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Stream: Global Themes

Co-Management: A Framework for the Participation of Communities, Indigenous Cultural Minorities, and Women in Asian Development Bank-Assisted Forestry and Fisheries Projects in Asia

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Introduction

1. Stakeholder participation has emerged as a key to equitable, and sustainable development in developing countries. The Asian Development Bank (ADB) is increasingly adopting participatory approaches in the design of its projects in natural resources management. This Paper will examine the new objectives and strategies adopted in ADB assisted forestry and fisheries operations in the Asia Pacific region, with case studies from Indonesia, Vietnam, Philippines, and Bangladesh.

Forestry Policy

2. The ADB's forestry operations started in 1977 and were guided by a Working Paper on the "Role of the Bank in Forestry and Forest Industries Development". The Working Paper emphasized production-related aspects of forestry, agriculture-supportive forestry, watersheds rehabilitation, and the establishment of forest industries. The ADB has come a long way since then. The shift since the late '80s has been towards conservation forestry. The ADB was a signatory to Agenda 21 and other resolutions resulting from UNCED. In 1995 the ADB adopted a new policy Paper on Forestry which reflects the ADB's strategic development objectives, particularly of sustainable management of the environment and natural resources, poverty reduction, and improvement in the situation of women. The Paper drew extensively upon stakeholder consultations including with NGOs. It emphasized the active, and informed participation of forest based communities in projects, provision of immediate

direct benefits to them, involvement of indigenous cultural communities in sustainable forest management, and provision of long term security of tenure to beneficiaries.

Fisheries Policy

3. In fisheries, the ADB has moved substantially from where it began its fisheries related assistance in 1966, in the marine fisheries subsector, with emphasis on improved technology and support for rapid expansion of aquaculture. In recent years the poverty-environment nexus has received increasing attention from national and international agencies. In assessing its own experience and approach in the fisheries sector, ADB's areas of emphasis have shifted to a more holistic approach to address ecological-economic linkages, comprehensive assessments of socioeconomic status of beneficiaries, and a more participatory approaching project design and implementation. The (draft) Working Paper on the Bank's policy on Fisheries (September 1996) emphasizes sustainable fisheries resource management with stakeholder participation. Participation of communities in successful fisheries management can be observed in Japan, Republic of Korea, New Zealand, some Pacific Islands, Thailand, some parts of India. These regimes show that communities can sustainably manage and conserve fish stocks.

Other Bank Policies Which Provide the Framework for Stakeholder Participation

4. Other recently approved policies and frameworks have facilitated and strengthened the participatory approach within the Bank. The policies on Involuntary Resettlement, Indigenous Peoples, NGOs, and Gender and Development, all emphasize the critical need to facilitate the participation of all stakeholders, particularly the socially disadvantaged groups, vulnerable sections, such as the poor, indigenous communities, women, in the planning and design of projects which are likely to impact on them. Stakeholder participation is regarded as a key to project success, and appropriateness of project objectives and design. Mechanisms for sustained participation of the “target group”, “beneficiaries”, “participating communities” are being increasingly built into project preparation and implementation as well as monitoring and evaluation. The recently approved Framework for Participation presents an overview of how participatory development processes fit into Bank operations, and of how these processes will be systematically incorporated into its business practices.

Case Studies of Selected ADB Forestry and Fisheries Projects

5. Case studies will be made of two forestry projects from Vietnam and Bangladesh, and two fisheries projects from Philippines and Indonesia. The Bangladesh forestry case study will analyze the issues of the rights, priorities of indigenous cultural minorities with regard to the management of forest resources, and ways in which the preparation, design, and components of the Project address these. It will also address the issues of participation of landless communities, poor women, in forestry programs, and frameworks for their sustained participation, and benefit sharing arrangements. The Vietnam case will look at the issues of ethnic minority groups in Vietnam, and project strategies to address their specific socioeconomic interests. Participation of cultural minorities in land use planning and land allocation, community based planning and implementation, participatory monitoring and evaluation, are some of the strategies used in the Project to develop joint management of the Project.

6. The fisheries examples will illustrate the participation of poor coastal fisher folk in designing systems of community based resource management (CRM). Gender analysis has been used to develop frameworks for women's full participation in the projects' design and implementation.

7. Conclusions will be drawn on the basis of the case studies, with regard to issues and priorities for local communities, user groups, indigenous cultural minorities, poor women, in the forestry and fisheries sectors, and strategies adopted by the projects, to facilitate co management, and initiate the process of sharing control over resource management between projects implementing agencies, and community stakeholders.

FORESTRY PROJECTS

A. Bangladesh Forestry Sector Project

I. Introduction

8. In Bangladesh the continued pressure on forest land for conversion into agricultural lands, for timber and fuelwood, and Non Timber Forest Produce (NTFP) has led to drastic reduction of forest areas in the country. An initial social analysis was carried out as part of the preparation of Feasibility Study for the project. This analysis was further strengthened during the Fact finding mission. The social analysis provides a basis for the planning for awareness programs for local communities particularly vulnerable groups and women, and their participation with NGOs and the Forest Department in realizing the goals of the Project, which include conservation of forests in selected protected areas, increased overall wood production, and institute sustainable forest management through local community participation.

II. Socio Economic Characteristics – Demography and Population Pressure

9. The total population of the country stood at 120 million 1991. The urban population was 20.1 percent while the rural population was 79.9 percent. The intercensal growth rate of population was estimated at 2.2 percent per annum. The total labor force was estimated at 51.2 million (31.1 million male and 20.1 million female). The distribution of the poor as percentage of total population stood at 48 percent in rural area, and 44.0 percent in urban areas in 1988-89¹.

10. Fragmentation of land and reduction of plot size is a continuing trend in rural Bangladesh. The number of the landless is increasing (8.7 percent completely landless, 19.6 percent with homestead but without cultivated land, and 70 percent of the farms in the class 0.02 to 1.00 ha.²). Forest areas are being encroached upon by the landless and also through a process of land grabbing initiated by powerful groups in the rural power structures. These settlers are regarded as "encroachers" by the Forest Department (FD), and are people who are landless and characterized by extreme poverty. They occupy the margins between the legally owned private lands and the FD land. They are usually employed as laborers, by local landlords and absentee rich landlords living in cities to cultivate private and encroached lands.

III. Women in Bangladesh

11. Bangladesh has an adverse sex ratio with 106 males for 100 females³. While the gender gap in life expectancy and infant mortality rates is reducing, women continue to be among the most disadvantaged sections, burdened by poverty and a social system that restricts their role in

¹ Bangladesh Household Expenditures Survey 1985-86-BBS.

² Bangladesh 1983-84 Agriculture census.

³ Bangladesh Population Census, 1991.

decision making. The intense population pressure on land has resulted in high levels of migration of young males to urban areas, leading to a large number of rural women with absentee spouses. Socio-cultural disparities mean that women and girls have less access to education, health and nutrition than men. Women's literacy rates in Dhaka Division are much lower than male literacy rates (29 percent as compared to 70 percent).

12. Among the rural poor, women are primarily responsible for activities connected with subsistence, and also with income earning. The Female Labour Force (FLF) rose from 3.2m in 1985-86 to 20.1m in 90-91. This happened due to the large increase in the FLF particularly in the agricultural sector, on account of the inclusion of subsistence oriented activities including collection and processing of forest produce as economic activities. In 1989 women workers in agriculture forestry and allied activities, were approximately 1.6 million, half of the total labor force in the sector. Women also constitute a majority among persons deriving a livelihood from fuelwood collection and sales, which are increasing in Bangladesh.

13. Since 1972 programs for women have been included in all National Development Plans. These have been based on the commitment to increase women's participation in order to promote economic development as well as social welfare. The Ministry of Social Welfare and Women's Affairs is the nodal ministry, with a Directorate of Women Affairs responsible for the formulation and implementation of women oriented programs. It promotes women's activities and coordinates women's programs of other ministries.

IV. Women and Forestry

14. The Bangladesh Forestry Sector Master Plan (FSMP) states that "women and poor people who do not have a land based source of livelihood will be employed on priority basis in nurseries, plantations, forest management, harvesting and industrial work". Women's participation in public programs has traditionally remained limited by social norms and religious practices. They are primarily responsible for homestead plantations which produce approximately 90 percent of fuelwood and bamboo supplies in the country. Women are responsible for planting, maintenance and protection of homestead trees. In the last decade women's participation in forestry activities outside the homestead has been demonstrated to be of economic advantage to the rural poor households. NGOs, and grassroots community-based organizations have supported poor rural women in generating resources and incomes, and in improving the standard of living for their families. Women are participants in nursery programs promoted by NGOs such as Bangladesh Rural Advancement Committee (BRAC) and Proshikhon Shikha Kaj MANABIK Unnayan Kendra (PROSHIKA-MUK).

15. Women are important actors in the forestry sector throughout the developing world. Women and children's roles as collectors of fuel and fodder and other NTFP for consumption and sale to urban markets, is widely known. This makes them major stakeholders in the planning and the management of the sector. The popular perception of women is that of depletors of the forest due to their fuel collection activity. This is far removed from the reality. Women's interests suffer with deforestation, their health suffers due to the increased energy needed to collect fuel from longer distances, and reduced quality of food for poor households due to the use of less efficient fuels and reduced cooking efficiency. Use of crop residues and cowdung for fuel reduce their availability for manuring purposes, causing a decline in soil fertility. Women's interests are integrally involved with sustainable forest management, so that subsistence and income needs of their households can be met.

16. Women are interested in the availability of fuel and fodder, as well as fruits from their own homestead plantations. Government owned forests provide only lops and tops, leaves and twigs for fuel. Forest plantations hardly provide women with fuel as they are timber oriented. Again when degraded forest lands are planned to be rehabilitated the supply of traditional products including NTFP from the natural forest is widely ignored. Rather than planning multipurpose species selection, long rotation timber species are often given precedence. However, women and farmers prefer multipurpose fruit trees and short rotation timber trees.

17. Key Issues for Women's participation in Forestry are:

- Species preferences and requirements of NTFP need to be taken fully into account in forestry planning;
- Poor women are important stakeholders in the protection and maintenance of common property resources because they depend more on them for subsistence;
- If women's work schedules are taken note of when planning forestry activities they can be more easily involved;
- Access to land and land rights are very crucial for women. Women need to be given opportunities to access khas lands for afforestation;
- Rural poor women have proved themselves to be more credit worthy than their male counterparts. Ensuring access for them to institutional credit for planting or land improvement, may bring high returns and increases in household incomes;
- Women's access to training facilities regarding silvicultural practices will increase their skills in the sector; and
- Women need access to high quality seed and seedlings.

V. Forestry Sector Master Plan (FSMP)

18. The Government launched the FSMP with Bank assistance in response to increasing deforestation and biotic pressures on forest resources, recognizing the need to involve local communities in sustainable forest management and development.

19. The objectives of the FSMP are related to the broader socioeconomic context of poverty and the increasing dependence by the poor on forest resources for survival, and the drastic shrinkages of forest cover on designated forest lands, as analyzed above.

20. According to the FSMP there are 5 pre-conditions which must be met for sustainable development in the forestry sector, to incorporate tree growing on private lands, management of state owned forest lands, and forest based industry. These are:

- (i) Basic human needs to be met by increases in vital commodities, such as firewood, housing, shelter materials, fodder, medicinal plants, soil conservation and biodiversity;
- (ii) Socioeconomic growth to be enhanced by equitable distribution of benefits to the poor in rural areas and prospects of a better future for those who depend on trees and forest land;
- (iii) Participation in decision making and benefit sharing by the actual tree growers, forest users, and others whose livelihoods depend on trees and forests;
- (iv) Sustained commitment of the government to systematic long term approaches to issues of tenure and overall policy; and
- (v) sustainable utilization of forest resources will be achieved by conserving the ecosystem and biodiversity; carrying capacity will not be exceeded.

VI. Social Thrust of the Project - Women and Vulnerable Groups

21. The Project will provide equal opportunities for women to participate in project activities in a culturally compatible manner with access to project outputs through:

- a) the provision of single/joint usufructuary titles to forest land and other government land being brought under Project activities;
- b) specific usufructuary rights to women of matrilineal ethnic minority communities participating in Project activities;
- c) targeting of female headed households and other disadvantaged women as Project beneficiaries;
- d) expanded opportunities for women to participate in community decision making and planning and management of Project activities through their membership of Local Community Organizations (LCOs);
- e) training of women in group formation and in improved nursery and plantation techniques.

22. Vulnerable groups include ethnic minorities, "indigenous" occupants of forest lands, people at the bottom rung of the social ladder, landless, women. Such groups may often be negatively impacted upon by the Project interventions unless care is taken to involve them fully from the start. The Project includes an Ethnic Minorities Development Plan (EMDP) which uses participatory processes to facilitate full and equitable participation of ethnic minority communities with respect for their dignity, human rights, and cultural uniqueness. The specific objectives of the EMDP are to ensure that ethnic minorities receive culturally compatible social and economic benefits from the development project and to avoid or mitigate the adverse effects of such interventions. The EMDP aims to develop beneficiaries' capacity for informed participation in Project activities, which would also contribute to the sustainability of the development process beyond the Project period.

23. The Project will provide opportunities for participation in Project activities by the poor and the landless groups through: a) specifically targeting them for allocation of usufructuary rights on demarcated plots of forest lands for participatory forestry; b) providing maximum benefits to participants in cash and in kind terms; and c) facilitating greater transparency and partnership through the involvement of NGOs in the selection of participants according to agreed criteria, in group formation and training, benefit sharing agreements, and in the provision of credit.

VII. Social Analysis of the Core Sub Project Areas

24. Following a sector project approach, a sample of Project areas were studied for the feasibility report, from which the following issues emerge clearly:

A. Dhaka Forest Division

(i) Priorities for Disadvantaged Sections in Degraded Sal Areas

25. The disadvantaged groups in such areas consist of the landless small farmers, food deficient households, disadvantaged women, and ethnic minority communities which are matrilineal. People living on forest lands belong to all these groups. There is also a feature of agrarian change ongoing, a process of land grabbing by powerful members of rural society who

manipulate their credit relations with landless households to use them as land grabbers. The latter farm such lands on a share basis. The share cropping households are chronically food deficit as after surrendering half of the crop, they do not have sufficient grain for the year (particularly during February-March). At this time they are often forced to resort to cutting coppice sal forests for fuel wood for sale. The issue for the Project here is to help landless households living near the sal forest bridge their seasonal food deficit, so that the forests could be allowed to regenerate and form fully stocked forest. There is an increasing population pressure on the sal forests, and the Project will develop strategies to deal with this if the remaining sal coppice is not to disappear.

(ii) **Ethnic Minorities**

26. The matrilineal community of Garos form the ethnic minority inhabiting the Madhupur tract in Ghazipur District. Their total population in the area is estimated variously at 20,000⁴ and 1343⁵. The former figure may represent the real situation. For the country as a whole the Garos may number approximately 100,000. The Garos historically practiced *jhum* or shifting cultivation. During the months of May and June while the *Jhum* crops ripened they depended on forest foods for subsistence. Over time population pressures, declining access to forest lands, have made *jhum* cultivation practically impossible. The Garo community is faced with problems of subsistence. For these disadvantaged communities, the priorities pertain to access to land, sustainable land use and livelihoods, security of tenure, and access to credit.

(iii) **Support Networks for Vulnerable Groups**

27. There are a significant number of NGOs working with the poor, including women and ethnic minorities, to develop credit based income generating programs linked to forest protection, afforestation, and development of cottage industries. PROSHIKA is involved in forestry activities. They work with landless and marginal farmers, to create roadside plantations and take up credit based economic activities. 500 acres of sal forest are protected by groups, formed by PROSHIKA.

VIII. Lessons from Ongoing Participatory Forestry Activities

28. The experience with such activities points to a number of concerns voiced by the participants providing lessons for the Project:

a) Short duration of lease agreements: this gives rise to insecurity of tenure, and lack of commitment from all stakeholders. People would prefer longer term leases with no need for annual renewals;

b) Choice of species: Species selection by the FD does not reflect the priorities of the poor and women. People need to have a much greater say in species choice;

c) Management Planning and Benefit Sharing: Up to now the Forest Department has decided about the layout and design of planting, and the eventual shares of the people to benefits. There is a clear dependency and a top down approach rather than a participatory or bottom up one. The participants would prefer to be involved in the planning, and in decision making regarding felling, marketing and sharing of benefits;

⁴ Jengcham, S. *Bangladesh Garo Sampradaya*, Dhaka, 1996.

⁵ Bangladesh Population Census, 1991.

d) Inadequacy of Training: Lack of technical training was identified by the people as a constraint in tree planting. They need training on nursery techniques, and improved tree plantation and management; and

e) Inadequacy of good seedlings: While local markets do not have good plants, the FD nurseries do not have the species available that people want, at the appropriate times. People are not interested in establishing nurseries as the FD nursery prices are less than those of private nurseries, and this makes it difficult for the private ones to compete.

IX. Potential for Participation

29. The Project strategy will be to facilitate the participation of communities and groups identified as stakeholders, by forming viable local community organizations (LCOs) for informed participation in forestry management, maintenance, and sustainable livelihoods planning. Beneficiary selection will be done through self targeting by the communities assisted by participating NGOs, through Participatory Rural Appraisals (PRAs); the potential participants are to be identified on a consensus basis.

30. Once the potential participants are identified, the NGO will organize them into LCOs, and provide training to them in group formation and group functioning, and issues related to informed collaboration with the FD. The FD will be responsible for providing the technical inputs for planning of forestry activities with the LCOs, taking into account their priorities for food production, and income earning. Equitable benefit sharing agreements and long term lease agreements will be worked out jointly by the LCO, NGO and FD. Regular meetings for monitoring and decision making will be organized by the NGO. Technical training will be provided by the FD to beneficiaries, and NGO staff.

B. Sylhet Forest Division

(i) Areas With Remaining Natural Forests, Vacant Areas Available For Forestry

31. Socio Economic conditions in Sylhet Forest Division are characterized by skewed land distribution, high degrees of landlessness, poverty, migration, and women managed households. There are matrilineal ethnic minorities living inside state forest areas. The tea estates have vacant areas with potential for participatory afforestation. The tea garden labor are keen to have usufructuary rights to such vacant areas for afforestation and agro forestry. The ethnic minority groups of Khasias, living inside the forest are interested in being involved growing betel vine gardens in the Forest Areas. They will be involved in sustainable forest management inside the conservation area.

(ii) Support Agencies

32. There are several NGOs working with the marginal farmers and landless households, female headed households, to form groups, provide training and credit for economic activities. Nursery raising, homestead plantations, and roadside mulberry plantation for sericulture are important activities. The Fact Finding mission visited 3 nurseries run by women's group members. While the group formation has been strong and the women have gained access to training and credit, sapling quality was found to be poor in some species. The beneficiaries need technical training from the FD. There are a number of areas where NGOs likely to participate in forestry activities and participating communities/groups need further training, in nursery and plantation techniques for better quality saplings and greater benefits from trees. There has been less NGO

activity in the areas inside forest where the ethnic minority group of Khasias live. However, there are several organizations which have started working in these areas, and can play a role in participatory forestry. Several church based agencies are active and will be able to help in planning community forestry inside State Forest Lands. BRAC, CARITAS, ASA, GRAMEEN BANK, and HEED could work as partner organizations with the FD, helping to facilitate participatory planning, forming LCOs, and providing credit, and management skills in plantation and processing activities.

(iii) **Potential For Participatory Forestry**

33. The two projects supported earlier by the Bank i.e. Community Forestry and Thana Afforestation Projects reflect a FD policy which limited "participation" to employment in plantation establishment, associated with a promised share in the returns to sale of final timber crop.

34. The Project will make a significant departure from this and will promote full stakeholders' participation in planning, decision making, and implementation. During the Fact Finding mission, these objectives and strategies have been discussed with potential participants. People realize that greater commitment and responsibility will be required on their part. They are interested and want more support and training for greater benefits. The ethnic minority community, the poor households consisting of landless, and marginal farmers, poor women, and tea estate workers, wish for greater involvement in future tree planting projects. Tea estate workers have great interest in using vacant estate land to plant fruit and fuelwood species. However all likely participating groups would prefer greater control over tree species selection, subsequent plantation management, and in the realization of subsequent benefits.

35. This new approach will require: a) increased level of commitment, investment of labor and time, and assumption of responsibility by local communities; b) Project investment in motivation and training of rural communities; c) a formal binding agreement with the FD allocating to respective communities legal rights to permanent residence in their present sites; and d) greater technical support and advice in designing more productive resource management strategies, including the use of agri-chemicals.

36. The potential target groups are homogenous culturally and socio-economically. PRAs, and community involvement in self targeting with NGOs as facilitators are likely to avoid the entry of better off elements such as the middlemen constituted "betel leaf committees". This is a major concern, and care must be taken to avoid providing them any legitimacy through the Project. ("Betel leaf committees" have come up, constituted of middlemen who purchase the leaf at lower prices, or negotiate rates with buyers.)

C. Rajshashi Forest Division

(i) **Areas With Little Forest Resources, Severe Erosion, And Increasing Poverty And Outmigration**

37. Rajshahi Forest Division is characterized by problems typical of North Bengal, with limited land resources, severe erosion, inequitable land distribution, high male outmigration, female headed households and ethnic minorities with a poor resource base. There are limited areas available for afforestation, but in the areas with potential for forestry, participation of disadvantaged sections is important both for poverty reduction, and sustainability of forests themselves.

(ii) **Experience With Participatory Forestry**

38. The feasibility study has analyzed the experience to date with agro forestry and woodlots in the Division. The issues that emerge relate to tenurial security, participatory planning of forestry activities, and equitable benefits sharing. The *char* lands provide ample possibilities for participatory forestry. The FD has been implementing woodlot and agroforestry models on *char* lands since 1992. During a visit by the Fact finding mission to Prematali village, participants in both the programs were met with. They had been cultivating these lands "illegally" and when the FD wanted to plant trees on these lands, they entered into agreements, as they felt they had no option. Their status on these lands was nebulous, and by joining the forestry programs, their position was legitimized. They now have agreements with the FD that were discussed at the meeting. It was felt by the people that the agreements were one sided with the FD deciding on whether they have fulfilled their protection responsibilities for annual renewal. The sharing at final harvest would be 60-40 between the FD and the people. People want long term leases without the need to renew them every year. There is a feeling of insecurity among them as to whether the agreements can be enforced. They feel that they are landless and cannot voice their opinions against the department. Regarding NGO participation, they did not want NGOs to work with them if they would be entitled to a share in the benefits. When it was explained that NGOs would not claim a share, they were receptive to the idea of NGO support services for group formation.

39. People are keen to participate and want to adopt the woodlot model. They are interested in participating in the tree farming fund, and keep the replanting costs in a separate account. They can use their family labor to replant, and get back their money once replanting had been completed.

40. There was a discussion regarding womens' title to the usufructuary rights. No one had any objection to womens' names being put on the agreements with the FD. Several women work as school teachers in the *char* village and are keen to participate in the program. In a discussion with the Deputy Commissioner, on the question of tenurial security to potential participants in *char* land afforestation, the Fact finding mission was told that the people can be given 99 year leases, on condition that 40-50 percent of land is planted to trees or put under agroforestry. This would save the FD from land related litigation.

41. In the Barind area where there is very little or no *khas* land, and tree plantation can be limited to gullies, tank boundaries, roadsides, targeting of potential beneficiaries has to be area and context specific, with planting of mixed species for subsistence and cash revenues and clear and equitable benefit sharing arrangements. Beneficiaries will need to participate from the planning stage itself, and NGO support will be important to organize groups and provide training and other services such as credit and income generation activities. Also, in involving the landless households, the constraints of such households in terms of food deficits, their need to borrow from moneylenders for consumption purposes, have to be kept in mind. Such households cannot provide cash support for the Project activities or forego their wages.

(iii) **Support Agencies**

42. Several NGOs are active in the area including CARITAS, BRAC, CARE, ASA, and TRINA MOOL. Most of the NGOs are working with the rural poor supporting group formation, credit, and training programs. They have fairly elaborate staff presence down to the village level.

The Thana Nirbahi Officer (TNO) coordinates the work of the NGOs. The mission found that there are some points of disjuncture between the bigger, resource rich NGOs, and the smaller ones in terms of the latter's lack of credit services to their clients. NGOs expressed their interest in participating in Project activities. The proposed Project will have to develop a strategy to work with NGOs in clearly designated areas, so as to avoid potential conflicts between different NGOs.

43. The Department of Sociology of Rajshahi University is another likely source of support to the Project's participatory approach. There are several researchers who have experience of working with various social groups, including the Shantals and Oraons. During the Fact finding mission the faculty expressed their interest in participating as trainers and resource persons for sensitization of the Forest department on participation.

D. Bandarban Forest Division

(i) **Present Land Use Patterns**

44. Bandarban Forest Division lies in the south eastern part of the country i.e. in the Chittagong Hill Tract and is administratively under the Chittagong Forest Circle. Bandarban Forest Division covers only part of the Bandarban district. Large areas of Unclassified State Forest Lands are available for afforestation in Bandarban district. About 10 percent of the land (exact estimation is not possible as there are widely varying estimates) is used for *jhum* or shifting cultivation. The difficulty in estimating *jhum* area also arises from the fact that while the traditional practice of *jhum* involving shifting of the entire village in the *jhum* cycle is declining, *jhumming* by *jhumias* who maintain their settlements while shifting their plots is more prevalent. The plain land at the bottom of the hills along the river side is cultivated with paddy, sugarcane, banana etc. Homestead plantations are common.

(ii) **Legal Status of Land**

45. The legal status of land is a major problem. No permanent settlement and land tenure system has been developed in the Hill Tracts. Several ethnic minorities inhabit the region and they have their own social systems and customary practices. The *Karbaris* or headmen look after village affairs, and chiefs, Rajas (king) still command considerable respect among the ethnic communities. These community leaders are entitled to shares in the produce from *jhum*. *Jhumias* practice shifting cultivation and sometimes shift residences as well, constructing temporary shelters near the *jhum* plots. This is also happening due to shrinking supply of land available for *jhumming*.

(iii) **Jhumia Rehabilitation**

46. The FD has supported a rehabilitation program for *Jhumias* by allotting them land, subsistence support, and by developing infrastructure facilities at the village sites. Some NGOs are involved in providing credit, medical and other social help to the *Jhumias* being settled by the FD. This program started in 1980. Land is divided into units, each of which is to support 500 families. Each participating family is provided 0.50 acre (0.2ha) of land for homestead, and 4.5 acres for farming. However, the amount of land varies with the available land area and number of families. The FD provided Taka 5000 in the first year for house building and subsistence, TK 1500 in the second year, and TK 500 in the third year. The FD also provided all the planting materials, fertilizer and pesticides and TK200 per family for subsistence. The program has not

been entirely successful on account of low yields and incomes, problems of access to markets, credit, and training. Several jhumias have gone back to their traditional livelihood.

47. The Fact Finding Mission was able to visit a village of "rehabilitated" or "sedentarized" jhumias at Shaonpara. The jhumias have been allotted 4.5 acres for farming each, on which they practice horticulture, tree planting and paddy cultivation. The yields are low due to erosion and reduced soil fertility. Farmgate prices of horticultural produce are low. There are problems of transporting the produce to the markets, and middlemen coming to the villages buy the pineapples etc. at very low rates. The men admitted that they often resort to jhumming outside their allotted area in order to make ends meet. They require technical assistance to make their farms more productive, and they need marketing assistance for their horticultural produce in order to improve prices. When asked whether they would be in the position to protect forest lands in the area surrounding their village, opinions were divided. While a few felt that they may not be in a position to withstand outside forces, others felt that they could with support from FD.

48. The Project will work closely with the jhumia communities and their traditional leaders to create awareness among the communities regarding the Project objectives, and participatory approaches will be used to enable ethnic minority groups to join the planning of forestry activities in light of their own priorities. Since most of the communities wish to settle down in lieu of improved access to services and economic opportunities, the FD and the traditional leadership, as well as NGOs will hold PRAs in the communities, form groups and carry out land and forest resource use planning in an informed manner. Equitable benefit sharing arrangements and tenurial security, provision of training and technical support, as well as credit and marketing facilities, will be required for the jhumias to be able to develop sustainable livelihood systems. The jhumia communities will also be made responsible for protecting nearby forest areas.

E. Ethnic Minorities' Development Plan

(i) **Socio Economic Profile Of Ethnic Minorities**

49. The Ethnic Minorities Development Plan (EMDP) will provide the framework for stakeholder participation for ethnic minorities likely to be involved in Project activities. According to the Census of 1991 the ethnic population of Bangladesh was 1.2 million, which constituted 1.13 percent of the total population. Their numbers may be more, as those groups who have converted to Christianity, or are Hindus, may have been listed as such. Micro studies place the numbers of ethnic communities at much higher than the Census. While some of the ethnic communities are found throughout the country, they are concentrated in the north and northeast, forest areas of the north central region, and in the entire area of the Chittagong Hill Tracts (CHT).

50. The Project is likely to involve communities such as the Shantal, and Oraon in Rajshahi Division, the Garo in Madhupur tracts in Dhaka Division, Khasias in Sylhet Division, and the Marma, Bom, and Mro in Bandarban in the CHT. Distinctive socio cultural and economic structures and traditions characterize the different communities likely to be involved in the Project. The Garos and Khasias are matrilineal societies with kinship being traced through the mother. Women inherit property from their mothers and marital residence is matrilineal. Among the other communities, society is organized along patriarchal lines, but women have equal positions regarding decision making, and social freedom, and perform a major part of income earning and subsistence activities. While the Garos, and the communities inhabiting the Bandarban area traditionally practice shifting cultivation, and collect forest produce, the Shantals

and Oraons traditionally practice plough cultivation. They are now largely wage laborers and sharecroppers. While most of these communities are under economic and cultural stress, due to rapid integration with the market economy, and the mainstream society, they retain their distinctive socio-cultural traditions and institutions. The position of the headman is important in community matters and for access to resources, and deciding on social behavior. All the ethnic communities traditionally have close ties to the forest in terms of their agricultural activities, as well as their subsistence production for household consumption. Women among most ethnic groups have a major share of responsibility for forest produce collection and processing. However, with the decline in forest cover, and extension of state laws, many of these groups are now disadvantaged in terms of access to adequate forest lands for shifting cultivation, and access to adequate forest produce other than timber, or NTFP. These ethnic minority communities are today among the poorest in the country, most of them not owning lands, and several communities resorting to daily wage labor or sharecropping for their survival. The shifting cultivators of the CHT face problems of reduced areas available for shifting cultivation, on account of state restrictions and, reduced land availability as a result of settlement policies for Bengali immigrants. Very few NGOs are involved in the area, due to continued political unrest and insurgency. Ethnic minorities throughout the country have very poor access to basic services and infrastructure.

(ii) **Objectives Of EMDP**

51. The objective of the EMDP is to ensure that ethnic minorities living in likely Project areas will have an increased capacity to participate equitably in forest protection and management. Another objective is to improve the forest cover and increase sustainability of forest management in the country. Project benefits should also be distributed in a culturally compatible manner.

(iii) **Issues Related To Ethnic Minorities In The Core Sub-Project Areas**

52. The issues related to the participation of ethnic minority communities in sustainable forest management can be summed up as follows:

a) Ethnic minorities living in and around sal forest in Madhupur tracts in Dhaka Division will have to be involved in planning and implementation of long term strategies for forest protection and management forest based, and livelihoods. These can be sustained only through their full and equal participation in planning, implementation, and equitable benefit sharing arrangements, which can address their subsistence needs in a sustainable manner. Women will be fully involved in decision making, and agreements to be entered into by the FD with matrilineal communities will be with the women of the households.

b) Ethnic minorities living inside State forest areas characterized by natural forests, and likely to be declared as national parks or sanctuaries, such as in Lawachara in Sylhet Division will be involved, in the planning of sustainable forest management strategies. Such strategies will provide them with subsistence along with protecting the forest; here too agreements will be entered into with women who are the traditional heads of households. Participatory buffer zone planning and management will be done, involving local communities, to develop alternative livelihood strategies for sustainable forest protection and conservation.

c) Participatory approaches will be implemented to involve landless, and ethnic minority populations in afforestation programs on roadsides, tankboundaries, and gullies, with wage

support and benefit sharing to provide livelihoods and self sustaining plantations, in order to control wind and water erosion in areas such as the Barind Tracts in Rajshahi Division.

d) Participatory planning will be done in order to rehabilitate shifting cultivators, who are settled in villages allotted to them for housing, civic amenities, and agro forestry. Participatory approaches will be used to determine land and forest management strategies that can help these communities to improve their livelihoods, build up their participation in forest protection and maintenance, and to improve their access to social services and infrastructure, in keeping with their cultural traditions and institutions.

53. The Project strategy to address these issues will be to work closely with all stakeholders in order to develop: a) appropriate forestry models that address the priorities of participating communities; b) agreements on mutual roles and responsibilities; and c) benefit sharing agreements that provide equitable access to intermediate and long term benefits to participating ethnic minority. The primary stakeholders involved in the process are the Forest department, ethnic minority, and participating NGOs.

Sal Forest Areas

54. The Project will involve the Garo community living in and around sal forest areas in Gazipur district. Existing forestry models will be modified to reflect the subsistence requirements of these communities. Participatory planning involving the communities, NGOs, will be done to select the technically and socially suitable forestry models. Woodlots in areas where forest cover has been removed, will incorporate inter cropping of food crops prior to canopy closure. Intermediate benefits will be worked out through modification of initial spacing and rotation lengths. Agroforestry will be developed in areas where settlements have occurred. Sal coppice management plans will be worked out in areas where the forest still exists but is degenerating due to unsustainable exploitation practices. Final decision making regarding the methodology to be used will rest with the community, subject to the proviso that the selected approach should bring the site to full production. All the concerned stakeholders, the community, FD, selected NGO, and individual beneficiaries will have common and specific roles and responsibilities.

55. The FD will provide the physical and technical data required for forestry planning and implementation. It will share the information and advice with the LCO and individual farmers. The planning and implementation of activities will be done jointly by the FD, LCO, NGO, and lease agreements will be entered into women in the Garo community. Collective agreements with the group to and protect forest areas, and share benefits will need to be worked out. NGOs will facilitate self targeting of participants through PRAs, organizing the LCO, providing training, and registration under appropriate rules, and provision of support in accessing credit and in income generating activities. The tree farming fund will be organized by the NGO with the LCO, and will be operated jointly. The NGO will provide support to women members of the groups in working with the FD, and facilitate thrift and savings/credit activities. Bench mark data will be collected with regard to the participating ethnic minorities as part of the process of collecting benchmark socio economic data for the Project using monitorable indicators. Repeat surveys will be carried out as part of the regular monitoring by the FD, as well as by a local NGO research institution of repute, using participatory rural appraisal methods.

Strip Plantations, Tank Boundaries, In Rajshahi

56. The ethnic minorities involved here include the Shantal and the Oraon communities which are generally landless and do not own sufficient homestead lands for tree planting. They work as sharecroppers and are not allowed to plant trees on rented holdings. They work as wage laborers and migrate out of their villages for several months. Men and women both work as agricultural laborers. Such communities can be involved in roadside plantations, afforestation of tank boundaries. NGOs will identify participants, and organize them into groups. Women of these communities will be targeted. Planting and protection responsibilities and benefit sharing arrangements will be worked out with the FD. Species choice will depend upon location, and upon subsistence needs. In working with such communities, their requirement to earn wages will be taken into account, and agreed upon, and they will be supported for the first three years, while the trees need protection. Also after three years, the benefits from strip plantings would be sufficient to replace the payment of wages. In pond and tankboundary plantation, similar approaches will be followed. NGOs will provide training and support for credit and economic activities.

Participatory Management In Betel Vine Cultivation Forest Villages

57. Participant groups will be formed by selected NGOs. The FD, the community groups and the NGO will jointly plan the management of the betel vine areas. They will need to agree to end any further in encroachment to the proposed national park areas. All dealings will be carried out through the *mantri*, and middlemen will be kept out completely. The participating communities will receive long term use rights to existing betel vine areas, and the FD will be responsible for providing technical guidance to establishing productive ground cover, at limiting damage to trees, and controlling soil erosion, and maintaining soil fertility. Fodder will be supplied to these communities. The community will need to agree to develop additional income sources by planting fruit trees. Some members of the communities can be involved subsequently in eco tourism and related activities.

Rehabilitation Of Jhumias In Bandarban Division

58. The communities likely to participate in this component consist of the Marma, Mru, and Bom. The FD will work closely with the traditional *karbaries* and Rajas in creating awareness about the Project objectives and strategies. NGOs will work closely with the leaders and the communities in identifying households likely to participate, and in organizing them into LCOs. Training in identifying their priorities and alternative livelihoods will be provided by the NGOs and the FD. The LCOs will need to jointly plan their shift to the selected locations. The FD will help groups with land allotment, house construction, provision of planting materials under agreed plans, technical advice and inputs, and in supervision and monitoring. The NGOs will assist in liaising with the land authority, and provide credit and other support services. The LCO will be responsible for providing protection to agreed forest areas, and assist with marketing activities, benefit sharing among members, and operation of the tree fund. Individual participants will be responsible for establishing their land titles, working according to agreed plans, providing protection to forest areas, and labor for silvicultural operations.

Benefit Monitoring Evaluation

59. The EMDP will be comprehensively reviewed by the Bank and the Executing Agency in keeping with the Bank's Handbook on Benefit Monitoring and Evaluation. Independent sample socio-economic studies will be carried out using baseline survey formats, to determine the extent of participation by the ethnic communities in participatory forest planning and decision making, as well as in benefit sharing. Findings will be shared with participating communities as an aid to improving outcomes.

B. BANGLADESH: Biodiversity Conservation in the Sunderbans Reserved Forest

Social Assessment and Strategy for the Participation of Poor Resource Users in the Sustainable Management of SRF Resources and Alternative Livelihoods Development in the Impact Zone

I. *The Context*

60. The Sunderbans is a mangrove forest covering approximately 1,000,000ha of land and water, formed from sediments deposited by three great rivers, the Ganges, the Brahmaputra, and the Meghna converging on the Bengal Basin. It is intersected from north to south by large tidal rivers or estuaries, which are connected by numerous interlacing channels and a large number of flat, marshy islands. The western part of the Sunderbans lies in India; the remaining almost 60 percent is in Bangladesh. The region as a whole contains one of the largest continuous blocks of mangroves in the world. The Bangladesh Sunderbans is dominated by high mangrove forest cover and is subject to tidal inundation during spring tides. The Sunderbans is located on the shores of the Bay of Bengal. It is in the Khulna and Barishal Divisions of Bangladesh.

61. The Sunderbans is the most diverse and richest natural resource area known in Bangladesh. However, it is being seriously depleted through over exploitation and inadequate management. The resource users of the SRF live in an area within 0-20 kilometers and are seriously disadvantaged by their poverty, lack of organization, lack of access to productive resources such as land, capital, boats and gear, as well as their low levels of effective access to social services and infrastructure. They have little direct access to markets, and are not organized to voice their views in any manner regarding the state of the SRF or its management at present. They are not in control over their own livelihoods, nor do they have any control over decision-making regarding management practices in the SRF. While there are approximately 29 NGOs working in the Greater Khulna area in the impact Zone, a review of their programs shows that there is little focus on conservation and natural resource management of SRF resources. The activities related to aquaculture, fishery, agriculture and social forestry are not conceptualized in an integrated manner. In most cases all these activities are carried out in isolation from each other, as well as from the greater issue related to sustainable use and management of SRF resources. There has not been any systematic attempt to mobilize and organize the SRF resource users into viable groups of their own, in order to articulate their stakes in the sustainable management of SRF resources. It is within this natural and politico economic context that participatory management strategies, and alternative livelihood planning, fully involving the poor stakeholders, will need to be evolved and implemented.

II. Social Issues Which Impact on the SRF

Initial Social Assessment

62. The ISA carried out under the Project showed that approximately one million people depending upon the SRF for subsistence live in an area which lies within 0-10 kms of the SRF, and another approximately 2.2 million such persons live in a band of 10-20 kms around the reserved forest. Dependency also extends outside this area, and varies between different groups of resource users. While fisherfolk and their financiers and traders come from as far away as Chittagong as well as Mongla, there are timber collectors coming from two thanas in Pirojpur district. The major socioeconomic characteristics of the SRF dependent households are the following:

- (i) prevalence of high levels of landlessness and marginal farms;
- (ii) high income poverty levels;
- (iii) high levels of human development poverty in terms of high overall illiteracy, female illiteracy, prevalence of child labor, and limited access to basic social services and infrastructure;
- (iv) very heavy debt bondage for consumption related loans, as well as SRF resource extraction activities, with high interest rates, lack of free access to markets, and long term relations with creditors;
- (v) the prevalence of creditors cum traders who adopt monopolistic practices;
- (vi) vulnerability of SRF dependent groups to risks pertaining to unpredictable and declining resource availability, sudden loss of life on account of accidents and attacks by unlawful elements known as *dakats*,
- (vii) low level of well being on account of limited access to basic social services such as safe drinking water, low access to health services, and lack of knowledge of preventive health and sanitation practices;
- (viii) gender issues pertaining to low levels of access of women to incomes, livelihoods, education and health, water and sanitation, lack of organization and access to decision making, as well as the emergence of shrimp fry collection not only as a new occupation for women ending their absence from the forest, but introducing new gender issues such as gender violence perpetrated against women workers inside the SRF by unlawful elements, increasing use of female child labor in shrimp fry collection, thereby leaving them with no other future livelihood options;
- (ix) the absolute lack of mobilization and organization of SRF resource extractors in order for them to be recognized as stakeholders in SRF planning and management.

The ISA further revealed the need for a two pronged strategy under the Project based upon organizing these SRF dependent groups into viable organizations, and the development of alternative livelihood activities. These organizations would be important both for economic activities as well as their role in sustainable resource management. During the ISA communities living in the impact zone showed great keenness to participate in the Project, both because they recognize the need to manage the resources more viably in future in order to protect their livelihoods and the biodiversity upon which their livelihoods depend. They also expect that participating in the Project may improve their access to alternative sources of credit, and basic services such as safe water, medical services. They look forward to the development of new

livelihood activities which can reduce their dependence upon the SRF, and diversify their economic activities. Several resource extractors pointed to the existence of traditional practices related to resource collection in the SRF, which have given way under the pressure of numbers as well as lack of other options, and the absence of any collective body of the SRF workers themselves, which can express the collective interest, and enforce sustainable resource management practices. The communities are keen to organize such groups, whereby they would be able to participate in otherwise remote decision making processes. Women are keen to participate both in such stakeholder organizations whereby they can make their voices heard, as well as gain access to financial services and alternative occupations. They are hopeful that in the long run, with efforts such as this, their children may be able to get options which they do not have at present.

Impact Zone Strategy Objective

63. The objective of this Impact Zone Strategy is to empower the resource user/extractor groups to be organized under the Project, which can participate meaningfully in resource conservation and management of the SRF through collective self-regulation, as well as access productive resources and markets, by successfully breaking out of the chain of moneylenders and middlemen, who at present dominate and control access to SRF resources and their exploitation and marketing.

Poverty Levels among the SRF Resource Users and Extractors

64. Bangladesh with a population of 120 million, has 50 percent of its population living at income levels less than a dollar a day. Rural communities are poorer than their urban counterparts. GOB's Poverty Line defined as a recommended intake of 2,122 kilocalories/day/person, shows that about 50 percent of the rural households live below this poverty line. The poverty Monitoring Survey by the Bangladesh Bureau of Statistics (BBS) converted this calorie intake into expenditure on food and estimated it at Tk440 per month or Tk5275 per annum. An alternative survey by the Bangladesh Institute of Development Studies in 1995 defined it as Tk6,300 per annum. This is the upper poverty line. The "hard core" poverty line consists of a kilocalorie consumption of 1805 kilocalories/day/person. According to the 1995/96 survey by the Bangladesh Bureau of Statistics (BBS) 56.7 percent of the rural population of Bangladesh is below the upper poverty line. The comparable figures for Khulna and Barisal divisions are 60.6 percent (higher than the national average) and 51.5 percent (marginally lower than the national average). On an average, 56 percent of the rural population of these two divisions are below the upper poverty line. The poverty status of the population in the impact zone further indicates that at least one third of the households are well below the 'hard core' poverty line with per capita incomes of Tk4,575 per annum.

65. There are added dimensions to rural poverty in Bangladesh, and more particularly, in the impact zone, which will need to be clearly understood in defining a needs based strategy for strengthening the socioeconomic status of the poor resource users in the impact zone, and enabling them to participate in Project activities. There are rural poor households consisting of entrepreneurs who are just above the poverty line, and while not in formal poverty, can rapidly descend into poverty by income and asset erosion. They usually work at the margins of ownership of productive resources. Households living on the upper poverty line constitute a second category of the moderate poor. The majority of households however, live significantly

below the hard core poverty line. The tendency to easily slip to way below the hard core poverty line is fairly common and is due to high levels of vulnerability in the SRF to economic exploitation, exploitative regulatory practices, rent-seeking practices, and the personal vulnerability of SRF workers to disease, and insecurities associated with working in the SRF, as well as extremely low levels of human resource development, and poor access to basic social infrastructure and services.

66. Another aspect related to poverty in the impact zone is that of significant gaps in the income levels of better-off households and those significantly below the hard core poverty. The richest households have incomes which are six times more than those of the hard core poverty groups (which subsumes those living below this level too).

67. Increasing inequalities in land ownership is a trend occurring all over Bangladesh. In the impact zone, agricultural land ownership is low, with only 51 percent of the population owning land. Among the poorest households, only 35 percent owned agricultural land. However, the mere possession of land does not guarantee security of livelihood or food security even in partial terms, on account of the large scale conversion of agricultural land into shrimp ponds. This process of conversion has been initiated by absentee landowners in collaboration with outside business interests. Muscle power is used to persuade small and marginal landholders to part with their lands, which further erodes their asset base and increases their dependence upon the SRF, as well as their vulnerability.

68. Food security is another major issue for the SRF dependent population of the impact zone. Some indication of the added dimensions of poverty and vulnerability can be gauged from the World Food Program (WFP) food Security Indicators. WFP used the 1991 population census data together with the latest data available from the Disaster Management Bureau of the Ministry of Disaster Management and Relief, and the BBS to assess the relative levels of food insecurity of poor rural women. The indicators chosen to determine insecurity levels were:

- incidence of natural disasters
- food grain deficit/surplus
- agricultural wage rate
- proportion of households not owning land
- proportion of unemployed persons
- proportion of widowed, divorced, and separated women
- proportion of literate women

69. Data on the seven indicators was standardized and combined for each thana giving equal weight to each indicator. All thanas were then classified into four categories of relative food security (very high, moderate, low-25 percent in each category). In the very high and high food insecure thanas, Dacope, Koira, Shyamnagar, Mongla, and Kaliganj, the proportion of food grain deficit, proportion of households not owning land, and the proportion of unemployed persons, are high on account of the conversion of agricultural land on a large scale for shrimp farming. Participatory Rural Appraisals (PRAs) carried out during Loan Fact finding and Pre-Appraisal in these thanas revealed that shrimp cultivation has reduced the multiplicity of livelihoods that households had on account of loss of agricultural employment, both as own-account farmers as well as agricultural labor. Livestock rearing is nearly impossible now due to the lack of fodder and foraging grounds. Shrimp cultivation is not labor intensive. Also, the *gher* owners prefer

labor from outside. People displaced from their lands also lose the possibility to grow fresh water fish on account of conversion of pond lands.

III. Demographic Characteristics of the Population in the Impact Zone

70. The household size in the impact zone at 6.3 persons on average is higher than the national average. The high adverse sex ratio (100-117) shows temporary male migration for work in the area. Temporary male migrants include fisherfolk, shrimp fry traders, and other SRF resource extractors. The dependency ratio was low with children of the age group 0-4 fewer than children in age group 5-9. It indicates a declining population growth rate effected by a high rate of contraceptive use (IRMP, 1997). Marriage is universal with 5.9 percent women widowed as compared to 1.2 percent among males.

71. In terms of education, while enrollment rates for both boys and girls is high, the problem lies in high drop out rates as well as low attendance rates. The literacy rate is 36.5 percent, and there are significant gender differentials as regards literacy as well as enrollment of girls in junior and high school levels. While access to primary schooling facilities may exist on the ground, effective access is lacking on account of poverty as well as growing employment opportunities for child labor in the SRF activities particularly for girls. Boys of poor households not owning means of production, are sent in to work for several months of the year as helpers and apprentices in fishing and fish processing as well as in the collection of other non wood forest produce (NWFP). Girls work along with their mothers in the collection of shrimp fry for which the demand has been rising since the development of the shrimp industry in the country.

72. The prevalence of severe malnutrition among children is comparable with national figures. However, the level of disabilities affecting children is notably high in the districts of Khulna, Pirojpur, and Barguna. The impact zone districts have very high levels of diarrhea among both children and adults. Immunization rates have improved but vary between districts. Immunization of children is notably low in Satkhira and Barguna districts. Effective access to health services at village level is impeded both by poor communications as well as poverty, and the lack of reserves to tide over illness and loss of incomes.

73. Access to safe drinking water is a major problem in the area. It is notably lower than the national level. More than a quarter of the population in Khulna, Bagerhat, and Pirojpur districts still drink water from marshes and ponds. Nineteen percent of the population of Satkhira and seven percent of Barguna have similar water sources. This contrasts highly with only 2.5 percent of population using such sources for drinking water at the national level. Sanitation facilities are almost non existent. Domestic fuel consists of wood from the SRF.

74. As regards asset ownership, as stated earlier, land ownership is low, with 49 percent of households being landless. Poverty and landlessness are coterminus with 65 percent of the poor being landless. The ownership of livestock and trees was low. The local communities have lost the coconut, mango, dates and other fruit trees on account of the shrimp farms which require stagnant saline water for 7-8 months in the year.

IV. The Target Group: Resource Users/Extractors and Their Issues

75. Most of the traditional resource extractors (wood and NWFP collectors, honey collectors, fisherfolk) are poor. They work as wage labor for the moneylenders and traders. The moneylenders and the traders are the owners of the means of production, and finance and control resource extraction activities in myriad ways.

76. The target group of the Project in the Impact Zone will include the SRF resource extractors from the poverty groups: poor *bowalis*, *mowalis*, poor fisherfolk, crab collectors, shrimp fry collectors, marginal farmers, the landless poor, and women, and children. More than 50 percent of the target population will be women. Female headed households will be particularly targeted as they are disadvantaged and particularly vulnerable.

V. Needs Assessment of the Target Population in the Impact Zone

77. Through the use of Participatory Rural Appraisals carried out during Project preparation, Loan Fact Finding as well as the Follow-on Mission, issues related to specific groups of resource users and extractors from the SRF became clear. The Resource users/extractors can be categorized in two ways. Firstly, there is a clear difference between the owners and non owners of capital, boats and gear, who range from big traders and middlemen based in urban trading centers, to petty village-based moneylenders, who may even work on their boats which are worked by crews put together by the principal borrower or *manjhi*, who is the leader of the expedition. The non owners of resources are those who work in the SRF for a living, in every type of resource extraction activity that is ongoing. All such persons have to depend on borrowing from big or small lenders of capital and equipment for their ability to work in the SRF. Thus, the issue that dominates the relations of production within the SRF are those of indebtedness, usury, and near bondage that characterizes many of the dealings between the workers in the SRF and their creditors. They are tied to them sometimes for generations. Their access to markets for most SRF produce is mediated by layers of middlemen ranging from the direct creditor and owner of the means of production, to bigger elements who may be financing significant parts of the industry and the trade. Thus, the issue of the origins of the SRF dependent population goes well beyond the immediate borders of the SRF, but what needs to be kept in mind is that those poverty groups who provide the labor for resource extraction and use, as well as the first and primary source of credit and gear to extractor workers mainly live in these areas identified during the study. Those who may control the financing and the trade may be found well outside the SRF area, as far away as Chittagong, and even Dhaka.

78. The second differentiation is on the basis of the types of resources that are collected and used. These include the following:

- (i) *Mowalis* (Honey collectors)
- (ii) *Bowalis* (Wood cutters/golpata collectors)
- (iii) Fishers
- (iv) Crab and shell collectors
- (v) Shrimp fry collectors consisting mainly of women, girls, and boys

(i) *Mowalis*

79. Honey collectors known as *mowalis* are mostly from Munshiganj, Koira and Sharankhola. They are a major stakeholder group. Honey collection is done from the end of March to the end of May. In Sharankhola area 500-600 *mowalis* go for honey collection each year. However, at present most of the *mowalis* work as wage labor for honey traders and money lenders. Traditionally, honey collection was sustainable, with limited numbers of people engaging in the activity. However, as with other resources, particularly fisheries, SRF activities are emerging as a livelihood of the last resort for the poor of the area and beyond. There are new moneylenders

interested in financing the lucrative trade. Rent seeking by the Forest Department (FD) as also the *dakats* also increases costs to the *mowalis*. As a result, traditional levels of honey collection are ignored nowadays.

(ii) ***Bowalis***

80. *Bowalis* collect goran as well as golpata during the season as laborers for the money lenders. During the off season the *bowalis* search for work as agricultural labor, fish fry collectors, and construction workers. *Bowalis* can cut goran only from the coupe identified by the FD. The coupe identified by the FD is not always productive. When *bowalis* identify a good coupe, they bribe the forest officer to get access to the coupe. As a result, *bowalis* harvest more goran than their permits authorize. Similarly, golpata in excess of their permitted amounts is harvested. Due to the scarcity of golpata, cutters do not always follow the rules of golpata collection, and as a result, the golpata become dry and do not grow back.

(iii) **Shrimp Fry Collectors**

81. In Khulna, Bagerhat, and Satkhira districts, there are approximately 107,000ha of land under shrimp farms and they require a constant supply of fry. A large number of people have shifted from agriculture into shrimp fry collection. They are supposed to pay Tk76 per week for official permits to catch the fry. In practice they pay approximately double, and collect much more than is sustainable. They also catch other species which are dumped on the banks, leading to the destruction of fisheries in the SRF. *Mahazans* or moneylenders provide credit for the purchase of nets, gear, and fishing supplements, as well as consumption items.

(iv) **Crab and Shell Collectors**

82. Crab and shell collection is on the decline. Crabs are often harvested during the breeding season. Female crabs with eggs are harvested for export. On account of the use of fine nets for shrimp fry collection, leading to the destruction of crabs and fin fish, crab collectors find the yields declining. Crab collectors are also dependent upon moneylenders for both consumption.

83. The problems of the different groups of resource extractors and users while specific to their trades are also common inasmuch as the unsustainability of their current activities, as well as their lack of access to productive resources on fair terms are clearly responsible for the depletion of the SRF as well as the continuing poverty and inequities that characterize the lives of those who labor inside the SRF.

VI. Identification of Problems and Solutions by the Stakeholders through Participatory Approaches

84. During participatory meetings and workshops, the issues faced by the different groups were analyzed. In summary these consist of the following:

- (i) Rent seeking practices at different levels leading to increased pressure on the resource base;
- (ii) Illegal destruction of trees;
- (iii) Prevalence of usurious interest rates;
- (iv) Lack of direct access to markets as most resource extractors do not have the right to sell their produce directly in the market;
- (v) Profits go to the owners of capital and gear;

- (vi) High levels of prevalence of child labor, male children being engaged in fishing and resource collection and fish processing for several months every year, while girls are withdrawn from school in order to collect shrimp fry;
- (vii) Seasonality of employment in the SRF and lack of alternative economic activities and outlets;
- (viii) Financial dependence upon the moneylenders and traders not only for production capital but also consumption expenses of households during lean periods; and
- (ix) Lack of agricultural land for food production due to induced conversion of land into shrimp farms.

VII. Gender Issues

85. Gender issues in the impact zone stem from the gender division of labor which necessitates that women be wholly responsible for reproductive work which is not regarded as economically valuable. Women are also fully responsible for processing of the SRF goods that are brought in by the men, drying, storing of wood, golpata, weaving of mats, etc. While these activities are labor intensive and value adding, these are not regarded as such. Women and girl children traditionally did not enter the SRF. But since the emergence of the shrimp industry, and the increasing demand for fry, they have entered this activity in a big way, thereby disrupting girls' educational possibilities, and exposing women to new dangers of being kidnapped and raped by illegal elements operating inside the SRF. Their families are unable to effectively protest on account of the prevailing gender ideology, as well as their social exclusion and powerlessness. Another emergent gender issue relates to the growth of female headed households (percentage not known precisely), caused by accidents and disease affecting men working inside the SRF, as well as divorce, desertion, etc. Female headed households are typically more disadvantaged than male headed households and their incomes are approximately 40 percent less than those of their peer group of households headed by men. Women heads of households are disadvantaged doubly by their absolute lack of access to resources, as well as their vulnerability in a work environment and habitat where the frontier culture still operates, and women as a gender group are particularly vulnerable.

86. Women also suffer from all the disadvantages resulting from lack of access to safe drinking water and sanitation, and health services, leading to increased vulnerability to disease, need for care giving in the family, as well as their own debilitated state on account of malnourishment, disease prevalence, labor intensive work both inside and outside the home. Women lack access to credit and training, markets and organization, and from participation in decision making in the family and the community. They may be considered to be amongst the most disadvantaged sections living in the impact zone and working in the SRF. Child laborers are another highly disadvantaged group that needs immediate attention.

VIII. Project Strategy for Participatory Resource Management and Alternative Livelihoods in the Impact Zone

87. The Project Strategy for the impact zone is based upon the foregoing analysis, which emphasizes the poverty and resourcelessness of the resource users/extractors, as well as their lack of economic alternatives on the one hand, as being responsible for unsustainable practices within the SRF. On the other hand, their not being organized into viable producer organizations capable of upholding their interests and monitoring the activities of members, as well as facilitating access

to new knowledge, training, credit and the means of livelihood renders them incapable of responsible participation in SRF management as stakeholders, and living lives which are economically viable and which dignifies them as workers and entrepreneurs in their own right.

88. The Project strategy is participatory and flexible, and what is set out here is not a blueprint for action but approaches which will be molded and further developed during the Project which is a process oriented one. The impact zone strategy is based on a fourfold approach, and consists of:

(a) collection and analysis of baseline data on socioeconomic conditions of communities and households living in the impact zone. The data collection will be done by NGOs working in the area, in close collaboration with the University of Khulna. The data collection will be done through socioeconomic surveys which will be updated annually through representative sample surveys, to measure significant socioeconomic indicators such as access to services, access to institutional finance, group formation, non formal education, incomes and livelihoods, and overall quality of life.

(b) Mobilizing and organizing the resource users/extractors into viable producer organizations which:

(i) will act as their collective voice in planning and decision making regarding SRF management and their own activities inside the SRF;

(ii) develop and enforce over a period of time, collective norms of behavior for resource users/extractors, based upon both indigenous knowledge and technical advice and training provided by the Project Implementing Agency;

(iii) provide access to members to institutional sources of finance (PKSF) for their SRF related activities, and develop mechanisms for responsible borrower behavior, and peer group solidarity, and accountability;

(iv) develop over a period of time, direct access of members to markets bypassing middlemen;

(v) provide access to members to new sources of technical advice and training for alternative livelihoods development {poultry, social forestry, energy saving stove-making, handicrafts, homestead gardening (where feasible), livestock rearing, among others}; and

(vi) facilitate the access of members, to non formal education programs emphasizing literacy, numeracy, life skills training, as well as awareness and conscientization programs to be conducted by NGOs working in the area.

89. Over a period of time such resource extractor/user groups are expected to federate into larger organizations. Membership of such organizations will be essential in order to access permits to extract SRF resources. The minimum conditions to be attached to membership of such groups will evolve through a participatory process guided by NGOs working with the local communities. However, it is expected that the minimum conditions would include that the resource extractor/worker should:

- have been working in the SRF for a period of at least 2 years prior to the start of the Project;
- he/she should be actually personally involved in laboring inside the SRF;

- he/she should be a resident of the thanas identified as the impact zone;
- he/she should not be a moneylender/trader;
- he/she should be willing to abide by the collective behavioral norms developed by the organization for resource extraction activities inside the SRF; and
- he/she should be willing to participate in all activities undertaken by the organization including training programs, non formal education among others.

(c) The third element of the Project Strategy in the impact zone consists of developing access to alternative sources of institutional finance for microcredit programs to be taken up with (i) resource extractors/users, and (ii) women members of SRF dependent communities. Such programs will be developed by NGOs working /extending their activities, into the impact zone. NGOs will need to do the following activities in the impact zone:

- (i) Mobilization of community based microcredit groups;
- (ii) training in credit management;
- (iii) promotion of savings habits;
- (iv) development of collective behavioral norms for members of microcredit groups;
- (v) delivery of credit through developing and implementing linkages with institutional financing sources (PKSF);
- (vi) development of alternative economic activities through training programs, and
- (vii) provision of extension services, marketing assistance and strategies.

(d) The fourth element of the Project strategy in the impact zone consists of facilitating, through the producer groups and community based microcredit groups, the identification by the SRF dependent communities themselves, their priority needs in terms of access to social services and infrastructure. This will be done through the process of mobilization and organization, and training, all of which is aimed at capacity building and empowering the groups at present socially excluded, in order that, in addition to developing collective voices in SRF management, and livelihoods protection and development, they will be able to improve their habitat and give the future generation a chance to access new opportunities and improved life chances. The process is likely to consist of the development of community based organizations (CBOs) by NGOs working as catalysts, which through the process of community participation will identify community priorities e.g. safe drinking water, communication facilities, improved schooling facilities, non formal education, health services, energy saving stoves, environmental education, among others. For certain activities such as drinking water, non formal education, and extension of schooling facilities, it may be possible to use Project funds to develop such infrastructure and services, either through NGOs, or government agencies (e.g. LGED) as found appropriate. For others it may be necessary to facilitate linkages with ongoing government programs, by bringing them into the villages in the impact zone, so as to improve the quality of life and reduce pressure on the SRF.

90. Gender Issues will need particular attention in the impact zone strategy. In addition to mobilizing women members of the communities, and organizing them into SRF resource extractor groups, as well as microcredit groups, it will be important for NGOs working in the impact zone to deal specifically with gender sensitization, and empowerment of women. Women will need particular training aimed at capacity building for group formation, articulation of their views in

gender specific and neutral venues such as workshops, training programs, as well as training in how to access modern financial services for savings and credit. They will need to be provided literacy and numeracy and accounting skills. They will also need programs on women's health requirements and issues, as well as knowledge regarding their rights and responsibilities.

91. Gender sensitization training programs will need to be carried out by NGOs at different levels including the communities, staff of the Project Implementing Agency, and where necessary among NGO staff themselves.

IX. Implementation Arrangements

92. The Implementation arrangements for the impact zone strategy is based upon constructive cooperation between the Project Implementing Agency and NGOs. NGOs will be selected as per the criteria agreed upon between GOB and ADAB and the Bank in the Bank assisted Forestry Sector Project. The Khulna Chapter of ADAB will coordinate the consensus building process among local and national NGOs regarding selection of areas and programs to be implemented by NGOs. Proposals will be finalized by the ADAB Khulna Chapter and forwarded to ADAB, Dhaka, to be discussed and approved by the Apex Committee. The Apex Committee will be chaired by the Principal secretary to the Prime Minister with the MOEF serving as the secretariat. Members will be drawn from the Government NGO Bureau, ADAB, and FD. The Apex Committee will meet quarterly to start with in order to give a filip to Project implementation and over a period of time will meet every six months, as determined by the members.

93. There will be a Coordination Committee at Khulna set up to monitor the implementation of activities in the impact zone as per agreed programs. The members of this will be drawn from ADAB, Khulna Chapter, and the Project director from the Implementing Agency, and concerned local government departments such as LGED. This committee will meet on a quarterly basis.

94. At the Thana level coordination will be provided by the Thana Coordination Committee chaired by the Thana Nirbahi Officer (TNO), with representatives from NGOs, and local concerned government agencies such as the LGED. This committee will meet on a monthly basis and will coordinate the implementation of Project activities, review problems that may arise, and report to the Coordination Committee at Khulna.

X. NGO Selection Criteria

95. The selection criteria which has been included in the Bangladesh Forestry sector Project, is a mutually agreed set of criteria between the Bank, ADAB, and the Bank. This will be adopted under this Project.

C. Vietnam Forestry Sector Project

I. Introduction

96. The Project addresses two of the Bank's strategic development objectives, of environmental protection and poverty reduction in three priority watershed areas. The three watershed areas are characterized by relatively high poverty levels, presence of ethnic minority communities, some of whom are engaged in shifting cultivation, poor infrastructural facilities, and forest areas under considerable human and livestock pressure. The Project aims at sustainable land use planning at village level, with the informed participation of all stakeholders particularly

women, ethnic minorities, secure tenurial arrangements for participating households, and access to income generating activities.

II. Socioeconomic Analysis of the Watershed Areas

97. The three watersheds are located in the hilly and mountainous areas of Vietnam.

Conditions vary between them as regards population and poverty levels, and natural resources.

While the Chu watershed is characterized by low population densities, and some areas of high income related to sugarcane cultivation, (13 percent of the population is below the official poverty line figure of US \$ 72 per capita per annum), the Ba watershed is characterized by increasing population densities due to in migration by the Kinh, and high poverty levels particularly among the ethnic minorities. In some parts 47 percent of the population and in others 99 percent of the population has been found to be below this poverty income level. The communities inhabiting the core sub project area in the Chu watershed are poor and face food shortages for several months of the year. Communications are poor in the Project areas, with several communes not having any access roads at all. Household food shortages characterized by rice shortfalls are chronic for almost three to four months of the year. In the core sub project areas, nutrition, water and sanitation, health and education levels are low, with 40-55 percent of people being illiterate. Diseases such as cholera, diarrhea, among others, are prevalent, and infant mortality and maternal mortality rates are high particularly among ethnic minorities such as the Banar in the Ba watershed.

98. Ethnic minority groups inhabiting the watersheds are the Thai, Banar, Jarai, Cham Hroi, Ede, and Tay Nung. The ethnic minorities are at varying stages of development, from the Banar practicing shifting cultivation, and forest produce collection, to the Thai and the Jarai who are more integrated into settled agriculture and market oriented activities. Also in some parts of the watersheds, the outlook of the ethnic minorities is changing, with greater interest in irrigated rice production, and improved techniques for agricultural and livestock production and management. The majority community, the Kinh, are better educated, and have greater familiarity with market oriented agriculture and trade. The ethnic minority communities have forest based activities for subsistence and income earning, and this makes them important stakeholders in forest protection and management.

99. Women are economically and politically important in all communities, and are particularly involved in subsistence agriculture, and forest based activities among the ethnic minorities, and in market oriented activities among the Kinh. Several of the ethnic minorities are matrilineal communities among whom inheritance of productive assets takes place through the mother to daughter, and production decisions are taken by the older, more experienced women. Women are organized into the Vietnam women's union, and at commune level, there are coordinators and representatives, who are responsible for village level program implementation. While the Union is active in the areas of health and nutrition, and family welfare activities, it can provide an important focal point for improved access for women to agricultural training and inputs supplies, thrift and savings, improved access to institutional finance for improved agriculture, as well as training in health and hygiene.

III. Social Analysis of Core Sub Project Areas

100. The Chu watershed covers mainly the district of Thuong Xuan. Poverty levels are high in the Project area, approximately 40 percent of the population being below the poverty line. This is

reflected by food shortages, on account of the scarcity of irrigated paddy lands, and the poor condition of existing irrigation sources. Low paddy yields are related to poor agricultural practices lack of livestock for farming, near total absence of inputs, training and extension. Women headed households are faced with labor shortages. Ethnic minority villages lack basic amenities such as water supply, healthcare, and schooling within reasonable distances. The core sub project area is the Tan Thanh commune which is made up mainly of Thai villages, with Kinh present in one village.

101. Communications with the commune are not as difficult as in other areas, but the level of development of social infrastructure and services is poor. Literacy rates are abysmally low. Access to effective health services is poor. Farmers are faced with water scarcity due to the poor condition of existing irrigation sources, and the failure to develop new ones. Irrigated rice fields are scarce (0.09 ha per worker) and have been fully allocated. Productivity is low. Production of vegetables and fruits, cassava, maize, and fodder is limited. Per capita food production and availability is low. Livestock holdings consisting of cattle and buffaloes, pigs and poultry, are of poor quality. The cattle and buffalo are mainly sold to generate cash for household purposes. They are not used for traction by the ethnic minorities. They are local breeds and are not managed in an intensive manner. They graze extensively, thereby damaging crops and forests. There is no organized veterinary service and this leads to frequent disease outbreaks, low productivity rates. Extension services are poor. Access to credit for investment in agriculture is limited. In the past forests were an important resource for the communities for the supply of poles and small timber, and Non Wood Forest Produce (NWFP) to meet food and other subsistence needs. Now the natural forest cover is left only on the top of the mountains, with negative impacts on the economic and cultural lives of the communities. People are aware of the loss and are keen to rehabilitate the forest with technical guidance and know how.

102. The Project area in the Ba watershed is located in the central highlands of Vietnam and covers parts of Gia Lai, Phu Yen provinces. The watershed area above the Dong Cam weir covers six districts in Gia Lai province, and four districts in Phu Yen. The population of Gia Lai province is estimated to be 317, 940. Population densities vary between districts, with new settlements increasing populations in districts such as An Khe. Poverty levels vary between districts, but are high. In Man Yang district, 47 percent of the population is estimated to be below the official poverty line, whereas in K'Bang district, 99 percent of the population is poor. The main ethnic groups are the Kinh, Banar, and Jarai, with smaller populations of other ethnic minorities. Ethnicity is a very important variable in developing Project approaches, as the Kinh and the Banar have different attitudes and perceptions, and also differ in terms of access to resources and technical know how, and the market economy. The ethnic minorities are subsistence farmers with limited access to agricultural land and carry out irrigated rice production in beds next to streams and dry upland rice cultivation using slash and burn techniques on slopes. Such areas are only cultivated for a few years and then new areas have to be opened up due to declining fertility. Many households are able to produce enough rice for their consumption for only 3-6 months of the year, depending upon area of irrigated rice fields, and labor availability. Low food availability affects children and women most adversely. In ethnic minority villages child mortality rates are high. The situation varies in Kinh and Tay Nung villages, where communities are better placed for food. Access to water and sanitation is highly limited. Serious diseases such as cholera occur in epidemic forms, and the health infrastructure and service is not equipped to deal with preventive and curative requirements. Housing differs in quality terms between the

Banar and the Kinh, with the former having rudimentary housing built with wooden boards and straw roofs while Kinh houses are made of brick with tiled roofs. Kinh gardens are well tended as contrasted with Banar gardens. While there is a network of schools at the commune level, illiteracy is a major problem affecting 50-55 percent of the population.

103. In the K'bang district, the core sub Project area is the So Pai commune in the northern zone. The commune has a total of eight villages with a total population of 3106 persons living in 645 households. The main ethnic group is that of the Kinh (65 percent), followed by the Banar (20 percent), and Ede (13 percent), and others. Access to communications, water and sanitation, education, and health is poor. It was reported to the Fact finding mission that schools are not adequately supplied with teaching materials, and teachers are not motivated. Very few children among the Banar go to school. The farming system is a combination of dry paddy cultivation with shifting cultivation. Food production is poor and employment opportunities limited. Average paddy land amounts to 0.02 ha per worker, and yields are low. Irrigated paddy fields are limited, and 58 percent of households do not own any. 48 percent of households do not own any rainfed rice fields. Livestock ownership is important but also limited. Lack of fodder and pastures are important issues. Food scarcity is seasonal with Banar households facing scarcities of an average of 3-6 months. The mission found that the Banar communities now practice shifting cultivation within a fixed area and yields are reported to be falling. There is also the problem of Kinh households in neighboring villages occupying more irrigated paddy lands than they are entitled to. Production forests have been mostly allocated but protection forests, paddy areas and home gardens have not been allocated as yet.

104. Many Yang district has 22 communes with 243 villages. The district's population is 100000 with 20000 households. The population growth rate is 3.5 percent per annum, due both to natural growth and in migration. 10 percent of households are headed by women, and these suffer from labor shortages, and are prone to being poorer than others. There is a severe population pressure on agricultural lands, Most of the forest lands are still unallocated, and the process of allocation of agricultural lands, home gardens, and houses is ongoing. Livestock ownership is skewed with more than 60 percent of households not having enough buffaloes for traction. Food scarcity is severe with the Banar facing 4-5 months of food scarcity per annum. Women and children are most affected by malnutrition and related diseases. Water supply, sanitation are poor, and health services are highly inadequate.

105. The core sub project areas are located in the Ayun commune in the north eastern zone and Dak Troi in the north western part. The fact finding mission visited two villages of Ayun commune. Kon Brung, a Banar village, does not have access to a reliable water supply source, or sanitation. A few attempts at drilling handpumps for drinking water have failed, and people depend on a nearby stream for water. Health services are inadequate, and child mortality rates are high. Access to population planning and maternal health services is inadequate. The Banar live in traditional habitations with houses made of wood and thatched roofs. The few brick houses are owned by recent Kinh migrants who are traders. The economy of the Banar is a subsistence economy, based upon shifting cultivation, livestock rearing, and forest produce collection. Customary land rights are still prevalent with individual households using land for shifting cultivation and paddy growing within areas determined as community owned land. No land allocation of any category of land has yet been done in this village. The Banar are keen to get land allotments, in order to have greater security of tenure, and access to paddy lands. Livestock ownership is widespread with cows and buffaloes and pigs predominating. There is lack of

buffaloes for ploughing. While agricultural practices are still rudimentary, with manual digging of sloping lands, there is some influence emerging from contacts with Kinh farmers as regards use of animal traction. Buffaloes are being used by Banar households to plough irrigated paddy lands. However, manure is not used by the Banar but sold to Kinh farmers and traders. Access to agricultural extension and inputs supply is poor. The mission was told that the community is not fully aware of the government policy regarding land allocation, and giving of "Red Books" for land use. Communities will need information training by the PRA advisers and Land use Planners, in order to be able to participate in land use planning in an informed manner.

106. The priorities of the Banar community as explained to the mission during the participatory discussions in the village are: a) to give up shifting cultivation and settle down in one place; b) to be able to get increased access to irrigated paddy areas by the creation of new irrigated paddy fields; c) to get clear land title which would establish their use rights and allow them to transfer such title through inheritance, and to use it as collateral; d) to get tenurial security for their use rights; e) food security during the interim period when shifting cultivation would be given up, and before other options would come to fruition; f) to be able to access credit for inputs purchases; and g) improved basic infrastructure in terms of water supply, sanitation, power.

107. Women in the Banar community are very hard working, with equal involvement in agriculture and sole responsibility for forest produce collection, and for household work. Their workdays are long, and they have little leisure. This accompanied by early marriage, frequent childbearing, poor nutrition, exposes them to health hazards. Women work hard and feel that their productivity is low and their living standards need to be improved. Increased external contacts have made them more aware and they are keen to get better access to land, and technical training and know how, inputs and services, in order to improve their agricultural practices and productivity. Women are very dynamic and are willing to allocate time for training in agriculture, and diversified economic activities. They feel that education is absolutely essential and are interested in adult education programs. Women have equal rights with men among the Banar and inherit property. Marital residence may be patrilocal or matrilocal, depending upon family circumstances. The major issue is that of households having sufficient labor power, and marriage is a means for labor deficient households to get more hands for agriculture.

108. Given women's traditional position of equality, and their dynamism, and interest, they will need to be equally involved in the Project, through the following measures: a) awareness campaigns; b) training in participatory planning; c) involvement in land use planning and implementation; d) getting access to allocated land through the issuance of joint certificates of land use, or individual ones in case of women headed households; f) training in agricultural know how; g) access to inputs; h) access to credit; and i) start up of thrift and savings activities. The Women's union is an important conduit for reaching women at village level for awareness campaigns, training, participation in Project activities, thrift and savings, and sharing in land use rights.

109. A neighboring Kinh village demonstrates all the difference between the traditional Banar community and the more entrepreneurial majority community. The Kinh are recent migrants into the area, but they brought with them their skills in intensive paddy cultivation. They have added to land allotted to them by government, by "buying" land use rights from the Banar and creating a source of irrigation from the nearby stream. They buy manure from them and trade in other commodities on exchange basis. They have received some training and inputs from the Extension service and have followed recommended practices. They have established cottage industries.

Women and men share all tasks equally, but household responsibilities are more specifically women's responsibility. Women and men share resources equally.

110. The mission's visit to Banar villages in the So Pai commune, K'Bang district, confirmed the findings from other similarly situated villages regarding the traditional economy of the Banar, the precarious nutritional and health status of the community, the lack of awareness of policies towards shifting cultivation, and the near total absence of access to training, inputs and credit. A very strong preference for fixing their agricultural plots, and rehabilitating the forests was expressed. There was positive support for Project objectives which were discussed in detail. Women particularly expressed their interest in gaining information, and being able to participate in Project activities at all levels.

IV. Beneficiary Participation

111. An important aspect for participation by communities in the Project relates to land allocation and security of tenure for local communities and households. This is important from the point of view of the beneficiaries as well as increasing the sustainability of the Project activities. Progress is uneven as regards the allocation of agricultural and forest lands to households under the present policy of the government, and the Fact finding mission found this to be a critically important area for community involvement in forest protection and management of watersheds. Food and income security are critical issues, and are closely linked with sustainable land use. The mission found that ethnic minority communities are aware of falling yields from shifting cultivation, and would prefer to adopt new ways provided they are given improved access to irrigation resources, land and inputs. In this socio economic context, the Project will adopt participatory approaches for local level planning from the village upwards, of land use, taking into account local land and forest resources, poverty and development levels, land and forest use patterns in terms of cultivation, dependence upon forest resources, development of cash cropping, market orientation, and livelihood needs, gender and cultural specificities. It will support capacity building and institutionalization of participatory approaches and gender awareness at the level of the district, by bringing in expertise in participation from experienced NGOs, as well as through the provision of technical assistance and training in these areas for staff in implementing agencies.

112. The bulk of Project funds will be spent on activities at the local level, undertaken by communes and villages. These include land allocation, investments in poor natural forests to be rehabilitated, plantations and agro forestry. Training of participating communities will be facilitated through awareness campaigns, and village level PRAs to be carried out by multidisciplinary teams from the communes and districts. Commune development funds will be created through beneficiary repayments of credit for income generating activities, to be used for locally planned activities and infrastructure. This will increase the sustainability of Project investments beyond the Project period.

V. Gender Analysis

113. Women form a significant part of the Project clientele. They form more than half the population and women headed households form 9-15 percent of households throughout the Project areas. Such households are among the poorest, being deficient in labor, and with limited access to paddy lands which are allotted on the basis of labor availability among other factors, agricultural training, inputs, and credit. Three out of the four major ethnic minorities present in the Project areas are matrilineal. Women perform all agricultural and forest related tasks, and

among the ethnic minorities have the major responsibility for household maintenance. While women are overworked they are also keen to improve their lives and those of their families through increasing productivity and access to basic services. They are keen potential participants for agricultural training, and training for improved health and nutritional practices. They exhibit leadership qualities and the Project will facilitate their participation through capacity building and access to productive resources.

114. Specifically, the Project will address women's development requirements through the following:

- (a) Women's access to land will be strengthened through joint use rights/individual rights (for women headed households and matrilineal ethnic minorities).
- (b) PRA advisers will strengthen women's capacity for informed participation in land use and infrastructure planning through training and PRAs with women's groups at village and commune levels.
- (c) The Project will support full participation of women's unions in planning and decision making.
- (d) Women will be provided training in improved agricultural and forestry techniques.
- (e) Women will participate in demonstration farming. Women leaders, heads of households, and members of ethnic minorities will be particularly targeted for this.
- (f) Women will have improved access to credit for productive activities through the Project, and the Community Development Fund will facilitate sustained financial support for economic activities and infrastructural needs.
- (g) Women will be enabled to start thrift and savings activities through the women's unions.
- (h) Prioritization of training in areas of health, population planning, and nutrition, and provision of basic services such as communications, water and sanitation, and adult education, through ongoing government programs will increase women's productivity, and improve the quality of life in participating communities.
- (i) Technical assistance for gender analysis and planning, and monitoring and evaluation will be provided under the Project.
- (j) Benefit Monitoring and evaluation under the Project will develop gender specific indicators as part of developing socio-economic indicators. Efforts will be made to measure:

- i) women's participation in decision making;
- ii) benefits accruing to them in terms of access to land use rights under clear agreements;
- iii) training programs;
- iv) men and women's labor contribution in various project activities;
- v) adoption of recommended practices;
- vi) productivity and income increases;
- vii) extent of land and forests rehabilitated through protection, afforestation;
- viii) creation/rehabilitation of irrigation sources, and irrigated paddy fields created;
- ix) access to savings and credits. Survey methods will be combined with qualitative data collection through PRA methods.

VI. Ethnic Minorities Development Plan

A Objective

115. The Ethnic Minorities Development Plan (EMDP) will facilitate the participation of ethnic minorities in Project activities in an informed manner. It will also ensure that Project benefits are made available to them in compatibility with their cultural preferences and felt needs.

B Ethnic Minorities in the Project Areas

116. The ethnic minorities present in the Project areas are not a uniform sociological group, and have distinctive socio-cultural traditions, and are at varying stages of economic development. While some practice shifting cultivation, with minimal participation in market activities for cash requirements, others are more integrated with the market economy and follow agricultural practices that are more in keeping with irrigated agriculture. This is an important point for Project planning. The standards for adoption of improved agricultural practices are set by the dominant community, the Kinh. In the Chu watershed, the major ethnic minority community, the Thai, constitute the majority in the population in the Project area. The Thai and the Kinh have lived in proximity and now share a similar way of life. However they are poorer, practice shifting cultivation, suffer from food shortages, and lack access to improved farming techniques, extension services, and adequate capital and livestock for irrigated agriculture. The Banar, Cham Hroi, Ede, and the Tay Nung, who compose the majority in the Ba watershed remain outside the mainstream and retain their distinctive way of life, carrying on shifting cultivation, livestock rearing, and collection of NWFP. The last is however declining, and the Banar are conscious of the need to rehabilitate the forest and manage it sustainably.

117. These ethnic minorities depend upon shifting cultivation, livestock rearing, and forest based activities. They lack access to irrigated paddy land, and falling yields from shifting cultivation, reduced land availability for such agriculture, have contributed to food deficits at household levels. The Banar have been "selling" their irrigated paddy areas to incoming Kinh settlers in the expectation that land would be available. They now feel deprived and want land allocated to them for rice production. Their priority is the creation/rehabilitation of irrigation sources so that irrigated paddy areas can be increased. Deforestation is another important issue for these communities as unlike the Kinh, many of their activities are forest based, and they traditionally depend upon the forest for subsistence. However, with deforestation, and plantations, their supplies of NWFP have fallen. Forest rehabilitation and protection are important from the point of view of the ethnic minorities. There is a great deal of support for the Project among such communities. However there is lack of information and knowledge regarding government land policies and strategies.

118. These communities have limited access to basic services. Health and education levels are low, health services are inadequate, teachers are poorly motivated, and schools lack facilities. More than half the adult population on an average is illiterate. Women and children suffer more than adult males from the consequences of malnutrition. Diseases such as cholera can assume epidemic forms due to lack of basic sanitation, and safe drinking water. Access roads are either missing, or in poor condition. This limits delivery of services and access to markets.

119. Women of the ethnic minority groups have important roles in food production and household provisioning. Their rights of inheritance, participation in family and community decision making, are equal with men. Among the matrilineal communities, land belongs to the eldest woman in the extended family. The land remains the property of the family whether it is

cultivated or not. Among the Ede, the youngest daughter inherits most of the land, and cattle. Land is not sold among the Ede. Among the ethnic minorities, women suffer from overwork due to the sole responsibility of housework and equal participation in agriculture, and have a low health and educational status. During PRAs they expressed their priorities consisting of access to safe drinking water, and sanitation, improved health services and education, fixity of land tenure, to practice settled agriculture, and to have access to training and inputs, as well as credit. They are organized into the Women's Union and can provide leadership in Project activities at the community level.

120. The Project will address the priorities of ethnic minority communities in the following ways:

(i) A participatory approach will be followed at all levels of Project planning and implementation.

(ii) The Committee for Ethnic Minorities and Mountain areas will participate in the Project Steering Committee in order to ensure that ethnic minorities are enabled to participate in the Project in an informed manner, and Project benefits are accessible to them in a culturally compatible manner.

(iii) Capacity building of implementing agencies for participatory approaches will be achieved through the deployment of participation advisers to be contracted from selected NGOs.

(iv) PRAs will be carried out among ethnic minorities to determine their priorities and interest in Project activities regarding land use.

(v) Capacity building of communities will be done by the Participation advisers through PRAs to generate awareness of Project objectives, and strategies. Technical guidance will be provided by the staff at commune and district level, for informed choices to be made.

(vi) Land titling and allocation, security of tenure, with clearly spelt out responsibilities and benefits sharing, as well as development of irrigation infrastructure, wherever possible, will provide sustainability to productive activities undertaken by participating communities.

(vii) Training will be provided to farmers, women, from such communities, in improved agricultural practices, livestock management, and pasture land management.

(viii) Access to Project fund for productive activities and village infrastructure, will strengthen the capacity of individual households to expand agricultural output as well as access to basic services.

(ix) Under the Project Benefit Monitoring and Evaluation, indicators will be developed as part of the socio-economic indicators, to monitor the participation of ethnic minorities in Project activities, and changes in their socio-economic status. Baseline data will be collected at the start of Project activities, and follow-up surveys will be done during project implementation.

C. Strategies for Ethnic Minorities in Core subproject areas

(i) **Chu watershed**

121. In the Chu watershed, the subproject area is the Tan Thanh Commune located in the southeastern part of the District of Thuong Xuan. The commune has nine villages with 779 households. The Thai are the majority community. The Kinh are present in only one village. Social infrastructure in the commune is poor. Food scarcity is a problem for most households, and this is related to the scarcity of irrigated paddy area. Agricultural techniques are poor and the

Thai do not have the knowledge or the means to utilize implements or inputs to improve productivity. Forests played an important role in the economic and social lives of the communities thirty years ago, but at present the natural forest that is left, covers mainly the top of remote mountains. NWFP supplies have diminished. The communities are aware of the loss of food resources and other materials from the forest, which in the past were important particularly during "hunger" times. Forest rehabilitation is important from the viewpoint of these communities. All the communities want financial and technical assistance for forestry.

122. Livestock rearing and animal husbandry are important economic activities for cash earning by the Thai. Fodder and pasture development are important issues. Although a large part of the hills and mountainous areas are classified as protection forest, the communities feel that these lands would be better utilized as pasture areas.

123. There is a clear need to strengthen the agroforestry extension support to farmers who at present do not have access to training and extension support.

124. The Project will support the following activities:

(i) Participatory workshops will be organized with the ethnic groups, in order to foster capacity building for informed land use and development planning. The Project objectives and strategies will be explained through oral presentations using facilitators from within the community, in the local language, and discussions held on the most feasible land use options, and infrastructure and service requirements, training needs, and the optimal ways to support these development interventions.

(ii) Participatory land use planning will be done with the Participation advisers spending time with the local groups to develop a common understanding of the local needs and constraints, and through further discussions with the land use planners, and local officials, prepare a land use plan.

(iii) Irrigation resources will be developed wherever feasible, in order to deal the major problem facing ethnic minorities, of chronic food shortages.

(iv) Development of roads in poorly connected areas will be facilitated through the use of appropriate resources.

(v) Land allocation will be streamlined and speeded up through participatory and equitable planning from the community level. Measures will be undertaken to prevent inequitable land transfers to the majority Kinh households by the ethnic minorities.

(vi) Agro forestry training and extension services will be provided to the ethnic minorities, as well as credit for inputs.

(vii) Contact farmers will be selected by the local communities from among the ethnic minorities, women, in order to create focal points within the communities for the transfer of technology and extension advice on a sustainable basis.

(viii) Women from these communities will be provided with training in agro forestry, home gardening, savings and thrift activities. Women and men will be provided training in the areas of health and nutrition, and population planning.

(ix) Pasture lands will be developed and maintained through appropriate management practices, and livestock services improved in order to increase livestock productivity.

125. In the Ba watershed, the major ethnic minorities are the Banar, with smaller communities of the Tay Nung, and other communities. These minorities have been losing land to the immigrant

Kinh, and there is a growing awareness of declining living conditions, and poor resource base among them. Chronic food shortages, and poor health and nutritional status characterize the communities, particularly women and children. Land allocation is hampered by lack of personnel and funds, as well as the ethnic situation. The Banar practice shifting cultivation, and there is a need to foster their informed participation regarding future land use planning and allocation, management strategies, so that their need of food security and livelihoods can be met in a sustainable manner.

126. In the core sub project areas in the Ba watershed the Project will support the following activities:

(i) Participatory workshops will be held in order to foster capacity building for informed participation in land use planning, allocation, identification of appropriate infrastructural development, and training and support services required.

(ii) Land use plans will be drawn up following the participatory workshops, with the local communities, village and commune officials, land use planners and participation advisers.

(iii) Land allocation will be speeded up and mechanisms developed in consultation with the communities to prevent land alienation.

(iv) Agro forestry training and extension will be provided, and contact farmers will be selected from within the communities for demonstration and training purposes. Women will be particularly targeted for this.

(v) Training will be provided to women in agro forestry, handling of cash, and cash management, savings and thrift activities. Women and men will be trained in health, nutrition and population planning.

(vi) Steps will be taken to link the communities with programs for literacy and improved education and health services.

127. Among matrilineal communities, the Project will support land allocation to women in compatibility with traditional practice, and strengthen the provision of training and extension services, and infrastructure development, in association with ongoing programs. Women will be particularly targeted for capacity building for informed participation through participatory workshops, and resource management planning, and allocation.

128. Benefit monitoring indicators will be developed in association with the communities, and will be provided to the Bank for approval. The CMMA will participate in the BME along with the BME institutions, to provide insights and support with regard to the ethnic minorities.

FISHERIES PROJECTS

A. Indonesia: Community Based Coastal Resource Management Project

I. Rationale

129. The rationale for the proposed Project stems from the need to (i) address the key issues confronting the Indonesian fisheries and coastal resource sector; and (ii) support the Government's efforts in meeting its objectives, strategies, and targets for the sector as embodied in REPELITA VI. Among several issues and constraints identified in the fisheries and coastal

resource sector, the two most critical that require urgent attention are the depletion of coastal resources, and the pervasive poverty and social disadvantages of coastal communities. These two issues are closely interlinked in a vicious cycle whereby poverty drives the coastal communities to increase fishing pressure, through increased fishing effort, on the coastal resources, which, in turn, leads to the depletion of coastal fisheries resources. Continuous deterioration of coastal resources results in reduced fish catch and income of fishers, thus contributing to increased poverty in the coastal communities, and the perpetuation of the cycle. The former requires the introduction and institutionalization of coastal resource conservation and management measures at the local level, i.e., fisheries regulations and law enforcement to control destructive fishing and overfishing activities, to ensure resource sustainability over the long term. The latter necessitates the introduction of supplementary and alternative livelihood initiatives to raise the income levels and improve the living conditions of coastal dwellers.

130. The Project addresses fisheries resource sustainability issues by (i) controlling destructive fishing methods and overfishing activities, (ii) improving the current status of the fisheries resources and coastal habitats, and (iii) enhancing the quality of life of coastal communities by providing poverty reduction measures and alternative income-generating opportunities. The Project will ensure the sustainable use of fisheries resources and empower the LCOs and coastal communities to participate in coastal fisheries resource management, conservation, and development activities. It will also provide a mechanism to increase the Government's capacity to mitigate and reverse the trend of fisheries resource depletion, and reduce poverty in coastal communities over the long run.

131. The Project is in line with the Government's long-term development objectives and fisheries sector policy. It is consistent with the Bank's medium-term operational strategy that focuses on (i) natural resource management and environmental conservation, (ii) poverty reduction among the poor coastal communities, (iii) improvement of economic efficiency, and (iv) human resource development. It is also in line with the Bank's strategy for the fisheries and coastal resource sector, which is anchored on the objectives of sustainability, equity, and efficiency.

II. Objectives and Scope

132. The primary objectives of the Project are (i) to promote sustainable management of coastal fisheries resources; and (ii) to reduce poverty in the coastal areas by providing opportunities for increasing income and improving the living standards of coastal communities. The Project scope includes activities intended to: (i) promote community-based coastal fisheries resource management; (ii) increase incomes and improve the living conditions of selected poor coastal communities by the provision of income-augmenting opportunities and necessary social infrastructure; (iii) rehabilitate the physical fisheries facilities at selected fish port and fish-landing centers to improve environmental and sanitation conditions as well as product quality; and (iv) strengthen the capabilities of coastal communities, community development organizations, and agencies of the National Government and the local government concerned with fisheries resource management and social development.

133. The Project will cover four sites to be models for coastal community development and fisheries resource management, namely, Trenggalek and Muncar, East Java; Lombok, West Nusa Tenggara; Tegal, Central Java; and Bengkalis, Riau. These sites were selected based on predetermined selection and evaluation criteria, including: (i) community and social commitment;

(ii) prevailing resource and environmental situation, and needs for resource management; (iii) existing local socioeconomic and infrastructure situation; and (iv) institutional setup for fisheries resource management and risks.

134. The Project will comprise four components: (i) coastal fisheries resource management; (ii) community development and poverty reduction; (iii) environmental improvement of small-scale fish-landing centers; and (iv) institutional strengthening.

Coastal Fisheries Resource Management

135. This component aims to rationalize and regulate the use of coastal fisheries resources, and conserve fish habitats at selected Project areas through: (i) resource and ecological assessment (REA) and socioeconomic assessment (SEA), i.e., data generation and analysis; (ii) coastal fisheries resource management planning; (iii) implementation of coastal resource management plans; (iv) monitoring, control, and surveillance (MCS); and (v) an information and education campaign.

136. The REA and SEA activities will collect data and information, and provide a scientific foundation for fisheries resource management and the community's social development. Qualified organizations, including research and academic institutions, consulting firms, and the LCOs, will be engaged by DGF to assist concerned local government agencies in: (i) conducting the REA and SEA; (ii) collecting essential benchmark information and data; (iii) establishing an information database; (iv) providing base maps and translated resource information, and recommendations to prepare comprehensive site-specific coastal fisheries resource management plans; and (v) organizing coastal communities to participate in the coastal fisheries resource management (CFRM) plan, design, and implementation.

137. The district fisheries services will be responsible for analyzing the data and information generated from the REA and SEA. It will also closely work with the district BAPPEDA to take the lead in the preparation of the comprehensive site-specific CFRM plans for each Project site, with technical support from DGF and a team of international and domestic consultants. The site-specific CFRM plans will be developed with the participation of the various affected stakeholders, including concerned agencies of the National Government and the local governments such as the Ministry of Environment, and Environmental Impact Management Agency (BAPEDAL), research and academic institutions, private sector, LCOs, and coastal communities. The CFRM plans will include: (i) assessment of the status of local fisheries resources and related habitats, as well as coastal communities at each site; (ii) determination of resource base and socio-economic linkages; (iii) identification of key resource management, environmental, and socioeconomic issues; and (iv) strategies for specific interventions, i.e., activities and measures, for CFRM and social improvement. The prepared CFRM plans will be refined and revised periodically based on updated information concerning changing ecological and social conditions at the sites.

138. Based on the CFRM plans, the organized communities will implement the following measures, as appropriate, to conserve the coastal fisheries resources and related habitats in their respective areas: (i) establishment of marine protection areas and fish sanctuaries; (ii) rehabilitation of damaged fish habitats, i.e., mangroves, coral reefs, and seagrass areas; (iii) implementation of an artificial reef and fish restocking program in the protected areas; (iv) reduction and shifting of fishing effort from overfished stocks to underfished stocks, e.g., tuna and squid; and (v) pollution, siltation, and erosion control.

139. The MCS system is an integrated three-tiered system that includes data and information collection and management, i.e., monitoring; legislation, regulation, and licensing, i.e., control; and law enforcement, i.e., surveillance. The system will support fisheries resource management and conservation, and will be designed and implemented at DGF and project provinces under the Project.

140. DGF and the provincial and district fisheries services, with the assistance of the Project consultants, will be responsible for improving the current fisheries data and information management system at the local levels. These agencies will likewise establish information linkages between the provinces and the information system of DGF to provide accurate data on the fisheries and habitat resources, fishing boats and gear used, and fish production statistics for effective resource management planning.

141. The Project will strengthen law enforcement through training and enactment of implementation regulations at the local level. Further strengthening and computerization of the provincial fisheries licensing system for boats less than 30 gross tons in Project provinces, and of the DGF licensing division will be undertaken to facilitate availability and analysis of information required for effective enforcement activities.

142. Surveillance and law enforcement are crucial to the effective control of destructive fishing and overfishing. The provincial and district fisheries services in the four Project provinces, in cooperation with the Navy and with assistance from organized coastal communities and deputized fisheries enforcers, will take the lead in the implementation of coastal fisheries law enforcement activities. The Project will provide: (i) patrol boats, two-way radios, and computers to the fisheries services; (ii) organization of coastal fishers into surveillance and enforcement task forces; (iii) training on the procedures of apprehension, preservation of evidence of illegal fishing, and coordination with the Government and legal groups; and (iv) legal support and analytical test equipment and facilities to local law enforcers.

143. A nationwide public information and education campaign (IEC) on the CFRM will be designed and implemented for the conduct of relevant activities by training institutions as well as the consultants and concerned agencies of the National Government and local governments. The IEC will also focus on the identified target groups, including coastal communities, LCOs, and officials of the National Government and local governments as well as planners who are involved in CFRM activities. At the national level, the IEC will be implemented to raise public awareness of CFRM issues and concerns; and the need to sustain coastal and fisheries resource management for present and future generations. At the local community level, the IEC will aim to increase awareness and appreciation of coastal fishers and other nonfishing groups in the communities on (i) the importance of the coastal fisheries resources, (ii) the need for resource conservation and management, and (iii) their role in CFRM as day-to-day resource managers and resource users.

144. The nationwide IEC will disseminate information on CFRM through the media, including spot radio announcements, television public service announcements, advertisements in newspapers and magazines, and special events. A national education campaign called *Cinta Laut* (Love the Sea) will be undertaken to raise awareness among the public on the importance of coastal fisheries resources and habitats, and the need for their conservation and management.

Community Development and Poverty Reduction

145. The Project will promote nonfishing income-generating activities and improve the existing social infrastructure in the Project sites. It will aim to wean coastal fishers away from fishing

activities and, subsequently, reduce dependence and pressure on the coastal fish resources. The component will consist of: (i) community organizing and social preparation; (ii) development and implementation of microenterprise, agribusiness, and income diversification projects; and (iii) improvement of infrastructure facilities for social services, i.e., village road, water supply and drainage, waste disposal system, public toilets, and village health center. The credit requirements for financing alternative livelihood schemes will be provided by ongoing mainstream financial sector schemes (see para. 54).

a. Community Organizing and Social Preparation

146. The success of the Community Development and Poverty Reduction component will depend to a large extent on an effective community organizing and social preparation strategy. Coastal fishers in the target communities will be organized into self-reliant cooperatives, associations, and groups. They will be given training on various Project activities, including: (i) capacity building, cooperation, and value formation; (ii) credit access, management, and utilization; (iii) microenterprise and livelihood development, and management; and (iv) savings mobilization and capital buildup. The LCOs will conduct social preparation. Their accreditation under the Project will be based on the following criteria:

- (i) proven track record in community organization and social preparation;
- (ii) competence in social and development work at the grassroots level;
- (iii) extensive experience in microcredit management and microenterprise development;
- (iv) continuous operation over the last five years;
- (v) capacity and resources for sustainable operations with or without the Project;
- (vi) outreach capacity to service Project areas; and
- (vii) agendas or constitutions in line with Project goals.

147. Social preparation will include (i) poverty mapping, perception, and problem analysis using participatory rapid appraisal techniques and determination of alternative solutions to current problems affecting coastal communities; (ii) technical service and advice, and skills training on potential occupational diversification opportunities, project development, and business and financial management; (iii) linking organized fishers with existing formal sources of credit and a savings mobilization program; and (iv) introduction and implementation of microenterprise and income diversification projects in the coastal communities. The social preparation and development process will be continuously carried out during and after Project implementation.

b. Development of Microenterprise and Income Diversification Projects

147. After the initial social preparation, local government agencies for community development, in collaboration with the LCOs, AAET, Agriculture Extension Center, small enterprise cooperative extension services, and extension agents of the provincial and district fisheries services, will:

- (i) assist organized cooperatives and associations in identifying, developing, and implementing microenterprises and alternative livelihood projects, e.g., nonfishing or land-based agricultural production, livestock, mariculture, hatcheries, handicraft, processing, and ecotourism;

- (ii) provide fishers with extensive technical support services, e.g., training and extension services;
- (iii) promote group savings mobilization;
- (iv) link potential fisher-borrowers to existing formal microfinancing schemes that may provide financial assistance for their livelihood projects; and
- (v) provide marketing assistance to ensure long-term outlets for the outputs of the livelihood program.

149. To improve the eligibility of the Project-assisted microenterprises and alternative livelihood activities for funding by existing microfinancing schemes, agricultural extension workers and the LCOs will train the organized communities in credit management and utilization, and business management and operation. Information on existing microfinancing schemes in the Project provinces, including their funding criteria, will be collected by DGF and made available to the communities. Extension workers and the LCOs will assist the communities to identify suitable microfinancing schemes for their activities, and to prepare proposals for funding from such schemes. They will assist the community groups to link up with the existing schemes. Some of the existing schemes include the (i) Income Generating Project for Marginal Farmers and the Landless, (ii) Microcredit Project; and (iii) provincial venture capital companies. A brief description of each scheme is given in Appendix 3.

c. Improvement of Social Infrastructure

150. Fishing communities are disadvantaged because of their lack of basic infrastructure, and isolation from social services and markets as a result of poor access roads. The Project will provide selected fishing villages⁶ with better access to social facilities and services through: (i) improvement of basic village-to-market roads in each site; (ii) installation of clean water supply facilities to benefit about 30,000 fishing households in the four sites; (iii) construction of about 10 km of drainage system, 120 units of public toilets, 120 units of waste disposal systems, and 35 meeting halls for the coastal communities; (iv) preparation and linkage of communities for effective participation in existing Government housing credit schemes; and (v) strengthening of the village health center in each coastal community. Improvements in social infrastructure and facilities will be undertaken by the local government agencies for community development; public works (Dinas Pekerjaan Umum Tk II); and public health (Dinas Kesehatan Tk II); assisted by the LCOs; the coastal communities will be encouraged to provide labor for undertaking the social improvement activities.

III. Implementation Approaches

151. The Project will adopt the following approaches in implementation: (i) use of a participatory approach by which coastal communities will have the opportunity to organize themselves (with the assistance of local government agencies and the LCOs), identify their specific needs, and plan and implement their community-specific fisheries resource management and enterprise development programs; (ii) flexible implementation of Project activities at each Project site by determining alternative approaches based on the needs of specific coastal

⁶ The villages will be selected based on the results of the socioeconomic assessment during Project implementation. To avoid overlaps, the villages included under Presidential Instruction for Underdeveloped Villages will not be selected for the Project component.

communities; (iii) capacity building of the agencies of the National Government and the local governments in the fisheries sector, LCOs, and coastal communities to respond to the development needs of coastal communities; and (iv) establishment of closer cooperation and coordination between agencies of the National Government and local governments, and the LCOs within the context of their defined Project roles and responsibilities.

Coastal Fisheries Resource Management

152. DGF and the provincial and district fisheries services will be primarily responsible for this component. The PCO of DGF, with assistance from concerned directorates of DGF and the Project consultant, will: (i) contract and supervise organizations responsible for the REA and SEA studies; (ii) provide technical advice in CFRM planning and implementation of CFRM activities; (iii) strengthen the existing MCS system (procure equipment and contract MCS consultants); and (iv) conduct a nationwide IEC on fisheries and coastal resources management. The district fisheries services in collaboration with other local government agencies, the LCOs, and coastal communities will be responsible for (i) preparing site-specific CFRM plans based on the REA and SEA results; (ii) implementing the CFRM plans at each site; and (iii) implementing the MCS system and local IEC.

Community Development and Poverty Reduction

153. Community organizing and social preparation activities will mainly be contracted to the LCOs, which will coordinate with the respective agency for community development and PIU at each site. The provincial and district fisheries services, provincial agricultural extension centers, AAET, small enterprise cooperative extension services, and financial institutions will provide extension services to microentrepreneurs on the technical and financial viability of alternative livelihood and microenterprise projects, as well as advisory services to ensure that potentially viable investments are consistent with provincial and district development plans. The improvement of the social infrastructure, i.e., village-to-market roads, water supply and drainage facilities, will be undertaken by the district public works, while the construction of day-care centers, community meeting and recreation halls, restrooms, and waste disposal facilities will be carried out by each community assisted by the LCOs.

IV. Social Analysis

154. The Project is designed to have a strong social dimension, emphasizing beneficiary participation at each stage. The Project will provide poverty reduction measures and alternative income-generating opportunities to enhance the quality of life of coastal communities. To ensure the success of the Project, the participatory approach was used in its preparation to enable the LCOs, and coastal communities, particularly women, to participate in the Project design and implementation. Rapid social assessments, village-level consultations, and participatory workshops with fisherfolk in selected villages of the selected sites were conducted during the Project preparation.

155. The Project will target as its primary beneficiaries those households with annual incomes up to Rp600,000, composed mainly of small fishers, fishfarmers, fish processors, and workers in the fishing industry and allied fields. Approximately 45 percent of the households in the four sites are poor fishing households living at or below the poverty line, with incomes ranging from Rp150,000 to Rp256,000 per capita per annum. Approximately 48 percent of the households

have somewhat higher incomes of Rp256,000 - Rp600,000 per capita per annum. These will form the target beneficiaries under the Project. The remaining 7 percent earning higher incomes and consisting of a few landowners, vessel and plant owners, as well as skippers of large vessels and owners of fish processing enterprises, will not form part of the Project beneficiaries.

156. A preliminary assessment of the needs of the poor fishers revealed differences in needs and constraints, thus requiring that group specific strategies be developed under the Project. The Project will thus develop specific strategies to assist the target groups among the poor in these communities, based on their specific felt needs and priorities. Participatory approaches will be used to facilitate maximum stakeholder participation and ownership of the objectives and strategies identified under the Project. Depending upon the needs and constraints thus identified during the phase of social preparation, strategies to develop community organization, training and assistance to develop supplementary/alternative livelihood skills, development of microenterprise project proposals, effective access to credit, technical and marketing support, and improved access to social infrastructure will be developed and implemented.

157. The social assessment studies show the significant contribution made by women of the coastal fishing communities to the economic activities of their families and community, as well as to the sustenance of their families through their subsistence activities and caregiving. Women of different strata among the sample communities work as fish buyers in auction halls, traders, transports, retailers, workers and owners in fish processing, net weavers etc. In some instances, women are organized in informal groups that are engaged in chit funds and credit activities. Women are also primarily responsible for household work. The poorer fisher households are critically dependent upon women's income, particularly during the absence of the men. Women are involved in household decision making and have the potential to become a significant social force in the community. Women do not have adequate access to the means of production, principally land and capital, to expand their activities. Lack of infrastructure and capital has constrained improvements in fish trading, as well as fish processing activities at the Project sites. Promoting women's organization into informal groups for savings, microenterprise development, credit and training, and marketing, is expected to impact positively on women's socioeconomic status, as well as that of their households, through their improved incomes, and greater participation in decision making.

V. Social Dimensions

158. The Project will produce significant social impacts on the coastal communities and benefit everyone in target households of the fishing communities. Some Project activities will benefit all persons in the coastal community, while others will have more impact on specific groups.

159. Physical infrastructure improvements will initially benefit boat owners and fish merchants, but the increase in value they will facilitate for fresh and frozen fish will trickle down for the betterment of all fishery workers. Consumers will benefit from greatly reduced chances of food poisoning and the higher protein value of fish products. Several programs will increase the incomes of fishers in the short term through improved quality, and in the long term, through the facilitation of resource sustainability.

160. The Community Development and Poverty Reduction component will facilitate and increase the availability of financial assistance and complementarily support social and technical training/services. It will subsequently address the problem of inadequate income-enhancing opportunities confronting fishers families and enable them to engage in diversified microenterprise

activities other than those related to the capture fishery. Additional benefits and income expected from microenterprise projects are estimated to be Rp7.9 billion annually based on the calculation of representative microenterprise. Women fish processors will also be the direct beneficiaries of the hygienic fish-drying facilities to be established. Fish processors and fishers are expected to have an increase in income from the shark, seaweed, and bait processing units to be established at Project sites. The small fish processors and small-scale fishers who rank among the low-income groups in the community will benefit greatly from access to microenterprise credit through cooperatives and to the technical services under the Project.

161. The Project will contribute significantly to the improvement of health and personal well-being of the community residents as social infrastructure facilities and support services are made available and are readily accessible to all intended beneficiaries. The low-cost housing support will facilitate quality homes of simple construction with access to clean water, drainage, and electricity, bringing the most benefit to households living below or immediately above the poverty line, many of whom live in a degree of squalor in some of the fishing villages.

162. Community education and social preparation will raise the awareness of low-income fishers and prepare them to access credit and technical services or to improve their incomes and living standards. Community children will be educated in environmental awareness and basic marine science; this will equip them to build on the Project programs of resource management and environmental protection. The women in the coastal communities are expected to also benefit from the various interventions meant to raise their status in the community and empower them to be equal partners with the men in their households and communities, and make even greater contributions not only to income generation but also toward the promotion of programs, practices, and services concerning health, hygiene, and sanitation.

163. In summary, the Project has significant gender and development objectives to empower women through organization, training, credit, and livelihood support. As women are considered important stakeholders, the Project interventions are designed to enable the women to become full participants in, and beneficiaries of, the Project, and ensure sustainable resource management, social progress, and enhanced family welfare as well.

B. Philippines: Coastal Communities Development Project

I. Rationale

164. The Project will address the two critical and interconnected issues of fisheries resource depletion and persistent poverty among municipal fisherfolk. Fisheries resource depletion is the fundamental cause of the declining income from fishing which, in conjunction with lack of alternative livelihood in remote fishing villages, contributes to intensified poverty among municipal fisherfolk. Such intensified poverty, in turn, imposes increasing pressure on overfishing and environmental degradation, resulting in a vicious cycle of poverty and environmental degradation.

165. The Project will focus on reversing the trend of fisheries resource depletion by controlling illegal fishing and overfishing. In particular, the control of destructive fishing, although affecting the livelihood of those who conduct the illegal activities, will immediately reduce damage to fish stock and fish habitats, check the trend of fisheries resource depletion, and protect the basic livelihood of the majority of poor fisherfolk. Control of overfishing will be more

difficult. The Project will adopt a gradual approach that will: (i) reduce the level of user competition by restricting new entrants to municipal fisheries through fishing licensing;⁷ (ii) reduce fisherfolk's reliance on fishing by promoting income diversification, which may reduce their fishing time and change them from full-time to part-time fisherfolk; and (iii) through the promotion of mariculture and the development of other commercial enterprises in the long term, facilitate the gradual exit from fishery of some fisherfolk, although slowly and in limited numbers.

166. The Project represents the Government's efforts to shift the sector focus from increasing capture fisheries production to fisheries resource protection, conservation, and sustainable management. It reflects the demand of municipal fisherfolk for public assistance to protect their basic livelihood, and the national and local governments' concern over poverty and environmental degradation. Although the sector issues today are basically the same as they were six years ago when the FSP was formulated, the environment for Project implementation has been substantially improved, because: (i) the FSP initiatives to keep fishing efforts within sustainable yield levels have been adopted as Government policies; (ii) the CRM concept has been widely accepted; (iii) institutions for CRM have been established at local levels; and (iv) experience on CRM, law enforcement, and income diversification has been accumulated by fisherfolk, LGUs, the Government, and the Bank. The FSP-PMO and DA-RO have successfully implemented the FSP and accumulated extensive experience in CRM implementation and project coordination, which will be an important institutional factor in the successful implementation of the Project.

167. The Project is based on the foundation laid down by the FSP as well as various programs initiated by local communities and LGUs on fisheries resource management and income diversification. Incorporating lessons learned from these projects, the Project will strengthen fisheries resource management on the one hand, and promote income diversification for municipal fisherfolk on the other. These tasks make it necessary to strengthen the capacity of government agencies in charge of fisheries management, especially LGUs, which have been granted authority in municipal fisheries management, but lack technical and managerial capabilities.

II. Objectives and Scope

168. The long-term goals of the Project are to achieve sustainable development of the fisheries sector, and reduce poverty among municipal fisherfolk. The primary objective is to reverse the trend of fisheries resource depletion in municipal waters. The Project comprises three components, namely: (i) fisheries resource management, (ii) income diversification, and (iii) capacity building. Geographically, the Project will cover 18 priority bays, comprising 11 FSP bays and 7 new bays.⁸

⁷ Restricting new entrants to municipal fisheries is justified given the already over exploited fishing grounds, as municipal fisheries can no longer afford to be the livelihood of last resort. The increasing labor force has to find employment in other sectors, which is possible given the improved performance of the economy.

⁸ The seven new bays will be Honda Bay, Puerto Princesa Bay, Davao Gulf, Lingayen Gulf, Gingoog Bay, Butuan Bay, and Sapián Bay. The new bays are included in view of the widespread illegal fishing and overfishing in the non-FSP bays, the urgent need to expand the successful FSP activities, and a realistic estimate of the institutional capacity of the EA/IA. The 11 FSP bays are Calauag Bay, San Miguel Bay, Tayabas Bay, Ragay Gulf, Lagonoy Gulf, Sorsogon Bay, Carigara Bay, San Pedro Bay, Ormoc Bay, Sogod Bay, and Panguil Bay. The FSP bays are included in view of the need to sustain the momentum created under the FSP. The Manila Bay, which was an FSP bay, will be excluded from the Project because of (i) the complexity of the problems in Manila Bay, which deserves

A. Fisheries Resource Management

169. This component aims to strengthen fisheries regulations, rationalize the utilization of fisheries resources, and rehabilitate the damaged fish habitats. This component comprises five interrelated elements of (i) data management, (ii) CRM, (iii) fisheries regulation, (iv) community-based law enforcement, and (v) regional coordination.

(i) Philippine Fisheries Information System (PHILFIS)

170. PHILFIS, which was developed under the FSP (see para. 15), will be fully operationalized under the Project. This component will start with a review of the current operation of PHILFIS. With assistance from consultants engaged under the Project and active participation of PHILFIS staff, the review will identify areas for improvement, develop and implement plans to fully operationalize the system, and sustain its operation after Project completion.

(ii) CRM Planning and Implementation

171. An IEC will be launched to elicit active participation of various stakeholder groups, especially municipal fisherfolk, in CRM planning and implementation. Replicating the FSP experiences, the IEC will be conducted at both the national and local levels. Resource and social assessments (RSAs) will be conducted to collect baseline information on the status of the ecosystems and their resources for CRM planning and Project monitoring. The RSA will include rapid social appraisals to collect socioeconomic data, including gender-disaggregated indicators, on the target beneficiaries. The RSA will be repeated in all Project bays once every two years to form a valuable time-series database.

172. With information collected from the RSA, CRM plans will be developed in the new bays and updated in the old bays, with active stakeholder participation through various consultation workshops. Guided by the CRM plans, resource rehabilitation will be implemented in all bays, which, depending on the local situations, may include establishment of fish sanctuaries, and mangrove reforestation and management. In conjunction with CRM planning, a monitoring system for CRM will be established with clearly defined goals, objectives, measuring indicators (including gender-disaggregated ones), reporting system, and benchmark information collected through RSAs. It is expected that at the end of the Project, CRM planning will have been integrated into local (provincial and municipal) development plans.

173. To facilitate CRM planning, a Geographic Information System (GIS) will be installed in BFAR. Employing imaging software, GIS will incorporate different data sets on maps, providing a consolidated view of pertinent information for a particular area. CRM planners will then take the output to determine the various uses in the subject area, their possible impact on different habitats, potential resource use conflicts, and identification of zonation parameters.

174. A new approach will be pilot-tested in Puerto Princesa City to integrate CRM planning in coastal areas with environmental protection in upland areas. Under the integrated approach, land and water use plans upstream will be made compatible with coastal land and water use downstream, with a view to controlling land-based pollution and siltation that impact on nearshore fish habitats. Since this integrated approach will involve various actors across multiple

a separate project to address the cross-sectoral issues; and (ii) the low priority given to the fisheries sector by LGUs in Manila Bay, which implies low commitment to Project implementation.

sectors (including industry, urban development, agriculture, forestry, tourism), pilot testing in one LGU is necessary to obtain experience, especially in interagency coordination. The selection of Puerto Princesa City as the pilot site is based on (i) the previous experience in implementing resource management projects involving multisectoral agencies, and (ii) the strong commitment to environmental protection and natural resource management of the local government.

(iii) **Fisheries Legislation and Regulations**

175. Fisheries legislation and regulations will be strengthened at the national and local levels. At the national level, DA will exert its utmost efforts to facilitate the enactment of the draft Fisheries Code (see paras. 34, 35, and 42), by engaging in frequent dialogue with Congress. Furthermore, DA will issue the necessary regulations to implement the revised commercial fishing licensing system by the end of June 1998, and impose a moratorium on the issuance of new licenses to commercial fishing vessels less than 250 grt by the end of October 1998 (see para. 44).

176. At the local level, LGUs in the Project areas will enact their own municipal ordinances, in line with the Model Comprehensive Municipal Fisheries Ordinance prepared by BFAR, and in close consultation with various stakeholders, including NGOs and fisherfolk organizations. The enactment of the Comprehensive Municipal Fisheries Ordinance will enable LGUs to implement the policy reforms on regulating fishing efforts in areas under their jurisdiction. LGUs will also implement the municipal fishing licensing system that has been pilot-tested in Puerto Princesa (see para. 45). An IEC as well as community development activities will motivate stakeholders' support for, and participation in, the establishment of the licensing system.

(iv) **Community-based Law Enforcement**

177. Successful FSP experiences in community-based law enforcement will be continued in the FSP bays and introduced in the new bays. LGUs in the new bays will set up their Fisheries Law Enforcement Team (FLET) comprising LGU staff and fisherfolk who will be deputized as fish wardens. With patrol boats and communication equipment provided by the Project and active participation of fisherfolk, FLET will patrol municipal waters on a regular basis, their presence serving as a deterrent to illegal fishing. LGUs will also set up a Coast Watch System at the village level, where village heads and fisherfolk will report illegal fishing activities to FLET with communication equipment provided by the Project. To improve law enforcement through successful prosecution of cases and an increase in conviction rate, FLET members will be trained in procedures for apprehension, preservation of evidence of illegal fishing, reporting and coordinating with Government agencies. Legal seminars will be organized where local judges and prosecutors will analyze typical cases in which conviction for illegal fishing has resulted, with a view to familiarizing themselves with fisheries laws, and improving decisions on similar cases.

(v) **Monitoring, Control, and Surveillance (MCS)**

178. MCS is a relatively new concept designed to integrate the various elements of fisheries resource management into a three-tiered system of data collection (monitoring), legislation (control), and enforcement (surveillance). The design of the Philippine MCS system has been completed, including database management, fisheries licensing, and law enforcement in both municipal and offshore waters. The MCS investment plan includes the setting up of one national and eight regional MCS coordination centers. The Project will support the Government's efforts in MCS implementation by (i) strengthening data management through PHILFIS, (ii)

strengthening fisheries legislation and licensing systems, and (iii) strengthening law enforcement in municipal waters. This subcomponent will provide support for regional coordination in data management, legislation, and surveillance in municipal waters through the establishment and operation of four MCS centers, comprising a national center located in BFAR and three regional centers located in Davao, Carigara, and Puerto Princesa.

179. To strengthen the control on cyanide fishing, five cyanide detection test (CDT) laboratories will be established under the Project in strategic locations: three major international airports in Manila, Cebu, and Davao, and two major live fish production areas in Puerto Princesa and Coron in Palawan. The CDT will detect cyanide in fish tissues and organs taken from samples of live fish destined for export. Existing laboratories in the Philippines are supported by BFAR in coordination with the International Marinelife Alliance, an international NGO. After the full operation of the CDT laboratories, the Government will adopt CDT as an enforcement tool for all live fish exports.

B. Income Diversification

180. The establishment and implementation of the fisheries resource management systems will be facilitated by the promotion of income diversification under this component. Although the short-term objective of this component is to provide municipal fisherfolk with supplementary income and reduce their reliance on fishing, its long-term goal is to facilitate the gradual exit of marginal fisherfolk from fishing, albeit slowly and in limited numbers. This component will involve three interrelated activities: community organizing, promotion of microenterprises, and support for mariculture development.

(i) Community Organizing

181. Community organizing will initially focus on social mobilization of fisherfolk. Its ultimate goal is to establish and strengthen community groups that are saving-based and self-reliant, capable of carrying out CRM activities and income diversification on a long-term basis. The community groups established under the Project will: (i) serve as self-sustaining financial intermediation in the remote rural areas to mobilize savings and provide microcredit to municipal fisherfolk; (ii) enable their members to engage in microenterprises and mariculture projects through internal savings and access to credit; and (iii) mobilize coastal communities to be active stakeholders and participants in CRM and fisheries law enforcement activities.

182. Incorporating lessons learned from the FSP, the Project will focus on capacity building for municipal fisherfolk. Experienced nonprofit organizations (NPOs) with proven records in developing self-reliant groups will be engaged under the Project. NPOs will recruit and train full-time community organizers (COs) to conduct social mobilization in the Project areas, with support from LGUs in the areas concerned. A participatory approach will be adopted, where COs will assist prospective community group members to analyze their problems and opportunities. Study tours will be organized to provide prospective community group members with exposure to successful group formation such as cooperatives. Subsequently, mutual-help groups will be organized among the prospective members. Initially, these organizations will be informal and flexible, including savings and credit groups, women groups, and various fisherfolk associations. COs will train the group members in savings mobilization, bookkeeping, management of small business. The groups may later mature to become cooperatives with legal status if their members so desire. The groups will be encouraged to join existing regional and national cooperative

federations that have been successful, with a view to obtaining technical support and access to the cooperative credit network on a long-term basis. In addition to training leaders in group administration, the COs will regularly visit the newly formed groups for at least three to five years to provide them with on-site coaching. The training and coaching will build up the capacity of the groups to sustain their operation. Starting from the third year of community development, a phaseout scheme will be carefully planned and implemented to gradually reduce the reliance of the new groups on COs. Continued training and technical support, however, will be provided with beneficiaries sharing the training costs.

183. Most groups established under the Project will focus on providing savings and credit services to their members. The members will be trained to develop savings habits, and will be entitled to borrow in a prudent debt/equity ratio, usually at a conservative level of 2:1. Initially, the groups will rely primarily on their internal savings. Upon maturity in terms of capacity to manage their loans and business, the groups will be able to borrow from the formal banking systems such as the LBP or other existing credit facilities, including the \$33 million credit line established under the FSP (see para. 16) and the credit facilities established under the Rural Microenterprise Finance Project.⁹ The Project will therefore not provide any credit funds.

(ii) **Promotion of Microenterprises**

184. In conjunction with community development, the Project will promote microenterprise development among fisherfolk. To be financed by savings and microcredit from the groups formed under the Project, the microenterprises may include small village shops, swine and poultry raising, handicrafts, mat weaving, and sewing. Revenues from the microenterprises, although small and insufficient to substitute for income derived from fishing, will substantially improve the living standard of the fisherfolk who currently live in poverty. These activities will also diversify their income sources, reduce their reliance on fishing, and thus facilitate the implementation of resource conservation and protection measures.

185. To secure a healthy policy environment for the formation of self-reliant groups and promotion of microenterprises in the Project areas, special training will be given to all Project implementors and LGUs. At the start of the Project, all Project implementors at the national, regional, and local levels will participate in orientation seminars on successful formation of self-reliant groups. The common view to be developed is that the groups should be formed by people to pursue common goals through self-help and mutual assistance instead of relying on external aid or Government sponsorships. Consequently, LGU leaders will be trained in prudent use of resources in microenterprise activities. They will be reoriented to support the following principles: (i) the groups or their members' enterprises should not be funded by grants or soft loans so as to avoid dependence on unsustainable financing sources; and (ii) grants or soft loans from governments or other sources may be channeled to capacity building, technology transfer, environmentally sound infrastructure (such as farm to market roads), or other community needs, but not for enterprise financing.

(iii) **Support for Mariculture Development**

186. The Project will support transfer of technology for mariculture development and for other commercial enterprises in the Project areas to generate nonfishing employment for municipal

⁹ Loan No. 1435-PHI: *Rural Microenterprise Finance Project*, for \$20 million, approved on 23 April 1997.

fisherfolk in the long term. As a first step, an inventory of prospective mariculture technologies will be developed by BFAR and other research and extension agencies. Technically mature and environmentally sound technologies will be selected and categorized according to status of development. For technologies that are proven to be commercially viable and environmentally benign, such as seaweed production, the Project will finance on-site verification in prospective areas, with a view to accelerating the expansion of the technologies in suitable areas.

187. For technologies that are technically mature but lack market research and feasibility studies, the Project will accelerate their development by conducting market research and feasibility studies. The studies may include (i) demand estimates, (ii) marketing channels, (iii) input sources, (iv) cost-benefit analysis, and (v) environmental impact assessment and monitoring measures. Findings of the studies will be widely disseminated as part of the IEC, so as to attract private investors. For technologies that are financially viable and environmentally sound, the Project will finance pilot testing of their transfer to the farm level, with a view to developing a package that is suitable for small-scale family operation by municipal fisherfolk. Partnership of research institutes with private investors and/or community groups will be promoted. Similarly, research institutes will provide technical inputs to pilot-test the small-scale technologies through demonstration farms established for the purpose. After successful pilot testing, the demonstration farms will be transferred to the private investors and/or community groups such as cooperatives, which will finance the continued operation of the farms.

188. Extension systems will be established to support mariculture development through the joint efforts of BFAR, DA-RO, and LGUs in the selected Project sites. Extension workers will initially come from the DA-RO and provincial agricultural offices, which have more fisheries technicians than the municipalities. Special efforts will be made to ensure that women have equal access to the extension services. While the Project will finance the extension system during the Project period, cost-sharing schemes will be developed, pilot-tested, and expanded, with a view to achieving self-financing of the system in the long run.

C. Capacity Building

189. The Project will (i) strengthen the capacity of the EA/IA in Project implementation; and (ii) build up the capacities of government agencies at the national, regional, and local levels for fisheries resource management in the long term. To achieve the dual objectives, a two-tier strategy will be adopted: (i) provide training courses and seminars to the implementors, and (ii) provide on-site coaching in actual Project implementation. The first tier involves traditional classroom training covering CRM planning; fisheries law enforcement; fishing licensing; project management, monitoring and evaluation; community organizing; participatory approach; and gender sensitivity training. The training will include domestic courses as well as short-term courses and master programs abroad to implementors at the national level, and CRM and management training to regional-level Project implementors. The second tier entails periodic coaching on problem solving to address issues arising during Project implementation, including quarterly national workshops for PIU staff, and monthly regional workshops for FMU staff. This dual approach aims to train and develop good decision making and problem-solving skills.

190. To further strengthen the BMCs in the FSP bays and extend them to the new bays, studies will be conducted under the Project to review the performance of existing BMCs and FARMCs. With technical assistance from the Project consultants and active participation of BMC and FARMC members, the reviews will clarify the relationship between these two councils, their

respective roles, mandates, structure, operational mechanisms, staff, and financial mechanisms. BMCs will be a forum for dialogue among LGUs on baywide resource management issues rather than another layer of government with authority over individual LGUs. BMC members will be given training in leadership, negotiation skills, and consensus building. Study tours will be organized to provide successful BMCs with new exposure experiences. The Project will introduce necessary incentives for the BMCs, such as award programs for exemplary performance of LGU leaders in CRM and law enforcement. To sustain the operation of BMCs in the long run, their cost will be kept to a minimum, with the DA-RO concerned serving as their secretariat.

191. For pragmatic considerations, the Project will adopt a "learning process" approach for capacity building. The Project will be implemented in about 100 municipalities in 18 bays with disparate capacities. The institutional capacity of the EA/IAs as well as the communities will be built up through experiences during Project implementation. For example, formation of self-reliant community groups is a new concept to DA and LGU staff, as most of them are used to the traditional approach of distributing financial assistance (subsidies or grants) to beneficiaries. Pilot testing of the new approach in organizing self-reliant groups is necessary to gain successful experiences. The Project will therefore start in about 20 municipalities in Year 1 so that, on average, each DA-RO will be responsible for coaching and monitoring only two LGUs. Obtaining experiences and confidence, the Project will be implemented in 40 municipalities in Year 2, and in all 100 municipalities starting in Year 3.

III. Implementation Arrangements

A. Project Management and Coordination

192. The Department of Agriculture will be the Executing Agency. BFAR and each DA-RO concerned under DA will be responsible for Project implementation at the national and regional levels, respectively. Before loan effectiveness, a Project Management Office will be set up in BFAR to be responsible for day-to-day Project implementation, coordination with various agencies, and liaison with the Bank. PMO will have adequate and qualified staff from FSP-PMO and BFAR, and be headed by a Project Director, who will report to the BFAR Director. The Department of the Interior and Local Government (DILG) will assist DA in facilitating coordination among LGUs, especially in matters relating to policy, legislation, and LGU training. An agreement between DA and DILG will define their respective responsibilities and working relationship under the Project.

193. A Project Implementation Unit (PIU) will be established within the DA-RO in each region covered by the Project, with responsibilities similar at the field level to those of PMO, including the provision of training to and coaching of LGUs. The PIUs will be set up before loan effectiveness, and will be headed by the Assistant Regional Director for Fisheries of the DA-RO concerned. At the municipal level, an LGU participating in the Project will sign a MOA with DA-RO to clearly define their working relationship and respective responsibilities under the Project, including an undertaking for the setting up of a Fisheries Management Unit (FMU) at least one month before Project implementation in the municipality concerned. For the 20 municipalities to be included in Project implementation in Year 1, FMUs will be set up before loan effectiveness to carry out Project preparation. FMUs will receive technical training and coaching from the relevant PIU, and will report to such PIU on Project implementation in their respective municipalities. While the Project focuses on municipal LGUs, relevant provincial governments will participate in the Project, coordinating LGUs in Project policies and training and provide

necessary technical support such as extension services. PIUs will provide technical assistance and support to the FMUs within their respective regions.

194. A Project Steering Committee (PSC) will be established by DA immediately after loan effectiveness to exercise supervisory responsibility for Project implementation. The PSC will be chaired by the DA Undersecretary for Fisheries, and comprise senior officials from the National Economic and Development Authority, the Department of Finance, the Department of Budget and Management, DA Planning, DILG, the Department of Environment and Natural Resources, and the directors of BFAR and PMO. Selected LGUs, NGOs and other project participants will be invited from time to time to attend PSC meetings on issues relating to Project implementation. The PSC will meet as frequently as needed to review the progress of Project implementation, formulate solutions to impediments to Project implementation, and recommend policy actions. Appendix 4 shows the organizational structure of Project implementation while Appendix 5 describes Project implementation arrangements in detail.

B. Selection of Project Sites

195. The selection of the 20 municipalities to be included in Year 1 will be completed before loan effectiveness. Candidates from the selected municipalities have been invited to LGU orientation workshops. Organized by BFAR and DA-RO, the workshops presented the Project design to LGUs, discussing with them the Project implementation details, including the criteria for selecting Project sites, and clarifying with them the roles and responsibilities of LGUs in Project implementation. Given the critical role of LGUs in Project implementation, LGU selection primarily focuses on the capacity of an LGU and its firm commitment to Project implementation. Such commitment is manifested by: (i) inclusion of a CRM plan in the municipal development plan with high priority; (ii) an MOA expressing the LGU's firm commitment to Project implementation; (iii) allocation of counterpart contributions for Project implementation in the municipality;¹⁰ and (iv) setting up of an FMU with at least one full-time staff in charge of Project implementation. The number of FMU staff may increase later on as necessary.

C. Beneficiary Participation

196. The Project envisions active participation as the key to strong Project ownership among stakeholders, especially LGUs and fisherfolk. During Project preparation, the stakeholders participated through social surveys and village-level group discussions. Stakeholder representatives, including NGOs, attended national and regional consultation workshops. Endorsements for the Project came from ten Regional Development Councils where the Project will be implemented. Detailed Project design and implementation arrangements were further discussed with prospective Project implementors as well as LGUs and fisherfolk during field visits. To further institutionalize beneficiary participation in Project implementation and monitoring activities, consultation with fisherfolk and NGOs through social surveys and village-

¹⁰ The required amount of counterpart contribution will vary by municipality based primarily on ability to pay. Specifically, the 4th-6th class municipalities will be required to share 20 to 30 percent of the direct Project costs in their municipalities. The 2nd-3rd class municipalities will share 30 to 40, and the 1st class municipalities, 40 to 50 percent of the direct Project costs in their respective municipalities. The remainder of the Project costs will be shared by the National Government on a grant basis. Considering the strong positive externality in fisheries resource protection and conservation, in which the efforts of one municipality would not be effective without the participation of adjacent municipalities bordering the same bay/gulf, financial incentives in the form of National Government grants are necessary to encourage LGU participation in the Project.

level group discussions will become an important component of the RSA to be conducted regularly in the Project areas. Before the Project starts in a particular municipality, local-level consultation workshops will be held to discuss detailed Project implementation plans with the concerned LGUs, fisherfolk, and NGOs. The regular reports from PMO, PIU, and FMU on Project implementation and monitoring, and the annual performance evaluation of the implementors will include sections on beneficiary participation. The PSC, BMCs, and FARMCs will also be venues for stakeholder participation in decisions relating to Project implementation and monitoring.

197. NGOs will play a key role in Project implementation and monitoring. In the field, NGOs will be engaged to participate in community development, motivating fisherfolk in CRM, law enforcement, and income diversification activities. Social intervention at a Project site will start with a rapid community appraisal to determine the presence and effectiveness of existing community organizations, if any, or the impact of recent social intervention activities conducted by LGUs, other government agencies, or NGOs. Community development plans will be based on the findings of the appraisal. Efforts will be made to collaborate with NGOs that already operate in the Project areas, so as to avoid conflicts or a split among NGOs and fisherfolk organizations. NGO representatives will participate in Project decision making through their attendance at PSC meetings at the national level, and representation in the BMCs and FARMCs at the village, municipal, and bay levels.

D. Implementation Approach

198. The Project will be implemented in six years, 1998-2003 (see Appendix 6 for details). Given the multiple tasks to be implemented at the municipal level, the various activities must be integrated into an internally consistent package, with proper priority and sequencing. Project implementation in a particular municipality will involve three steps.

199. The first is to control illegal fishing through IEC as well as the establishment and strengthening of FLET and the coast watch system. These measures will have the highest and immediate economic benefits and the lowest social costs, and will therefore be implemented in Year 1. Fisheries law enforcement will be strengthened to reduce damage to fish stocks and fish habitats from destructive fishing, and thus mitigate the adverse effects of illegal fishing on the basic livelihood of the municipal fisherfolk. By controlling illegal fishing, LGUs will gain strong support from the fisherfolk, creating a momentum for Project implementation in other areas such as CRM planning and implementation. Starting in year 2, CRM planning and implementation will be carried out; this will contribute to the rehabilitation of fish habitats.

200. The second step is to reduce overfishing by restricting new entrants through the establishment of a fishing licensing system and the imposition of a moratorium on new licenses for municipal fishing boats. To be implemented in Year 3 and Year 4, these measures will also have low social costs. By protecting the fisherfolk from intensified competition due to unlimited entrants, this policy will gain support from municipal fisherfolk.

201. In conjunction with those two steps, income diversification will be carried out to reduce fisherfolk's reliance on fishing. Self-reliant groups will be established to organize fisherfolk, develop their savings habits, and train them in bookkeeping and managing small businesses. With their own savings and access to microcredit, fisherfolk will set up microenterprises. Although small, the supplementary income from the microenterprises will reduce fisherfolk's reliance on

fishing, and permit implementation of resource management measures, such as seasonal closure of fishing areas for fish stock regeneration.

202. Lastly, when (i) the fishing licensing system has become effective (most likely in Year 6); and (ii) sufficient time-series data have been accumulated through regular conduct of RSA, making it possible to estimate the total allowable catch (TAC) for each bay, the existing fishing efforts in terms of fishing boats will be compared with the TAC. If the fishing efforts significantly exceed the TAC in a particular bay, the LGUs concerned may buy out some fishing licenses so as to balance the fishing efforts within the TAC limit. In such cases (which will be beyond the Project period), financial assistance from the National Government may be needed and is justified as it will minimize social costs by encouraging voluntary exit of municipal fisherfolk from fishing. The promotion of mariculture and other commercial enterprises by generating employment opportunities in the Project area may facilitate the gradual exit of a small number of fisherfolk from fishing.

203. The complete control of pollution and siltation from the industry, urban, agriculture, and forestry sectors is extremely difficult. However, the pilot testing of the integrated CRM approach in Puerto Princesa (see para. 56) will provide valuable experience. If successful, such experience will gradually be extended to other municipalities.

IV. Environmental and Social Measures

A. Environment

204. An analysis of the Project's positive impacts on marine resource conservation, and coastal habitat enhancement and rehabilitation is provided in para. 107. An initial environmental examination (IEE) was conducted under the TA and a summary IEE is attached as Appendix 9. The IEE found that the Project will have substantial positive effects on environmental protection and enhancement because it is designed to reverse the trend of fisheries resource depletion and to improve coastal resource management generally. The IEE determined that some mariculture activities, such as fish cage culture, may potentially have small adverse environmental impacts. Such adverse impacts will be avoided or mitigated through appropriate siting, operation, and monitoring. Since the establishment of mariculture operations under the Project will be preceded by a number of preparatory activities to ensure that beneficiaries have the capacity to successfully operate the enterprises, environmental criteria for the selection of mariculture technologies and proper guidelines will be developed during these preparatory phases (which may last for two to four years). Additional IEE studies will be undertaken as part of the feasibility studies and pilot-testing of mariculture enterprises financed under the Project.

B. Social Analysis

205. Major social measures under the Project include mobilizing municipal fisherfolk for CRM and law enforcement activities through NGO assistance, and organizing fisherfolk into community groups to participate in both CRM and income diversification. The Project will not provide credit subsidies nor grants to finance microenterprises for target beneficiaries, but will focus on training fisherfolk to mobilize their internal savings and strengthening them to be self-reliant. The Project will therefore focus on capacity building for the target groups, organizing them into self-reliant groups such as cooperatives, building their savings habits, and training them to be good managers of their own microenterprises and organizations. The Project will also support the transfer of mariculture technologies in the coastal areas, with a view to promoting environmentally sound

and financially viable projects that would provide long-term employment for the target beneficiaries. With "bankable projects" and "bankable borrowers," the Project will link the self-reliant groups with strong national/regional cooperative federations, providing fisherfolk with access to sustainable credit sources such as the cooperative credit network, the LBP, and credit schemes established under various programs. To help the disadvantaged groups, special group discussions will be conducted at the start of Project implementation at a specific Project site to identify the fisherfolk without *bancas* and fishing gears and to develop special measures to ensure that the bottom poor benefit from the Project.

206. Gender concerns will be integrated into all Project activities. At the start of the Project, gender awareness training will be provided to all Project implementors. PMO will tap the services of national or local women resource centers in organizing the training. One staff will be assigned as the gender focal point in PMO and the national coaching team, with responsibility for organizing gender training, coordinating gender-related activities, and ensuring that gender concerns are integrated into all Project activities. Gender-disaggregated data will be regularly collected through social surveys under the RSA and special women studies. Gender indicators will be included in the Project monitoring system, and will become an important element in the evaluation system for PMO, PIU, FMU, as well as contracted NPOs. Women will be encouraged to actively participate in all Project activities, especially in IEC, CRM, the coast watch system in law enforcement, and income diversification. It is anticipated that women will constitute at least 50 percent of the participants in community development. COs engaged in community development will particularly encourage the election of women as group leaders to ensure their active participation in not only community services, but also decision making. Based on the experience in cooperative development in the private and informal sectors, women will play a major role in savings mobilization and microenterprise development. Women will be trained in bookkeeping, managing of small businesses, as well as special technical skills such as sewing. Efforts will be made to ensure that women have equal access to extension services under the Project, such as seaweed production technology. The arrangement of training schedule and venues will take into account women's time constraint in view of their household chores.

V. Social Dimensions

207. The target beneficiaries of the Project are municipal fisherfolk, the majority of whom currently live in poverty, suffering from a declining income from fishing and lack of alternative livelihood. The fisherfolk have shown strong willingness to cooperate with the National Government and the local governments in fisheries resource conservation and protection. The Project directly addresses the fisherfolk's concerns and needs by implementing a set of resource management measures to control illegal fishing and overfishing. All municipal fisherfolk in the Project areas are expected to benefit from the improved fishing environment.

208. The Project will promote income diversification for municipal fisherfolk by organizing self-reliant community groups, promoting microenterprises, and supporting mariculture development. These measures focus on building up the capacity of fisherfolk to mobilize savings and manage their organizations and microenterprises, and will link them with formal banking systems. These efforts are expected to yield sustainable financing intermediation in the remote fishing villages, capable of generating savings and providing microcredit to marginal fisherfolk to facilitate the development of microenterprises. By giving special attention to vulnerable groups, the Project is expected to foster equity among Project beneficiaries.

209. Women in the Project areas play an important role by engaging in preharvest and postharvest activities, bringing in supplementary income to the families, managing the household budget and expenditures, and taking care of children and other household chores. The promotion of self-reliant groups and microenterprises under the Project will particularly benefit women by strengthening their capacity to develop microenterprises and increase their household income. These results, in conjunction with improvement in fish catch, will improve the nutrition of the fishing families and their children's education as well.

Conclusions and Recommendations

210. The case studies are among examples of recently designed projects of the Bank, where the fundamental approach is that the natural resource base has to be managed in ways whereby the subsistence needs of those communities that depend upon these resources can be met, through sustainable management practices. It is increasingly recognized that local communities, user groups who depend on these resources tend not to destroy them, or use them unsustainably, until they are debarred from using them, and or, are disassociated with their planning and management. Unsustainable exploitation of natural resources has occurred as a result of growing state roles in their management, the overwhelming entry of large numbers of the poor and marginal population into the sectors, on account of the lack of other options, the "livelihood of the last resort."

211. However, with the gradual shift to full and equitable participation of communities living in the vicinity of the forests, fisheries resources, their growing awareness of the impending disastrous effects on their livelihoods of unsustainable practices, and efforts to bring them into the mainstream of resource use planning, protection and conservation, the hope that things may take a turn for the better, are becoming stronger. An interesting aspect of these efforts is the harking back to bodies of traditional user practices, rights and responsibilities, that user groups had in precolonial times. In some instances, remnants of such practices, belief systems are being revived, or attempted to be revived by communities, through the help of NGOs. Such an attempt is being made in the context of the proposed Bank assisted project in Bangladesh Sundarbans.

212. Social analysis, stakeholder participation are increasingly becoming routine in Bank projects, laying a solid foundation for co-management with other stakeholders, among whom large sections are seriously disadvantaged and voiceless. They are very important partners in the search for ecologically and socially sustainable economic growth.