Tk 165, and the average monthly income amounted to Tk 141. But half a piece of small mesh driftnet took up to 12 weeks to complete, because of the smaller mesh size which required more knots. Earning per piece for small-mesh driftnet was Tk 200, yielding an average monthly income of Tk 67. The thinner twine was also more difficult to work with.

4.1.2 Goat raising

Goat raising was taken up in May 1983 at the request of the fisherwomen. Twelve members who constituted the first group were given loans to buy goats. Later, another three members were given loans. Though these loans helped the members to earn some money without spending anything, the income was rather low. The price of baby goats fell when the members wanted to sell them. Earnings had been estimated on the assumption that each goat would yield a young one per year. The baby goat was sold when six months old for Tk 150. This activity resulted in earnings of Tk 12.5 per month.

4.1.3 Chicken and duck raising

Chicken raising was first started in June 1983. By September 1984, there were 100 members raising chicken and 45 members raising ducks. Each member owned 4-5 birds, and no expenses were incurred. The minimum earnings were estimated at Tk 60 per month per person for chicken and duck raising : the estimate was based on egg production from four birds yielding an egg each per day for 15 days a month and eight months in a year.

4.1.4 Fish marketing and fish drying

These were the two main activities carried out traditionally by poor families; they were the only way by which widows could earn some money. But they had to borrow money every day at very high rates of interest. Hence in November 1983 members were given loans to take up fish marketing and fish drying on an experimental basis. By September 1984, 37 members had been given loans for fish marketing and seven members for fish drying. Incomes from these two activities fluctuated highly because of the seasonal character of fishing, also because the women bought fish in varying amounts according to its availability and price. It was impossible to estimate the monthly earnings. The members said that sometimes fish marketing yielded very good profits, as high as Tk 60 on a capital of Tk 200. On other occasions they also incurred heavy losses. On an average, they probably earned Tk 10 to Tk 20 per trip. Deducting the interest they paid on the loan, what remained for their livelihood was very little.

4.1.5 Fish culture and tree planting

The fish pond culture trials turned out to be unprofitable though other organizations who have introduced it have made money. (Fish culture has been one of the popular activities among rural development agencies in Bangladesh.) A likely reason for failure was lack of know-how for planning and implementing the activity. (The pond should be rented out when sufficient fry is available and there is time enough for harvesting. This was not done.) Another reason for failure was dependence on outsiders.

During the early part of 1983, coconut and guava seedlings were distributed to 75 members. Unfortunately, only a few trees survived-cattle gobbled up the rest.

4.1.6 Savings from income-generating activities

When net-making was started, the women were encouraged to save 10% of their earnings to initiate funds for other activities. When their fee for net fabrication was raised to the market price, the women agreed to **save** 15% of their earnings. Members were also encouraged to save from other incomes. By April 1985, a majority of project members had average savings of about Tk 100 each. Their total savings amounted to Tk 16,350.

Savings were encouraged so that members could invest in other economic activities such as fish drying, and also meet any emergency expenditure themselves, without rushing to usurious moneylenders. To help them, several discussions were held with the Director of Grameen Bank* in Bangladesh, persuading him to open a branch in the village. The bank finally did so in April 1985, in an area about one-and-a-half miles away which covered Jaldia-Shamipur.

4.1.7 Credit

Meanwhile, the project also loaned money as advance for various activities--loans which the members paid back in instalments. Since the raising of goats, duck and chicken was profitable, members were able to pay back the capital. But fish culture was a failure; since it was conducted on a trial basis, BOBP bore the cost.

BOBP also advanced loans for fish marketing and fish drying, the traditional occupation of fisherwomen. About 60% of the fishing families in Jaldia-Shamipur, inclusive of men and women, were engaged in selling fish, for which they borrowed money at high rates of interest from private moneylenders. BOBP advanced Tk 210 to 37 members on the basis of mutual trust without interest. The terms of the agreement were that members would repay Tk 2 on days when they sold fish. Link workers collected these payments. BOBP also advanced Tk 300 to six members to take up fish drying during winter.

Assistance was also provided to fisherfolk to raise animals and birds and provide data on their incomes and profits. Who in the family would be given the responsibility for feeding the animals? Where would the animals be kept during the night? What was their previous experience in raising animals? Were these successful or unsuccessful and why? If they encountered the same problems in future, would they be able to tackle them? How? What was the profit they envisaged? And finally how did they plan to pay back the loans? These were some of the questions discussed with the fisherwomen before they were given loans.

Every time a loan was given through the link workers, it was announced at a meeting. Link workers collected the names of those who wished to obtain loans. Field workers and link workers visited them, studied their living conditions and discussed the questions mentioned above to make sure that the member's whole family was interested in the loan, felt responsible for it and was clear about what to do to ensure the best results. The particular member's record in earlier activities (net making) and her attitude towards the group and community was also taken into account.

Table 2 details the loans given to members concerning five activities : fish marketing, fish drying, goat raising, duck raising and chicken raising. The loans were given at different points of time, starting from June 1983. Repayment calculations presented in the table begin from the date of receipt of loan up to September 1984.

Of the five activities, the highest amount repaid was for goat raising (76.60% within the stipulated time of 10-16 months). Chicken raising ranked next (63.01% repaid within the stipulated time of 5 to 15 months). Next came fish marketing (61.67% within 10 months), fish drying (59.20% within 7 months) and duck raising (53.94% within 6 to 12 months). The **low** rate of repayment on duck raising could be because a few ducklings died a few days after purchase from the city.

*Grameen Bank is an autonomous, government funded institution, which helps rural folk with loans for productive purposes.

Table 2
Loans disbursed and repayed for income-generating activities

Income generatiny activities	Number of loanees	Loan amount per head	Total loan amount	Total loan amount repaid	Total repayment percentage	Individual repayment percentage range	Period in which repaid (months)
		(Tk)	(Tk)	(Tk)			
1. Fish marketing	37	210	7,770	4,792	61.67	18.57 to 100	5-10
2. Fish drying (trial)	6	300	1,800	1,065	59.20	6.7 to 100	7
3. Goat raising	15	200	3,000	2,298	76'60	37.5 to 100	10-16
4. Duck raising	45	100 125	4,950	2,670	53.94	15 to 100	6-12
5. Chicken raising	38	48 100 120 125	3,263	2,056	63.01	25 to 100	5-15
Total	141		20,783	12,881	61.97	67 to 100	6-16

Table 3
Repayment pattern by activities financed

Activity	No. of months	Percentage of repayment					Loanees Nos.
		100	75-99	50-74	25-49	25	
Goat raising	16	7	1	3	1		12
Chicken raising	15	10	2	1	3	—	16
Chicken & duck raising	12	—	1+2	4+1	0+3	—	11
Fish marketing	10	4	3	3	1	1	12
Fish marketing & duck raising	9	2+0	1+0	8+3	6+ 2	0+1	23
Fish marketing	8	—	1	2	4	—	7
Fish drying, chicken & duck raising	7	2+0+1	1+1+2	0+0+2	1 +0+1	2+0+1	14
Goat, chicken & duck raising	6	0+1+1	0+3+4	2+3+7	1+9+8	0+0+2	41
Fish marketing	5	0	0	0	1	0	1
Duck	4	0	2	0	2	0	4
Total loanees (nos.)		28	24	39	43	7	141
		19.8%	17.0%	27.6%	30.5%	5.0	

It was agreed that the women would repay a part of the loan amount from their net-making earnings. In fact the loan repayment instalment was 'deducted at source' from the money due to women net-makers.

Thus, the loan amounts and the duration of repayment varied, but the figure of 62% loan repayment indicates that the majority of members had repaid a good part of their loan amounts. Details of loan repayment by activity will be discussed later.

Table 3 classifies members into five categories according to the percentage of money repaid and the duration of repayment time, which varied from 4 to 16 months. The percentage of loan repayment by members was calculated individually. The total number of loanees is at the far right hand column.

In all, 28 members or 19.8% of the loanees paid up 100% of their loans. Though the majority took 9 to 16 months to pay up 100%, a few managed to pay within 6 to 7 months. There were very few who paid only 25% or less. And there was none who completely failed to repay. This shows clearly that these very poor fisherwomen were 'good loanees'. It is clear that they needed more time to repay loans because of their lack of means.

The five tables on Appendix 2 give details of loan repayment by project members separately for each activity (Fish marketing, fish drying, duck raising, chicken raising).

4.2 Health improvement activities

4.2.1 Preventive health care

Around early 1983 a training course on preventive health care was organized for 20 link workers and voluntary leaders with the help of CONCERN, a voluntary organization. Sixteen lessons prepared by CONCERN were taught through an informal discussion using flash cards as aids to help stimulate trainee participation. The 16 lessons related to environmental hygiene, sore ears, diarrhoea, scabies, baby feeding, personal hygiene, worms, ante-natal care, care for children under five, bottle feeding, alcohol, measles, sore eyes, T.B., treatment for minor injuries and diet during pregnancy.

Of the 20 trainees, 10 were selected to train the 10 fisherwomen groups. They spent 3-8 months to complete the 16 lessons for all 10 groups. Attendance at these classes varied from B-12 women. The classes were meant to impart a basic knowledge of health care; their immediate object was to encourage members to build toilets in their homes.

The project helped Jaldia-Shamipur families to buy toilet slabs and rings from the health office in Chittagong which made and sold them at a subsidized price of Tk 150. More than 10 sets were requested. After a long time (about 2 years) only four sets were received. Four families immediately paid for them. The market price of each set was Tk 800; even if other families were interested in the toilet paraphernalia, they could not afford to buy these at market rates,

The poorer families without land had neither the money nor the space for a toilet. Several infructuous discussions were held about the location of the toilets. The issues involved were non-availability of land for toilets, construction and maintenance of community toilets, toilets for small clusters of houses, availability of slabs at subsidized prices and repayment. The members were not able to arrive at a consensus.

The census figures indicated that a high percentage of children under 6 years of age (20% of the total population) were malnourished. This was a matter for urgent action. At the end of 1983, the World Food Programme (WFP), Bangladesh, was contacted and various discussions held to find out if the fisherwomen's project could be adopted under the WFP food schemes. WFP officers visited project sites to study and discuss the issue with villagers.

It was agreed that support should be given to women and children under the 'Food for Vulnerable Groups' programme. Specifically, foodgrains, oil and pulses could be given to women for two years. The link workers agreed that on their part, the project groups could undertake community development activities such as road improvement. Government approval of this scheme took 2½ years and was sanctioned in May 1985.

42.2 Nutritional survey and training on supplementary and weaning food

To find out the nutritional status of children and identify measures to improve their status, many organizations were contacted. One idea suggested was to train young women to run the local health care centre; they could then take care of children with working parents, and serve them with WFP food for lunch. This would ensure the children at least one nutritious meal per day during their vulnerable pre-school age.

During early 1984, after several enquiries, it was found through UNICEF that the Institute of Nutrition and Food Sciences,* Dhaka University, had a field unit concerned with improving the health status of rural folk. Their approach was to teach members about the basics of good health, then impart practical training on using highly nutritious but cheap and locally available food items to cook supplementary food for children. They did not train village women to run child-care centres. (It has not been possible to identify a local organization to do that). The Institute arranged with UNICEF to organize some training in Jaldia-Shamipur. A team of five persons—a doctor, a nutritionist and three well trained home science nutritionists—started a 5-day course for the project's field workers, link workers and voluntary leaders. These trainees later assisted Institute staff in training some 70 village women (both project members and non-members, mostly in the 16-45 fertility age bracket) on health and nutrition.

In this way, project personnel and group leaders got practical training that reinforced their learning and helped them guide the village women. Both training courses dealt with the following topics :

- Food, nutrients, nutritional diseases and nutritional requirements
- Importance of breast feeding
- Importance of proper weaning and supplementary food
- Food production at home
- Food preservation at home
- Oral dehydration
- Food hygiene and environmental hygiene
- Population education
- Demonstration and preparation of weaning and supplementary food
- Assessment of nutritional status

The first part of the training course for project personnel and group leaders contained more theory than practice, while the second part, for village women, emphasized practical aspects. Particular mention must be made of a new recipe for supplementary and weaning food made from a wild plant that grew abundantly around the village. Most villagers never ate it though it had a higher nutritional value than that of rice and dal combined. The training included cooking sessions of the recommended recipes, and the women were encouraged to cook such supplementary food for their children. The recipes (Appendix 4) were developed keeping in mind the taste preferences of people of the area. Project personnel and link workers kept in touch with the trainees so that the use of the nutritious wild plants continued. During the training, two members of the team conducted anthropometric measurements of children under

*The Institute had in the past helped implement a UNICEF-assisted child development project, which advised rural folk to use locally available vegetables. In two years, the nutritional status of the villagers improved noticeably.

five years of age in the village. These figures were used as baseline data. Project personnel were taught techniques to measure and calculate the nutritional status of children under five, and the children were weighed every two months. These figures can **be used** to gauge improvement in health status, and field data may be analysed by the Institute of Nutrition and Food Sciences. Those who run this project in the future may find it worthwhile to follow up on this activity.

Follow-up

Four link workers and six women who had received training in nutrition were interviewed about the utility of the training. They agreed that they had gained useful knowledge, and many expressed a desire for more such training. Details of these interviews are provided in Appendix 3.

Field workers and link workers later followed up on the training to check whether the women put into practice their new knowledge about nutrition. The findings were rather discouraging. Very few women prepared the recommended food for their children.

It was then decided that each group would continue occasional meetings at which joint cooking sessions would **be** organized. This way the women would have frequent opportunities to cook and taste the nutritious food. They brought their children along to these sessions, so that they were fed as well. These classes continued a long time. The idea was that the field workers should attend these meetings, discuss problems if any with project members and solve them. It is hoped that such meetings will prove fruitful and that nutritious food intake will become a habit.

The reasons the women gave for not trying out the nutritious food were : 'no fuel, no time, no money', though this food required just as much fuel, time and money as their normal food.

What's the actual reason ? Though the women agreed during their training that the food tasted good, some extra effort was needed to prepare something different, and to promote a new food that tasted different. Further, there was a belief that these leaves were eaten only by 'poor' people. It is also possible that family members including the husbands protested at the new food.

Food tastes are developed from birth. To cultivate a taste for something new takes time. Any programme that tries to introduce a new food will take time to develop the right recipe and to get it accepted.

4.3 Community hall

A project that emphasizes the group approach should provide as many opportunities as possible for the people to meet. Jaldia-Shamipur is a very congested village, though it does have open spaces where community meetings can be held. But rains (which batter Bangladesh almost half the year) make the ground muddy and impossible for use. Besides, the environment is not very hygienic (only 2% of the households own toilets), Therefore most project meetings were held in the KFP building, but the women did not feel quite at ease here. The need was felt for a field office where members could keep their records, store twine for nets, hold discussions and conduct training sessions. After much cogitation, a local leader, a well-to-do Muslim merchant from the village, agreed to donate land for a community hall on the eastern edge of the village.

Built with BOBP funds, the hall has a store-cum-office room, some open space for meetings and a toilet. However it needs refinement.

The land around the toilet should be raised so that it does not get flooded during the rainy season. A tubewell is needed to supply the water for a kitchen garden. And the garden has

to be fenced. It was proposed that these improvements be carried out gradually by project members themselves, who would be paid for their labour with WFP food. The link workers and most of the women's group members agreed that the community hall could be used as a child care centre as well. They were enthusiastic about a small shop being opened within the hall compound where women could sell provisions at reasonable prices and run a profitable tea stall (almost every family buys tea from shops instead of making it). These points were discussed at various meetings. The hall was 'handed over' to the village community at a small function. A committee was selected to maintain the premises. Members from nearby villages could use the hall, but priority would be given to the project groups.

4.4 Working with fishermen

The project believed in the family approach to development, with the emphasis on women : necessary because of their disadvantaged position in society. But if women alone are to be considered for development work without paying attention to the family and other village institutions, development will not get very far. The family in any given community is the very fabric of society and most valued by each and every individual in the community. This should be kept in mind while planning and implementing any development programme.

During mid-1983 and early 1984, meetings were conducted with fishermen, mostly from families of project members, and with some leaders and bahardars. The first meeting was meant to inform them about project goals, and solicit their opinions and suggestions. The second meeting sought to explore possibilities of the men forming groups and getting involved in development activities. The response at the first meeting was poor. But at the second meeting, members expressed appreciation of project work. They were thankful for the small incomes women earned from net-making which had helped their families during the lean season. (Most of the men were labourers, either on contract or on a daily wage basis. Money was normally advanced to them before they went out on seasonal fishing. This meant that when the season was over and they returned home, the income had already been spent by the family. And jobs were not readily available for the men during the lean season).

During the second meeting, the fishermen said they too would like to take part in income-generating activities. A majority, quite understandably, asked for fishing assets-nets and boats. These were very logical requests. But to launch such an activity required fairly high capital and a long-term plan of work not possible in a small 'pilot project' run by an outside organization like the BOBP.

The men too responded positively to the idea of food for work. The work consisted of minor jobs around the community hall and construction of a pathway to the hall.

5. ORGANIZATIONAL STRUCTURE OF THE PROJECT

The organizational structure of the project hinged on its approach-participatory. This meant the target groups had to organize themselves to give expression to their ideas. Their strength lay in their numbers-the only power against any form of exploitation. Thus, the target group was encouraged at the very beginning to form groups. To stimulate group formation and to coordinate the work, link workers were selected from among the members. Since they belonged to the same village, the link workers would be able to understand the needs and problems of village women easily. They were given training in basic rural development work so that they

could perform their tasks even better. Liaising with the link workers were *two female field workers* who worked in cooperation with the *government fisheries officers/counterparts*. The *BOBP sociologist*, in close cooperation with the *BOBP Project Officer*, Dhaka, dealt mainly with the women field workers and occasionally (through an interpreter) with the link workers and members. Each group consisted of 12 to 15 members with one link worker. The intention was that, as the link workers gained in experience, each would work with two groups of 15 women each ; and an experienced field worker would eventually guide 12 link workers. The marine fisheries officers/counterparts closely assisted the field workers, particularly on technical activities such as net-making and fish ponds.

In each group, a few other members were encouraged to be voluntary leaders. They worked closely with link workers so that they could learn from 'them'. These voluntary leaders were given occasional training: they helped in performing various jobs such as training members on preventive health care for a low fee. The voluntary leaders 'kept on changing, depending on the nature of the specific job on hand. The process was meant to gradually build and strengthen leadership qualities among members. In fact, several voluntary leaders became link workers when a few of the latter resigned to take up jobs in garment factories around Chittagong.

The performance of the link workers was continuously monitored. What they were paid depended on their performance. The criteria used were efficiency, their interaction with the group, the number of members they led, and the attitude of members of their group.

The government counterparts of the fisherwomen's pilot project were statistical officers. They assisted in the technical and marketing aspects of net-making and fish pond activities, in interviewing people while conducting surveys, and in building the community hall.

The training that these government counterparts had undergone helped them acquire skills in implementing development work. Though they did not work directly with the project women, they were consulted by field workers on different aspects of the project. Government officers engaged in this pilot project had some of the skills needed to implement development projects using a participatory approach.

The field workers improved their knowledge and skills and developed the attitudes essential for such a project through several training programmes. The fact that the field workers were women made them particularly effective-the project members were able to communicate freely with them.

5.1 Utilization of local expertise

The project's methodology laid high emphasis on tapping local expertise. Therefore a good bit of time was spent looking for appropriate local institutions to assist the project. The search was fruitful : a number of organizations assisted in the project's planning and implementation. Some of them were more effective than others, but all laid stress on human resource development. These organizations are listed below:

1. Fisheries Directorate and Marine Fisheries Department.
2. Kalidaha Fishing Project-provided a forum for meetings and discussions, offered facilities for storage of project material.
3. Sister of the Catholic Missions-proffered advice about the village women.
4. CARITAS-provided useful local information.
5. Women Cell, Agricultural Extension Directorate-helped train village investigators.
6. Economics Department, University of Chittagong-assisted the village investigators.

7. Bangladesh Rural Advancement Committee (BRAC)-provided training both at the project site and elsewhere for village link workers as well as for field personnel and counterparts
8. GHASHFUL-A women's organization in Chittagong which worked directly with the women on behalf of BOBP.
9. CONCERN-An Irish-funded voluntary agency which helped link workers and voluntary leaders on preventive health care.
10. Grameen Bank--provided training to field personnel.
11. The Institute of Nutrition and Food Science, Dhaka University-conducted anthropometric surveys to find out the nutritional status of the fisherwomen and conducted training on nutrition and supplementary and weaning food.
12. World Food Programme-contributed food under the 'Food for Vulnerable Groups Project'.
13. Nijera Kori (NK)-took over the project from BOBP (See chapter 6.9).

5.2 Cost-effectiveness

The project's average monthly earnings were estimated from the sum of average earnings of individual activities. (This calculation does not take into consideration work on the LMD nets whose market is very limited.)

Total earnings per member per month on net-making, goat,

chicken and duck raising

$$= \text{Tk } 60 + 60 + 12.5 + 66.60$$

Tk 199.16

Average earning per activity

Tk 49.79

If one member takes up two activities the earnings per month would be

Tk 99.58

Cost of training for field workers and link workers per woman per month :

Tk 12.46

This is calculated as follows:

- 1 link worker could work with 30 members.

Link worker's salary : Tk 250/m

Therefore cost/member of a link worker

Tk 8.30

- 1 field worker could work with 360 members through 12 link workers

Field worker's salary : Tk 1500

Therefore cost/member of a field worker

$$= \text{Tk } 1500/360$$

Tk 4.16

This calculation does not include on-the-job training for 3-5 years when the field workers commence work. The extent of training depends on the qualifications of field workers. The better qualified need less field training time.

The calculation presupposes well-trained field supervisors and link workers, assuming a ratio of 1 link worker per 30 women and 1 field worker per 12 link workers. Such a training input is regarded as a must-it should be provided by government or by the concerned NGO agencies.

5.3 Transfer of the pilot project

Every one agreed on the need to continue the project after the pilot stage. A local agency with faith in the participatory approach and willingness to continue project work had to be identified. After a long search, Nijera Kori (NK), a voluntary agency known for its community development work, was selected. Its representatives visited the area and held discussions with everyone concerned with the project before agreeing to take it up. They expressed appreciation of the members' ability to articulate their problems, needs and efforts.

NK would need funds to continue the work. BOBP sounded several funding agencies about further development work under the project's auspices.

5.4 BOBP inputs

The major input was in terms of personnel: two female field workers (full time), the Project Officer, Dhaka, the link workers, and a sociologist (part-time). Another input concerned training for all concerned with the project, for which BOBP coordinated with various organizations. The field workers and link workers were given training in both managerial and technical aspects of the project's activities and on the importance of savings and their potential for development. Training was also provided in cleanliness, food and nutrition, child care, cooperation in development efforts, etc.

A third type of input concerned loans to fisherwomen for project activities. The money involved was very little, and for a revolving fund only. The money was repaid by the project members. This money will not be needed from BOBP any more when the Grameen Bank takes over the loan function.

Another input was the supply of twine to fabricate LMD nets. The 27 ply twine used was not available in the market, since fisherfolk used much thicker twine for their nets. However, BOBP was trying to demonstrate the effectiveness of thin twine as compared to traditional thicker twine and was therefore providing project members with thin twine for net fabrication. When fishing trials showed thin twine nets to be technically suitable and economically viable, efforts were made to establish a market for the 27 ply twine. Three meetings were held on different occasions with twine traders—first to inform them about the success of the thin twine experiment, later to discuss how it could be made available in the market.

Discussions were also held with project members who knew how to fabricate this particular type of net. They were told that if the thin twine was available in the market, they should use it and produce superior-quality LMD nets. Top fisheries officials, twine traders, the BOBP project officer and field workers met to consider ways of importing this type of twine. It was suggested that government should be approached for import of such twine by Chittagong twine traders. A proposal was put up to the government twice, but till mid-1985, the traders had not been allotted quotas for twine import.

BOBP's biggest single financial input was for constructing a community hall. The money inputs for activities were minimal. The most important inputs related to training of project personnel, to instil knowledge, skills and attitudes; and to the training of target groups on the conduct of each activity, thereby encouraging them to improve their quality of life.

5.5 Government inputs

Good cooperation was provided by the Bangladesh Government for field work on this pilot project. Four marine fisheries inspectors were assigned as field counterparts. Though not all of them spent all their time on the project, they were involved according to the need. It was understood that if the project proved viable, the government would absorb the two women field workers into the marine fisheries department so that a fisheries extension service could be

initiated. Work with the pilot project would continue and gradually expand, both in staff strength and area of coverage. It was suggested that a proposal on these lines should be sent to the central government for sanction. Three such proposals were sent till May 1985. Government sanction was still awaited at that time.

6. DISCUSSION

6.1 Project approach

To help the fisherwomen's project achieve its goal of assisting fisherfolk to improve their living conditions, an atmosphere of trust was built up between project personnel, the various co-operating agencies and the fisherwomen. They worked together as equal partners. The following implementation procedures helped the process.

- * The project organization considered it essential to study the fisherfolk, and to understand their culture and lifestyle while interacting with them.
- * Every activity proposed was discussed with the members. Understanding was reached among members that the activity was only a 'trial' and participation was entirely a matter of choice by individual members.
- * Project activities were decided by the fisherfolk, while project personnel provided suggestions and information. The latter learned from the experiences of project members, and helped members think through their own experiences, identify problems and plan measures to overcome them.
- * Care was taken to ensure that the activities and discussions did not go 'against family beliefs and norms, or religious and social institutions.
- * Though the project focussed on women-necessary because of their disadvantaged position -it aimed at the family as a whole. The activities for members of the family-men, women and children-overlapped in any case.
- * One problem encountered was the tendency of the target group to view the project as a welfare programme from which handouts could be obtained. The field workers tended to function as welfare officers : this created a dependency syndrome. Field workers concentrated on producing the end-products, rather than on encouraging inculcation of knowledge and skills and positive attitudes by project members and groups.
- * Basic infrastructure-such as a dispensary, a bank or a school-was lacking in the village. There were no means to deposit savings or obtain medicines. The government too lacked the organizational infrastructure to support the project. The Marine Fisheries Department dealt mainly with technology.

6.2 Group formation among fisherwomen

Group formation among fisherwomen was initially slow but picked up later. The group grew gradually from four small groups of 5 or 6 members each during late 1982, to 13 groups of 12 to 15 each with a total of about 200 members in May 1985.

The women obviously found that joining these groups was to their advantage-both for getting loans and for earning from other income-generating projects. Perhaps they also relished the opportunity to voice their feelings and problems, and to listen to others-though this cannot be

said with certitude. It can only be surmised that the women seemed to enjoy sitting together and discussing in groups. They seemed to understand that the project was meant to spur self-reliance, not dole out welfare. The understanding between project personnel and members improved over time, and more and more people wanted to become members. During the nine-month period when transfer of the project was finalized, no loan was given. Otherwise, activities would have increased, so would the number of members. Initially group formation required some effort, but later the women joined groups on their own.

6.3 Income-generating activities

Activities in which the project's women members had some experience were found to be more successful than those in which they had no experience. The women earned money from activities like net-making and the raising of chicken, ducks and goats. Incomes ranged from Tk 12.50 per month for goat raising to Tk 64 per month for SMD net-making.

Fish pond culture failed because it called for technical and managerial skills, also for more investment (for renting the pond, hiring fishermen for harvesting) than other activities. It was understood that male members from project families would take care of the pond, but this did not happen-probably because they were not consulted, only the women were. Fish culture might have been more successful as a fishermen's activity, since they know more about fish culture than women do.

The project's activities did not substantially increase the workload of the women which was already very heavy; it got spread out among the family. Project work-earning more money and working together in groups with other women-strengthened the self-confidence of the women, broadened their horizons, and brought out latent potential.

Some suggestions :

- Present activities may be consolidated and strengthened with more members and more cattle and poultry. But while raising more of the latter, the capacity of a member's family to manage them should be borne in mind.
- Periodic discussions should be held on all activities-the resources, the costs, the time, the effort, the earnings.
- Members should find out whether group efforts will improve the economics and management of any activity. For example, can sale of eggs be taken up cooperatively? If yes, they may be able to sell in neighbouring villages and town markets and get better prices. This may improve efficiency- a few members could concentrate on production, a few others on selling. The problem some members had with selling baby goats can surely be solved with some group effort.
- Members should be encouraged to make SMD nets again. Demand is unlimited. These nets take a long time to fabricate, but family members can do the work in their spare time and get both money and experience. (In the long term, it is likely that mechanization of net-making will hit net-making by hand). There is need to organize the supply of twine and keep in touch with fishermen who need such nets.

6.4 Loans and their repayment

High interest loans are often the main reason for the poor being driven deeper into despair, Low-interest loans should rate high priority in any development programme.

Loan repayment by the project fisherwomen was quite satisfactory. A good many repaid more than half the loan within a year or slightly more than a year ; one-fifth paid back the entire amount. Very few paid less than a quarter of the loan amount, and there was no one who did not repay.

It was evident that if women were given some earning opportunities, some time to repay loans, the advantage of no interest or low interest, they would probably repay.

- The period for which the loan is provided should be flexible : not too short and not too long.
- This being a pilot project, its loans were interest-free. Loans for the poor should be at low rates of interest, at least till they are able to feed themselves.
- Loans should be given both for production and for lean-season consumption, at least for a short period.
- Loans for activities should be continued until every member is able to build up her own capital, both for production activities and for emergencies. Otherwise, they will be forced into dependence on money-lenders.

6.5 Savings

Members with relatively good earnings from LMD net-making managed to save about Tk 100 per head (between Tk 50 and Tk 248) after repaying loans. (Investment on most of the activities was small, from Tk 48 to Tk 125. The loan for fish marketing was Tk 210, for fish drying Tk 300). This saving should help members meet possible emergencies and fund future activities as well.

-Women should be taught to manage their budget (savings, incomes and expenses) better. Suitable training has not been identified.

- If by chance Grameen Bank fails to start work in the project area, group funds should be set up; these and individual savings should help meet emergencies, with assistance from Nijera Kori.

6.6 Health improvements

The health of the community in general, especially that of the children, was very poor. The women were taught to cook better and more nutritious food with locally available cereals and vegetables such as *chat* (which resembles colocasia leaves), not part of their daily diet earlier. They were taught the importance of hygiene, especially the need to build toilets, and to keep surroundings clean. Results showed that the women liked the food items introduced, the children too. Yet it did not become a regular feature of their diet, for change in food habits cannot be expected in just eight months.

In building toilets, progress was again limited. Reasons : the government manufacturing unit did not supply the toilet equipment in time. Whatever was supplied was put to use by the villagers. The project organization which advanced money for the toilet slabs was repaid in full.

- Follow-up is necessary if steps taken to improve the health of the target group are to succeed. Continued training is needed to help project members apply in practice what they have learnt.
- Nonformal education concerning health problems could be taken up. Health should be linked to other aspects of people's lives and vice versa, so that development is seen as an integrated all round effort.

6.7 Working with fishermen

As a step towards working with the whole family, a beginning was made with fishermen. Their requests for loans to acquire fishing assets could not be met. However, they were involved

with the fish pond culture trials-and through them their families as well. Fish ponds can help initiate activities with fishermen, just as net-making is a suitable 'first activity' with the women. More information is needed to get to know the men and their problems better.

6.8 Organizational structure

- * The project's link workers helped women organize themselves, and developed the right skills and attitudes needed to execute several training programmes. The link workers are a permanent asset to the community-they can further develop its human resources.
- * Choosing link workers from within the community helped the 'participatory approach': they knew and understood village problems far better than an outsider. They were young, energetic and receptive to new ideas: this ensured positive and dynamic change. They had more time than the older women who were busy with their daily occupation. They cost the project less than older women would have. The disadvantage of choosing link workers from within the community was that their educational status was low. Hence it was necessary to use a variety of communication techniques to train the link workers. But with proper training, this problem was overcome. The link workers were not accepted initially because of their youth-only later, when they proved themselves.

These shortcomings can be overcome if field work is supported by professional staff. The professional staff can operate in wider areas (with the assistance of local link workers). At present there aren't enough graduates in Bangladesh, particularly graduates trained in participatory development work. Though the recommended project staff structure of 360 : 12 : 1 (members, link workers, field worker) is based on experiences with the pilot project, this ratio is not realistic in the initial project stages. Link workers should start with small groups and build them up gradually in 3-5 years. It is important that things move at this pace in the beginning so that a sound base is built for the future. Thus on-the-job training with support from experienced staff is crucial for effective learning at the initial stages.

- * The voluntary leaders who assisted the link workers also received training. Many took up the role of link workers themselves. This again was an effort towards initiating skills among local people and helped strengthen the participatory approach.
- * The system whereby the field workers, link workers and voluntary leaders worked together proved effective.
- * Government support to the project was extended at the village level; such support was missing at the policy-making level. It was hoped that the marine fisheries department of the Directorate of Fisheries in Bangladesh would absorb the project. There was no response to proposals for such absorption. The government seemed to be interested only in technology development. The need for human resource development to accept and utilize the technological inputs was not recognized.
- * It was difficult to find qualified women workers and NGOs in the villages because of social norms and attitudes towards working women in rural areas. The women workers would have to travel by bus and by boat and work in difficult conditions. But the villagers expected middle-class women to stay at home and travel only with a male escort.
- * The two field workers hired by the project took a long time to adjust to their working conditions and overcome inhibitions.
- * The target group was unable to contribute any inputs to the project other than labour and time. Even the time was limited and irregular because of the members' main occupation (fish marketing).

The language barrier between the project coordinator and the field workers, link workers and members was another problem, though communication was possible through non-verbal means. The language problem delayed project activities. This was because the

field workers had had no previous experience or education in development work. Their understanding of development concepts was based only on commonsense and from the little literature they could find, most of it about welfare programmes. Project work was based entirely on learning by doing, working together and discussing the logic of events/ happenings. This was time-consuming.

6.9 Time frame

At the end of the pilot project, it was found that the project duration was sufficient to develop an organizational structure and a methodology for working with fisherfolk. But more time would be needed to make them initiate and manage community organization on their own.

Further institutional support for the project was seen as essential. As government support did not seem to be forthcoming in time, BOBP tried to identify a voluntary organization with similar basic beliefs and with a reputation for human resource development. Nijera Kori (which literally means 'We will do it ourselves') was identified and chosen.

The setting up of a Grameen Bank branch in the village for transfer of the project's credit activities was considered early on. The bank would improve the access of the project's target groups to loans at reasonable interest. Another plus point was that the bank made the 'group approach' crucial while extending credit.

Nijera Kori is a non-governmental organization whose main object is to help the rural poor—particularly landless labourers, fisherfolk and artisans—to form their own organization to safeguard their interests and rights.

The main focus of NK's work is on training programmes. The activities of a mobile cultural team form an integral part of these training programmes. This team also stages plays, puppet shows and musical shows for the local communities. NK raises funds for its own full-time workers and administration from funding agencies.

The Grameen Bank opened a branch about 2.5 km from Jaldia in May 1985. This strengthened NK's work in the village.

Some thoughts:

1. The time frame of a project should be kept flexible if it is to succeed in helping people organize themselves, and if the project is clear about its direction and *modus operandi*.
2. When a project trying out different approaches to human resource development winds up after merely testing an approach, the target groups may resent the fact that they were 'guinea pigs'. Their hostility will hinder further development.

7. REPLICABILITY

This chapter discusses the replicability of the fisherwomen's project. The discussion refers not only to Bangladesh, but to the Bay of Bengal region as a whole.

The pilot project has tested one approach to development. The results demonstrate the value of the participatory approach.

The approach is in line with the greater emphasis worldwide on development of small-scale fishing communities within the context of integrated rural development (illustrated by the report of the FAO World Fisheries Conference, 1984). People's participation is an important element in strategies for integrated rural development.

In spite of the positive results demonstrated by the approach, a number of factors limit large-scale application within a governmental set up.

1. The government administration is usually organized in sectors, with defined targets for separate sectors. This system does not 'jibe' with a multi-sectoral mode of operation. There is no natural governmental organization to employ link workers or field workers or supervisors for them.
2. The project operation calls for coordination of efforts among a number of authorities, institutions and organizations. Such a coordinating unit does not normally exist in government.
3. Supervisors, field workers and link workers need specialized training. But institutions that can cater to continuous training on a large scale are lacking. Governments might be hesitant to establish new training institutes or even include a curriculum for such training in existing institutes.
4. The allocation of funds for the operations. Since the project organization does not directly fit into the government structure, allocation of funds poses problems. Allocations are made to sectors for specified activities with targets for health, education, fisheries etc. A flexible utilization of funds in accordance with priorities expressed at the community level is usually not possible.
5. Cost effectiveness. The report states that the annual cost is in the order of US \$0.50 per group member, when the structure is established, while the initial cost for the training, organizational build up etc., is higher. Compared to annual development aid to the fisheries sector in Asia, this is a low figure. However, it might be difficult for governments to give high enough priority to these activities in competition with more established interests, such as fish production or foreign exchange earnings.

The factors discussed above indicate the need for structural changes in the administration to cope with this approach to development. Fisheries departments could take a leading role in this and initially take on the responsibility for a participatory approach that caters to the needs of fishing communities.

A non-governmental organization (NGO) has now taken over the Bangladesh fisherwomen's project. A similar procedure was adopted earlier in a DANIDA-supported fishing community development project in Bangladesh. The target group in both projects is well defined; and the approach to development is similar to that adopted by several NGOs, whose personnel are devoted to the communities they work with and motivated to help them.

This approach to development suits the policies and strategies of several donor agencies, as it emphasizes basic needs, elimination of poverty, and people's participation. It can be concluded that the approach tested in the current project, until further proven and accepted, is most suitable for a NGO-run project funded by a donor agency. Cooperation between donors and NGOs might be the most realistic way in which such projects can be expanded on a large scale to reach the poorer segments of society, resulting in self-confidence on their part, improved income opportunities, and better health and nutrition.

Appendix 1

CALENDAR OF PROJECT ACTIVITIES: DECEMBER 1980-AUGUST 1985

December 1980 : Ministry of Fisheries and Livestock, Dhaka requests BOBP to identify 'family and women-oriented' project activities.

March-April 1987: Preparatory work for a survey to identify activities. Selection of study area and appointment of research consultant.

April 1987: Two villages in the Chittagong area, Jaldia and Mohara, are selected for a detailed socio-economic survey.

Training of investigators and preparing and field-testing of questionnaire.

Three village women are selected for a one-week training session on net-making. They then organize the first group of women to make nets. The Kalidaha fishing project, Jaldia-Shami-pur, provides training, assists in controlling the quality of the nets and purchases the products.

May 1987: The second group is formed.

June-July 1987: Socio-economic survey to provide background information on the target group.

August 1987: The third group starts net-making.

September 1987: Year-round observations of eight selected families from different socio-economic strata commence.

October 1981: A socio-economic consultant from FAO Rome is assigned for 2½ months to analyse the survey data and undertake informal group discussions to identify problems and the attitudes of Jaldia and Mohara fisherfolk to these problems.

November 1981: The fourth group of women starts net-making. Interviews/group discussions by the consultant and investigators.

December 1981: Proposal resulting from a regional BOBP workshop, in Dhaka to set up a Fisheries Extension Unit within the Marine Fisheries Department, discussed with Director MFD, Chittagong.

May 1982: The NGO (non-government organization) Ghashful is contracted for six months to assist/implement the Fisherwomen Activities Project.

Objectives of Ghashful/BOBP cooperation :

- to better organize the existing women groups
- to increase the number of members
- to increase the number of activities.

June 1982: Two female field supervisors paid for by BOBP are employed by Ghashful. The field supervisors and counterparts from the Department of Fisheries (DOF), Government of Bangladesh (GOB), are trained by the Bangladesh Rural Advancement Committee (BRAC).

The training emphasizes :

- Analysis of village situation
- Identification of problems
- Leadership qualities and role of leaders
- Community organization, viz. how to mobilize women group/activities.

August 1982: The fifth group of women starts making nets. Total project members = 75.

October 1982: Ghashful contract extended by three months till the end of January '83. Savings activity starts. 10% of the LMD net-making charges are put into a group savings account. Individual savings are too limited for individual accounts. The purpose of the group saving is to finance future income-earning activities.

November 1982: All group members are provided with a coconut seedling and a guava seedling each for cultivation.

Supply of nylon twine through local traders is investigated. As 27 ply nylon twine has to be imported, traders have to obtain a special licence. For the time being BOBP remains responsible for provision of nylon twine.

Study tour of two field supervisors and GOB counterparts to GOB and BRAC development projects (within Bangladesh).

December 1982: Discussion with field supervisors and women groups to start new income earning activities: fish farming in rented ponds, raising of ducks, poultry, goats, milk cows, betel nut germination.

Meeting at the Marine Fisheries Department (MFD) to:

- follow up proposal for an Extension Unit
- request licences for local traders to import nylon twine.

January 1983: Ghashful contract extended for another three months.

March 1983: Follow up MFD discussion (for Extension Unit and import licences for traders). Proposal to fill two vacant posts in MFD Chittagong with female extension officers.

Returns from LMD nets increase from Tk. 135 to 165 and women decide to increase their savings from 10% to 15%.

On-going evaluation shows :

Since the start of the first women group in April '81.

- Response of women to the project is improving, the initial scepticism is being overcome
- Women members freely discuss suggestions/ideas for new activities
- Besides the paid link workers (selected group members), voluntary group leaders were encouraged to come forward to assist the link workers (LW) in some group activities.

GOB agreed that BOBP will assist in training and guidance of similar fisherwomen extension projects in other villages in the Chittagong region.

May 1983: A one-week training course on fish culture and management organized by BRAC for field supervisors and GOB counterparts.

Training by CONCERN (non-profit voluntary organization with headquarters in Ireland) on leadership, preventive health care and sanitation.

5-day village-level training for field supervisors, GOB counterparts and three selected members of each group.

Under the guidance of field supervisors the group members repeat the lessons with their respective groups.

Goat/poultry/duck activities start with a limited number of women who are provided loans for these activities.

The five existing groups of 12 to 15 members are divided, resulting in each link worker leading two groups of 8-12 members (total membership increases).

Licences for local traders to import nylon twine are again discussed with officials.

June 1983: Cooperation with Ghashful is discontinued for organisational and financial reasons. Two female field supervisors are directly guided and paid by BOBP. A one-week training session organized by BRAC on 'Project planning and management in the perspective of rural development' for the two field supervisors and GOB counterparts.

July 1983: Total number of project members: 83

Total savings within 10 months: Tk 6,200

Marketing prospectives for LMD nets investigated.

One fish pond is stocked with fry.

August 1983: Land for community centre-cum-field office is donated to FWA project by village leader.

Amount of fry in fish pond is increased.

September 1983: 11th group of women is formed.

Loans for fish marketing start with \pm 12 members. At the pilot stage no interest is charged

October 1983: Several fishing villages are investigated for possible expansion of FWA activities. On-going evaluation shows :

- Total project membership : 112
- Total savings: Tk 8,900
- Health care training by group leaders proceeds well
- One group seems to show less interest than others in activities and is slow in net-making and loan repayment. This group is within a somewhat better off community, located more in the interior.
- The non-subsidy approach to extension activities is being appreciated more and more by fisherwomen.

A community centre-cum-field office is planned.

Cooperation is sought with WFP (World Food Programme-UN).

November 1983: 61 LMD nets are sold to fishermen at market price. Extension work with male relatives of women members is explored. Because of the limited market of LMD nets, hand-making of small mesh drift (SMD) nets is again encouraged.

December 1983: Fish marketing loan extended to 38 members.

Total saving amounts to Tk 10,000.

Report of observations on eight fishing families of different socio-economic strata finalized.

January 1984: 187 LMD nets sold.

Total savings amount to Tk 11,800.

Trials for loans with fish drying.

Possibility of setting up a day-care centre in the planned community centre is explored. Project expansion into new villages-other than the existing ones at Juldia-Shamipur, North Juldin and Diyang-will not be studied further, because of limitations of time and funds.

A pilot project proposal 'Socio-economic uplift of artisanal fishing families of Jaldia-Shamipur' is prepared by MFD, Chittagong, based on ongoing discussion between the BOBP and the DOF. The objective is again to set up a fisheries extension unit within the DOF. Trials to make by hand the tyre cord SMD net according to the BOBP gear technologist's design.

February 1984: Second meeting to discuss group formation and extension activities. 32 fishermen and 40 fisherwomen took part in the discussion. In general, the project activities are considered useful and men would like to organize themselves similarly. To start with, the men will assist in the earthwork necessary around the community centre.

April 1984: The trial with the tyre cord SMD net is useful, but the women are less interested in SMD nets than in LMD nets as work with the former is more strenuous and less rewarding. The SMD nets however have more ready buyers.

Preparation for a nutrition survey and for training on nutrition and weaning food are launched. Preparations for training in budgeting to convert the group accounts to individual saving accounts.

June 1984: Budgeting training postponed because of unsatisfactory training design by VERC (Village Education Resource Centre).

Nutrition survey of Jaldia-Shamipur by the Institute of Nutrition and Food Science, Dhaka University (INFS).

INFS staff train field supervisors, link workers and voluntary leaders on nutrition and weaning food.

Fifty village women are trained by the link workers and voluntary leaders, with the assistance of the INFS trainers.

Children are weighed twice a month by the link workers and field supervisors in order to monitor the nutritional status of children in Jaldia-Shamipur.

July 1984: A study tour is undertaken by two field supervisors and three GOB counterparts to Orissa, Andhra Pradesh and Tamil Nadu. Visits to ongoing fisherwomen extension projects and to the projects of voluntary agencies.

A third pond is leased and prepared for stocking.

A proposal to include the project in the regular plans of the Fisheries Directorate is forwarded to the planning cell of the Directorate. It is said to await inclusion in the Third FiveYear Plan.

August 1984: A community centre-cum-field office is completed.

Interviews with link workers and group members show that knowledge has been gained in nutrition and health care, but traditional habits are still strongly entrenched.

Proposal to post two field supervisors within the MFD, Chittagong, and to include the project in the regular planning of the Directorate is followed up. No definite answers yet.

September 1984: Link workers demonstrate the preparation of supplementary and weaning food with their groups.

It has been decided in consultation with the fisheries authorities to phase out BOBP input to ongoing activities by the end of June 1985. A project status report is prepared, to enable study of its future.

January 1985: Discussion at Grameen Bank to set up a branch in Shamipur.

Inauguration of the community centre.

Forming of a committee (link workers and village leaders) to maintain the centre and ensure that all groups of the community make use of it. Discussions with SIDA, NORAD, DANIDA, Dutch Aid, USAID and voluntary agencies BRAC and Nijera Kori to continue the Fisherwomen's project: execution by a NGO, funding through bilateral aid.

February 1985: Women's group in Diyang is closed down as ineffective.

March 1985: Total number of project members: 198 women.

Total savings: Tk 16,000.

FAO mission to draft the Fisheries Master Plan for the Third Five Year Plan visits the project area and incorporates the project as a model for planning fisheries extension work.

Nijera Kori agrees to take up and continue the project after a visit and discussions with the people concerned.

April-June 1985: Transfer of the fisherwomen's project to Nijera Kori.

May 1985: Training of two field supervisors by Nijera Kori. WFP sanctions food relief for Juldia-Shamipur which will be used as payment against community work(upgrading roads/sanitation). Official handing over of the project to Nijera Kori.

August 1985: Financial assistance from BOBP ends. Discussion with NORAD for funding Nijera Kori for project work.

Appendix 2

LOAN REPAYMENTS BY ACTIVITY BY PROJECT MEMBERS

Fish Marketing						
Percentage of repayment of loan	Duration (months) of loan repayment and date started				Total loanees	
	10 (Nov. '83)	9 (Dec. '83)	8 (Jan. '84)	5 (May '84)	No.	%
100%	4	2	—	—	6	16
75-99%	3	1	1	—	5	13.5
50-74%	3	8	2	—	13	35.1
25-49%	1	6	4	1	12	32.4
Below 25%	1	—	—	—	1	2.7
Total loanees	12	17	7	1	37	

Fish Drying				
Percentage of repayment of loan	Duration (months) of loan repayment and date started		Total loanees	
	7 Feb. 1984		No.	%
100%	2		2	28.6
75-99%	1		1	14.3
50-74%	1		1	14.3
25-49%	1		1	14.3
Below 25%	2		2	28.6
Total loanees	7		7	

Goat raising

Percentage of repayment of loan	Duration (months) of loan repayment and date started		Total loanees	
	16 (May 83)	16 (April '84)	No.	%
100%	7	—	7	46.7
75-99%	1	—	1	6.7
50-74%	3	2	5	33.3
25-49%	1	1	2	13.3
Below 25%	—	—	—	
Total loanees	12	3	15	

Duck raising

Percentage of repayment of loan	Duration (months) of loan repayment and date started					Total loanees	
	12 Sep. '83	9 Jan. '84	7 Mar. '84	6 Apr. '84	4 June '84	No.	%
100%	—	—	1	1	—	2	4.4
75-99%	2	—	2	4	2	10	22.2
57-74%	1	3	2	7	—	13	28.9
25-49%	3	2	1	8	2	16	36.6
Below 25%	—	1	1	2	—	4	8.9
Total loanees	6	6	7	22	4	45	

Chicken raising

Percentage of repayment of loan	Duration (months) of loan repayment and date started				Total loanees	
	15 June '83	12 Sep. '83	7 Mar. '84	6 Apr. '84	No.	%
100%	10	—	—	1	11	29
75-99%	2	1	1	3	7	18.4
50-74%	1	4	—	3	8	21.1
25-49%	3	—	—	9	12	31.6
Below 25%	—	—	—	—	—	
Total loanees	16	5	1	16	38	100

Appendix 3

TARGET GROUP'S VIEWS ON NUTRITION TRAINING

Four link workers and six women from the project who had received training on health and nutrition were interviewed. Their answers are summarized and discussed below.

What did the women expect from the training?

Seven said they wanted to learn more about food and nutrition. One felt the knowledge she gained might help her children and her family. One said that before the training, food for her meant rice: now she knew about other foods.

Would the training help the women and their families ?

All 10 respondents said the training was very useful. Some views: 'Malnutrition among the children can now be brought down'. . . . 'I now know the type of food the body needs, the type of food children need, what is nutritive and what is not'. . . . 'I now know a lot more about food and health than I did before'. 'I have discussed the new foods with neighbours, and I believe they will use it too'.

Was the duration of training long enough ?

Three women said it should have been extended by two days, but did not say why. All the link workers and one of the members said the duration was sufficient. One woman said it was so because the trainers were efficient.

Did the members like the training-the theory and the practice ?

Six preferred practical classes to theory. Reasons? The subject could be understood better through practicals, the practicals were important for the children. A few others liked both theory and practice; two of them preferred practice but expressed the view that the lectures were more important.

The members were asked questions to test their knowledge. These concerned foods that stimulate strength and energy, foods suitable for convalescence, foods that strengthen resistance to disease, and weaning food preparation. All the respondents gave satisfactory answers.

Could the trainees afford to buy the foods that go to make a balanced meal?

Four respondents replied in the negative, five in the affirmative. Some answers: 'I used to think that good food is expensive, now I know it can be cheap and affordable'. . . . 'I can afford to buy because I know what to buy'. . . . 'I intend cultivating the land around my house so that I can grow nutritious food'.

How do the trainees apply the lessons of their training to daily life?

Four said they tried to do so every day, two said they tried to convince neighbours, three others said that making practical use of the training would take time. One of these three said that since hers was a large family, she needed help. Another said she did not prepare the recommended foods when she had no money; a third said she cooked vegetables only when she was short of money. One person summed up her disposition thus. 'I was trying to keep the children neat and clean, and trying to give them nutritious food'.

Appendix 4

RECIPES AND COSTS FOR SUPPLEMENTARY AND WEANING FOOD

1. Khichari

<i>Ingredients</i>			<i>Maximum price (Tk)</i>
(i)	Rice	.. ¾ chatak	0.50
(ii)	Dal	.. 1 kacha	0.20
(iii)	Vegetable	.. ½ chatak	0.20 if bought but it is freely available in the village
(iv)	Small fish	.. 3-4 nos	2.00
(v)	Ghee/oil	.. 2 teaspoons	0.20
			<u>3.00</u>

Process : Soak rice and dal in water, add a small fish, boil for a few minutes and grind. Add sliced vegetable, mix with ghee or oil in a pan, add some salt and water, then cook on a stove. This dish will be ready in 10-15 minutes.

2. Halva

<i>Ingredients</i>			<i>Maximum price (Tk)</i>
(i)	Potato	.. 1 No (big size)	1.00
(ii)	Dal	.. 1 chatak	0.62
(iii)	Sugar	.. 5-6 teaspoonsful	0.05
(iv)	Oil/ghee	.. 2 teaspoonsful	0.10
			<u>1.77</u>

Process : Boil potato and dal, then mesh with sugar. Mix with ghee or oil in a pan, cook. Add spice for flavour. The dish will be ready in 15-20 minutes.

Units of measure:

5	Kacha	=	1 Chatak
16	Chatak	=	1 Seer
1.02	Seer	=	1 Kg

These two types of food suffice for one person on a single day. They cost Tk 4.77. (Calculations based on the market prices as of August 1984).

Market prices of foods in August 1984

- Rice Tk 8.50 to Tk10/seer
- Dal : (1) small orange dal, Tk 13-14/seer
(2) big yellow dal, Tk 13-14/seer
(3) small yellow dal, Tk 8-9/seer
- Leafy vegetables of various kinds, Tk 5-6/seer or available free of cost
- Small (trash) fish, Tk 10-30/seer : varies by season
- Oil, Tk 32-45/seer for various types of oil. Pure ghee : Tk 100/seer.

Publications of the Bay of Bengal Programme (BOBP)

The BOBP brings out six types Of publications:

Reports (BOBP/REP/. .) describe and analyze completed activities such as seminars, annual meetings of BDBP's Advisory Committee, and projects in member-countries for which BOBP inputs have ended.

working Papers (BDBP/WP/. .) are progress reports that discuss the findings of ongoing BOBP work.

Manuals and Guides (BDBP/MAG/. .) are instructional documents for specific audiences.

Miscellaneous Papers (BDBP/MIS/. .) concern work *not* originated by BOBP *staff* or consultants-but which *is* relevant to the Programme's objectives.

Information Documents (BOBP/INF/. .) are bibliographies and descriptive documents on the fisheries of member-countries in the region.

Newsletters (Bay of Bengal News), issued quarterly, contain illustrated articles and features in non-technical style on BOBP work and related subjects.

A list of publications follows.

Reports (BOBP/REP/. .)

1. Report of the First Meeting of the Advisory Committee. Colombo. Sri Lanka, 28-29 October 1976. (Published as Appendix 1 of IOFC/DEV/78/44.1, FAO, Rome, 1978).
2. Report of the Second Meeting of the Advisory Committee. Madras, India, 29-30 June 1977. (Published as Appendix 2 of IOFC/DEV/78/44.1, FAO, Rome, 1978).
3. Report of the Third Meeting of the Advisory Committee. Chittagong, Bangladesh, 1-10 November 1978. Colombo, Sri Lanka, 1978. (Reissued Madras, India. September 1980)
4. Role of Women in Small-Scale Fisheries of the Bay of Bengal. Madras, India, October 1980.
5. Report of the Workshop on Social Feasibility in Small-Scale Fisheries Development. Madras, India, 3-8 September 1979. Madras, India, April 1980.
6. Report of the Workshop on Extension Service Requirements in Small-Scale Fisheries. Colombo, Sri Lanka, 8-12 October 1979. Madras, India, June 1980.
7. Report of the Fourth Meeting of the Advisory Committee, Phuket, Thailand, 27-30 November 1979. Madras, India, February 1980.
8. Pre-Feasibility Study of a Floating Fish Receiving and Distribution Unit for Dubla Char, Bangladesh. G. Eddie, M. T. Nathan. Madras, India, April 1980.
9. Report of the Training Course for Fish Marketing Personnel of Tamil Nadu. Madras, India, 3-14 December 1979. Madras, India, September 1980.
- 10.1 Report of the Consultation on Stock Assessment for Small-Scale Fisheries in the Bay of Bengal. Chittagong, Bangladesh, 16-21 June 1980. Volume 1 : Proceedings. Madras, India, September 1980.
- 10.2 Report of the Consultation on Stock Assessment for Small-Scale Fisheries in the Bay of Bengal. Chittagong, Bangladesh, 16-21 June 1980. Volume 2: Papers, Madras, India, October 1980.
11. Report of the Fifth Meeting of the Advisory Committee, Penang, Malaysia, 4-7 November 1980. Madras, India, January 1981.
12. Report of the Training Course for Fish Marketing Personnel of Andhra Pradesh. Hyderabad, India, 11-26 November 1980. Madras, India, September 1981.
13. Report of the Sixth Meeting of the Advisory Committee. Colombo, Sri Lanka, 1-5 December 1981. Madras, India, February 1982.
14. Report of the First Phase of the 'Aquaculture Demonstration for Small-Scale Fisheries Development Project' in Phang Nga Province, Thailand. Madras, India, March 1982.
15. Report of the Consultation-cum-Workshop on Development of Activities for improvement of Coastal Fishing Families. Dacca, Bangladesh, October 27-November 6, 1981. Madras, India, May 1982.
16. Report of the Seventh Meeting of the Advisory Committee, New Delhi, India, January 17-21, 1983. Madras, India, March 1983.
17. Report of Investigations to improve the Kattumaram of India's East Coast. Madras, India, July 1984.
18. Motorization of Country Craft, Bangladesh. Madras, India, July 1984.
19. Report of the Eighth Meeting of the Advisory Committee. Dhaka, Bangladesh, January 16-19, 1984. Madras, India, May 1984.
20. Coastal Aquaculture Project for Shrimp and Finfish in Ban Merbok, Kedah, Malaysia. Madras, India, December 1984.
21. Income-Earning Activities for Women from Fishing Communities in Sri Lanka. Edeltraud Drewes. Madras, India, September 1985.
22. Report of the Ninth Meeting of the Advisory Committee. Bangkok, Thailand, February 25-26, 1985. Madras, India, May 1985.
23. Summary Report of BDBP Fishing Trials and Demersal Resource Studies in Sri Lanka. Madras, India, March 1986.
24. Fisherwomen's Activities in Bangladesh : A Participatory Approach to Development, Patchanee Natpracha. Madras, India, May 1986.

25. Attempts to Stimulate Development Activities in Fishing Communities of Adirampattinam, India. Patchanee Natpracha and V. L. C. Pietersz. Madras, India, May 1986.
26. Report of the Tenth Meeting of the Advisory Committee, Male, Maldives, 17-18 February 1986. Madras, India, April 1986.
27. Small-Scale Aquaculture Development Project in South Thailand : Results and Impact. Madras, India, May 1986.
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