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# **Social Soundness Analysis**

Conducted for the  
**Programmatic Environmental Assessment  
of the USAID/Bangladesh  
Integrated Food for Development  
Program**

Prepared for:

**USAID/Dhaka  
Bangladesh**

Prepared by:

**KBN Engineering and Applied Sciences, Inc.  
1034 NW 57th Street  
Gainesville, Florida 32605**

and

**Tropical Research & Development, Inc.  
519 NW 60th Street, Suite D  
Gainesville, Florida 32607**

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**SOCIAL SOUNDNESS ANALYSIS**

**Prepared for:**

**Office of Project Development and Engineering  
United States Agency for International Development  
Dhaka, Bangladesh**

**by:**

**Herbert M. Platt, M.S.  
KBN Engineering and Applied Sciences, Inc.  
and  
Frederic C. Thomas, Ph. D.  
Tropical Research and Development, Inc.  
Gainesville, Florida**

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## ACRONYMS AND ABBREVIATIONS

A.I.D.	United States Agency for International Development
BBS	Bangladesh Bureau of Statistics
BDG	The Government of Bangladesh
BIDS	Bangladesh Institute of Development Studies
BRAC	Bangladesh Rural Advancement Committee
BRDB	Bangladesh Rural Development Board
BWDB	Bangladesh Water Development Board
CARE	Cooperative for American Relief Everywhere
CFR	United States Code of Federal Regulations
EA	Environmental Assessment
FAP	Flood Action Plan
FFW	Food for Work
FFW III	Food for Work III Project
FPCO	Flood Plan Coordination Organization
IFFD	Integrated Food for Deveioption Program
IFFW	Integrated Food for Work Program
ILO	International Labor Organization
KBN	KBN Engineering and Applied Sciences, Inc.
LCS	Labor Contracting Society
LGEB	Local Government Engineering Bureau
MOR	Ministry of Relief (Government of Bangladesh)
MT	metric ton

<b>MM</b>	<b>millimeters</b>
<b>MPO</b>	<b>Master Plan Organization</b>
<b>NGO</b>	<b>non-government organization</b>
<b>NORAD</b>	<b>Norwegian Agency for International Development</b>
<b>PER</b>	<b>Preliminary Environmental Review</b>
<b>RRI</b>	<b>River Research Institute</b>
<b>RDRS</b>	<b>Rangpur Dinajpur Rural Services</b>
<b>RESP</b>	<b>Rural Employment Sector Programme</b>
<b>RMP</b>	<b>Rural Maintenance Program (CARE)</b>
<b>SIDA</b>	<b>Swedish International Development Agency</b>
<b>SIFAD</b>	<b>Strengthening Institutions for Food Assisted Development</b>
<b>SPARRSO</b>	<b>Space Research and Remote Sensing Organization</b>
<b>TES</b>	<b>threatened, endangered, or sensitive species</b>
<b>TR&amp;D</b>	<b>Tropical Research and Development, Inc.</b>
<b>UNO</b>	<b>Upazila Nirbahi Officer</b>
<b>UE</b>	<b>Upazila Engineer</b>
<b>USAID/Bangladesh</b>	<b>United States Agency for International Development Mission at Dhaka, Bangladesh</b>
<b>VGD</b>	<b>Vulnerable Groups Development</b>
<b>WFP</b>	<b>World Food Program</b>
<b>WHE</b>	<b>Women Health Education Program</b>
<b>WRI</b>	<b>World Resource Institute</b>

**Glossary of Terms**  
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shalish--local court, village court

mauza, mouza--smallest revenue unit, a revenue "village"

sardar, sardari system--crewleader, gangleader

gushti, gusti--patrilineage

bangsha--patrilineage [synonymn for gushti, gusti]

shamaj, samaj--Muslim congregation; village association; inclusion of non-kin in this social group type

matabbar, matbar, matbor, grammo mattbor--village "leader"; leader of a shamaj (samaj); chief, usually an elder of the village or a group of elders

bari--homestead, usually consisting of an inner courtyard with surrounding huts

para--geographical part/sector of a village; ward; neighborhood

madresha, madrasa--Islamic school

Azzan--often quoted/cited verse of the Quran

dal--lentil; faction

roti--generally bread

pardah--the seclusion of Muslim women from outsiders. Women are confined to their homestead and go veiled when they move outside the fences of their homestead. More generally, a concept that encompasses basic rules of female morality and conduct.

hat, haat--periodic markets, usually found in rural areas

bazar--permanent marketplaces

khas--government-owned land

zila--(64 zilas) the largest unit within a Division (formerly District)

upazila--(460 upazilas) the basic local government unit (formerly Thana)

**Glossary of Terms**  
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union--(4,354 unions) a grouping of villages with local cou

kobiraj--medicine men, herbalists in rural areas

parishad--council

pally parishad, palli parishad--village council

swarnibhar gram sarkar--self-reliant village government

ghat--literally "steps down to a waterbody" for domestic or commercial purposes, i.e.,  
bathing, ferry ghat, etc.

chowkidar--common use in South Asia meaning "guard"

bidi-maker--cigarette-roller

maund--a measurement equivalent to about 37 kilos

seer--a measure of weight equivalent to 0.9 kg

## **EXECUTIVE SUMMARY**

This study analyzes the socio-demographic conditions within which the Food For Work (FFW) operates as well as the positive and negative impact of the project on society. Within this context, the team suggests mitigating measures and recommends the appropriate emphasis and components which proposed Integrated Food for Development (IFFD) activities should adopt in the future.

The important basic trends in Bangladesh rural society are initially identified as:

- How pressure of population and the cumulative fragmentation of landholdings has weakened the patron-client relationships upon which landless and near-landless have traditionally depended;
- How the consequent polarization of rural society and the growing number of landless households has resulted in greater dependence upon wage- and food-earning opportunities -- such as those provided by FFW;
- How with landlessness and fewer possibilities of self-employment as unpaid family workers, a growing number of women are compelled to seek outside wage employment, including work on roads and other rural infrastructure; and
- How local authority at the upazila and union levels has become an extension of the patronage system from Dhaka without the revenue-raising capability nor the accountability to respond to the needs of the poorer segments of the population.

The study then describes the impact of FFW as indicated from field interviews, documents, and beneficiary profiles pertaining to similar projects. Without more complete survey data it is impossible to draw firm conclusions regarding the impact of FFW road reconstruction on the livelihoods and well-being of the workers themselves. It is not certain that those most in need are

those who are hired nor that the scheduling of roadwork coincides with periods of greatest need for off-farm employment. Field interviews both of FFW and Rural Maintenance Program (RMP) workers, however, do indicate how beneficiaries perceive these projects and the value of the roads that are being rebuilt and maintained. The concluding impression is that many of the earthen roads are of dubious value and, in fact, have had an adverse impact in exacerbating rural polarization and inequities. This is due mainly to the expropriation of land from those peasants who can least afford to give it up (e.g., marginal farmers) without providing in return any appreciable benefits in terms of enhanced mobility, health and social services, and other support. Ironically, FFW roads can even become an impediment in closing off access to open-capture fisheries and other resources upon which the rural poor depend for their livelihoods.

A more serious consideration for the society at large is how food aid has been used for political ends. As an integral part of the patronage system, food aid for road building is used to satisfy constituencies of rural elite rather than to implement projects which will improve the condition of the population as a whole. Donated wheat provides the opportunity for misappropriation by officials and project committees who are intended to be protecting the interests of the workers and the community. Moreover, it vastly complicates CARE's responsibilities for monitoring and control both of work that has been done and wages that have been supposedly paid.

With respect to any future FFW project, the study suggests certain mitigating measures:

1. partial monetizing to meet the real needs of beneficiaries as well as for revolving loan funds and other mechanisms so that they eventually can become self-supporting;
2. requiring for upazilas to contribute to the maintenance and other recurrent costs of schemes they undertake with FFW;
3. encouragement of the creation of labor contracting societies composed of landless and women to implement FFW schemes;

4. giving greater attention to detailed planning and mapping of scheme proposals which would be fully discussed in the affected villages before implementation;
5. compensating with aid of food to small farmers who must give up land, trees, or other property; and
6. initiating a closer dialogue with those upazila parishads which are prepared to seriously engage in physical planning not only of roads but also projects related to flood control, public buildings, village grain storage, and market centers.

Thus, CARE shifts from a generalized program of food aid programming and monitoring to a more focussed effort providing technical assistance to those upazilas that are ready to engage in a program of environmentally sound and socially equitable infrastructure development.

IFFD should also diversify beyond the immediate infrastructure planning and implementation concerns of upazila parishads and include food aid-supported activities such as social forestry, roadside tree planting, and excavation of fishponds and canals. Diversification is needed so that households of landless and near-landless who are dependent on outside wage employment during certain periods of the year can eventually become self-supporting. To address the needs of poor households which rely upon diversified sources of income for their livelihoods, the project must also work at the union and village levels.

CARE's responsibility with regard to diversification should be restricted to the targeting and programming of food resources, drawing on other non-governmental organizations (NGOs) having the grass-roots experience and personnel to handle implementation. Choice of where to work should depend upon the demonstrated interest of the upazila, including some financial contribution and technical support, and the interest of the particular union parishads directly concerned. Also, an NGO's prior involvement in the area or desire to expand operations and become involved should be an important consideration. In short, while CARE would be directly involved at the upazila level in infrastructure and environmental planning, NGOs using Title II food would be

collaborating by initiating projects at the village level in particular unions. The extent that focussing food aid in this manner will have a demonstration effect on neighboring upazilas and unions will determine the ultimate geographic scope of the IFFD program.

Based on operational principles which have emerged from extensive experience of the Government of the People's Republic of Bangladesh (BDG), non-governmental organizations (NGOs), and donor agencies, the team identified the following fundamental needs for successful project diversification: to form target groups of landless and women, to enable groups to act as their own advocates vis-a-vis local authority and rural elites, to obtain usufruct land and water rights and other control over income-generating resources, to inculcate savings discipline and access to independent sources of credit; the need also to make optimum use of the full range of NGO grass-roots experience while at the same time working coordinating closely with upazila officials and calling upon upazila technical services and skills.

## 1.0 PREFACE

This social soundness analysis, conducted for the Environmental Assessment of the United States Agency for International Development (A.I.D.)-funded Integrated Food for Development Program (IFFD), is based upon discussions with BDG, USAID/Bangladesh, CARE, and other officials, a review of relevant documents, and a field survey. The survey was conducted through a short questionnaire administered to male Food For Work (FFW) road reconstruction workers and to female Rural Maintenance Program (RMP) workers during a three-week period in November 1990. Neither statistical techniques nor internal checks of validity and reliability were built into the design of the survey. Also, the data collected on pre-test respondents has been reviewed and analyzed since the total number of expected respondents was under 20 for each program group.

USAID/CARE FFW road workers are selected in late December to begin work in early January. During the month of November 1990, locating former workers was difficult since they were otherwise employed in undisclosed locations. The union parishad chairman, even with the assistance of the gang leader (sardar), seldom knew where to locate them. Workers who could be located were difficult to interview due to the demands of their current employment (e.g., fishing, harvesting rice, or working rickshaws). Consequently, only five interviews were conducted with former FFW workers, and four informal conversations were held with sardars who manage FFW crews. Two of these sardars were in the presence of their union parishad chairmen at the time of the conversation. Also, 15 interviews were held with RMP females working on the roads in different CARE districts.

Clearly, a social soundness analysis of this nature should include field visits while FFW is in progress. Moreover, because of hartals and general insecurity at the time of the study, it was difficult to conduct extensive on-the-spot enquiries into the involvement and capacity of local government staff at the upazila, union, and village level. However, two upazilas (Saturia and Faridpur Sardar) were visited for this purpose. Much of the following analysis was derived from existing documents and discussions in Dhaka.

During the next work season (January-May 1991), CARE will carry out a survey of FFW gangs at sites randomly selected in the six CARE sub-office districts. The purpose of the survey will be to collect profiles of more than 4,000 workers with a view to better understanding who they are and how to address skills and other needs for sustainable, full-time employment. Analysis of the results could suggest fundamental shifts in current FFW practices, including conversion from a daily food wage system to some form of group contractual arrangement. This analysis could also be used to expand many of the ideas presented herein.

## **2.0 SOCIO-ECONOMIC SETTING WITHIN WHICH FFW OPERATES**

### **2.1 LANDLESSNESS AND SURVIVAL STRATEGIES**

Besides providing the basic needs for family survival, land is used as security. When loans accumulate, the family plot is mortgaged. The creditor obtains usufruct rights and decides whether to cultivate the land himself or lease it out on a sharecropping basis.

A network of credit relationships exists between poor and better-off farmers. Because of intense competition for land, the marginal farmers still have some economic leverage. Marginal farmers can use their land to obtain loans and favors, thus establishing credit relationships which are mutually beneficial: marginal farmers retain land ownership and, in return, they are more likely to support their patrons in the event of land or water disputes. If the marginal farmer can obtain credit and sharecropping rights from more than one person, the farmer has a chance of negotiating better conditions for the gradual sale of the land. Marginal farmers prefer to rent land to a creditor for a period of time with the understanding that when the loan is repaid, the land will be returned.(1)

The threat of landlessness forces the marginal farmer to enter the labor market. Such farmers are careful about who they approach to ask for employment, not wanting to work for people considered to have a similar or inferior status to themselves. Moreover, farmers would feel it degrading if shamaj leaders began to consider them eligible for charity at the Eid festival.

Wealthier farmers recognize the importance of being a supportive neighbor in the politics of village factions. A farmer's neighbor can keep an eye out for the farmer's interests and inform the farmer of thieves. Thus, one of the worst things a well-to-do farmer can do is to deny a poor neighbor employment. With the importance of such reciprocal, patron-client relationships in providing security, hiring is done on a personal basis; there is no open labor market.

Many manual tasks are carried out in a village setting, making embankments against floods, excavating drainage canals, building footpaths and roads, and digging ponds and other rural infrastructure. Absent, however, are the institutions in the countryside that can mobilize the

people collectively on the scale required. Moreover, individual ownership of land, which is becoming increasingly fragmented, often discourages collective efforts in infrastructure development since such efforts affect the interest of different landowners differently. Bitter competition for control of land poses difficulties for even medium-scale water development schemes: few landowners will voluntarily sacrifice their precious land for the construction of irrigation channels which will benefit others.

Many rural households depend for their sustenance on a diversified range of activities for their basic needs: maintaining homestead plots where they have fruit trees and grow vegetables; raising some poultry, goats and other livestock; weaving, paddy husking and other cottage industries; fishing in village ponds and nearby watercourses; collecting frogs or fingerlings for sale; and gathering wood, straw, and fodder for animals—in addition to rice cultivation and off-farm wage employment. Such diversified livelihood strategies are particularly important for households who are landless or have relatively small holdings.

According to statistics published in 1989, the number of landless is increasing. Households having no cultivated land totalled 16.3 million persons in 1978 and 23.5 million in 1984 while those with up to a half acre of cultivated land (owned or leased) increased from 13.2 million to 23.4 million. During the same period the average size of landholding decreased from 3.5 to 2.3 acres.(2)

Many marginal farmers, dependent upon ready income for a variety of expenses, lose land that has been mortgaged as collateral for loans when crop production is less than expected and loans cannot be repaid.

Schemes that increase crop yield and thus make crop lands more valuable discourage marginal farmers from using sharecroppers. Marginal farmers find it more profitable in these cases to cultivate plots with wage laborers than to offer sharecroppers a flat percentage of the increased yields. Thus, sharecroppers have been evicted when their plots came under deep tubewell (DTW) irrigation or with the introduction of HYV crops, which cause yields to double and triple.

Landowners also shift from sharecropping to wage labor and from permanent laborers to casual and even migrant labor when wage rates erode.

## **2.2 VILLAGE INDUSTRIES**

Village industries provide employment opportunities for landless, marginal farmers and women at relatively low investment cost. Intermediate technology by definition only requires small organizations, making cottage industries appropriate. Such industries, often of a piece-work variety, are found in the villages. Men and women (separately) find wage employment as weavers, bidi-makers, basket and brush-makers, potters, and spinners. Blacksmithing, woodworking, cane and bamboo weaving, and net making have important forward linkage as they supply agricultural and non-agricultural implements, tools for handlooms, and fixtures for rural construction.

One of the goals of the Bangladesh Small Cottage Industries Corporation is to make women economically self-reliant through promotion of entrepreneurship. Women are becoming more active in rural industries (as well as in the urban-based garments industry). On the other hand, mechanized rice mills which have proliferated with the advent of rural electrification have had an opposite effect: they displace the labor of millions of landless and poor peasant women who used to earn money by manually husking rice for wealthier households.

## **2.3 VILLAGE ORGANIZATION AND MUTUAL SUPPORT**

Increasing population, the cumulative partitioning of land through inheritance into smaller and smaller holdings, and the growing number of landless families has had an impact on family life and structure. Large extended families have tended to break down. Even brothers within the same patrilineal society compete for a dwindling supply of resources. Moreover, little harmony and mutual support exists, even within the nuclear family.(3)

Women are particularly threatened by a breakdown in traditional support systems. Within the poorest households there is said to be competition over dividing the food at mealtimes. Quarrels between spouses over limited resources are quite common. Thus, the picture of rural Bangladesh

that emerges is one of relentless struggle, pitting villager against villager, above all for the control of land.

Much discrepancy in wealth exists even among brothers, although members of the same patrilineage (gushti or bangsha) exhibit greater mutual support. Land is inherited and, by preference, sold within the gushti, thus ensuring the survival of the patrilineage. Some farmers will even mortgage some of their land in order to buy that of a kinsman and prevent it from being sold to an outsider.

A wider community grouping, known as the shamaj, provides both kin-group and immediate neighbors with mutual support. Households belonging to a particular shamaj have reciprocal rights and obligations and cooperate with each other on ceremonial occasions. The shamaj is also important in settling disputes, its leaders (sometimes called matabbars) pass judgement on conflicts and misbehavior. The composition of the shamaj will change over time. After the gushti, poor people in the village turn to the shamaj for loans and favors.

A vast reciprocal network of debt relationships exists between poor households. This borrowing acts as a security and guarantees that when sickness or unemployment strikes, loans can be expected. Agricultural land and household plots are used as security. These ties based upon kinship, patronage and neighborhood cut across the landholding groups and create a complex network of societal relations (in contrast to production relations). Beyond the immediate household, a person has well-demarcated duties and obligations in the larger household (bari) and secondary ties to kin-based groups. The bari is the corporate entity with land held in the name of its patriarchal head, while kin-groups tend to dominate such matters as matrimonial relations and disposal of assets.

Typically the individual households are units operating within dyadic (one unit interacting with another unit) competitive relationships.(4) Both parties in these relationships -- employer-employee, seller-buyer, landowner-tenant -- try to obtain as much as possible from the other without demanding more than the other party will concede. Reciprocity here refers to a relationship in which each party makes an assessment of whether there is an acceptable "give and

take" between parties. It does not imply that there is a balance. In fact, one party may be disproportionately stronger and will channel much of its efforts to impose its own terms and conditions in the "give and take" of the relationship and in circumscribing and controlling the scope of action of the more vulnerable party.

There are few activities for which the village is a corporate unit acting against other village units or activities which are particularly confined to village boundaries. Larger villages are divided into a number of paras, each with its own mosque, Islamic school (madresha), or Hindu temple, and social and religious groups are attached to one such neighborhood or another. This is an important consideration in understanding the extent of common interests and public responsibility in village society.

#### **2.4 STATUS AND ROLE OF WOMEN**

The religious laws and customs of Bangladesh reinforce social and economic differences between men and women. For example, one Muslim custom involves the Azzan (a verse from the Quran) being recited in the ear of the male baby at birth to express one's gratefulness to God for the birth of a baby boy. In contrast, when a female is born, especially in the rural areas, she is considered to be a burden. The family must begin managing money to pay for the dowry at her marriage. From the time a female is born, she is prepared for the time she is old enough (15-20 years old) to leave her father's home.

Women's functions center around reproduction, child-rearing, and household chores. If a wife gives birth to more than two girls without having a son, then the husband's family takes the initiative to have him remarry in the hopes that his new marriage will produce a son. Only the son can take over the inheritance of his father.(5)

According to a study of a village in Keranigan upazila (Munshiganj district), women do not have any part in decision making when it comes to crops grown on the farm, but quite a number of them decide within the homestead what to grow. Women do not generally participate in the field operations: land preparation, sowing and transplanting, weeding and harvesting. The post-harvesting process of the crops which take place in the bari are, however, regarded as the

responsibility of the women. Women's homestead vegetation activities are generally limited to a few fruit trees and vegetables.

Cooking is always done by the women (wives, daughters, and daughters-in-law). Decisions on what to cook apparently are based on what food is available rather than nutritional factors (even if nutritional information is available). The husband and the very young children eat first, the female head last, after finishing her household chores. Most households have three meals a day. Afternoon meals consist of rice, dal, sometimes with vegetables and fish; evening meals the same, while morning meals are often the leftovers of the previous day.(6) Very poor families get by with less, perhaps roti (bread) for breakfast, rice in the afternoon, and any leftovers in the evening.

Female-headed households are generally among the most impoverished. Constituting some 15 percent of all households in Bangladesh, they emerge when husbands or other male kin have died or migrated or when the wife has been divorced or deserted. Any assets they own are jealously guarded. The fulfillment of the dowry obligation upon marriage of daughters is foremost on their minds. "If dowry demand is not fully met, then the bride has to face the consequences. She can be tortured, beaten, and in extreme cases killed."(7) As Grameen Bank experience shows, women make more loan repayments on time than do males. For them access to agricultural credit or small business and cottage industry start-up capital is critically important.

A recent study shows how, with the increasing polarization of rural society, women have begun to emerge from the restrictions that have been traditionally placed upon them. With more and more landlessness and marginal holdings, the incomes of male earners are insufficient for providing the family's total subsistence needs. Without land or livestock, which in the past generated much of the food-processing and other work that they did, women are compelled to undertake wage employment outside, in village industries and even in agriculture. This has profound socio-cultural implications in the enhanced value of women's role, greater appreciation for schooling, rise in the age of marriage, and decline in fertility. It also means that there will be a growing demand by women for a segment of the work on roads and other rural infrastructure.(8)

Just as the weakening of patron-client relations will create conditions more favorable for mobilizing the landless, so also will the erosion of traditional male-dominated kinship norms permit women increasingly to group together and, as they have in a few instances already done, assert their own rights and entitlements.

## **2.5 RELIGION AND MUSLIM-HINDU FRICTION**

Islam remains a bulwark of socio-cultural maintenance. Its most visible manifestations are mosques, worship, and purdah (the seclusion of muslim women from outsiders). Considerable investment by rich Arab countries has built and supported mosques and religious schools. Although purdah is prevalent in many forms, countervailing socio-demographic influences of urbanization and increased female participation in the labor market exist. There are a plethora of muslim values and mores that are much less visible but no less important.

One of the upazilas visited (Saturia) still has an important Hindu minority, and their temples and markets are scattered throughout the area. The Hindus are represented in the local government councils and, like the Muslims, are organized into work gangs for road work and other rural infrastructure activities. When many of them migrated to India at the time of partition, their land was leased, purchased and even illegally occupied by Muslims residents of the area, and there are still stories of Muslim landowners trying to take over or encroach on Hindu properties.

## **2.6 OUTSIDE CONTACTS AND CHANNELS OF COMMUNICATION**

More than 70 percent of all journeys are made on foot, many of them away from the road network as such. Thus, the need for improved tracks and footpaths may be as pressing as the need for good quality, reliable roads. On the other hand, better access to markets is perceived by rich and poor alike as one of the most important benefits from improved road links.(9)

Periodic markets (hats) and bazaars are the main outlets for the produce of the 68,000 villages of Bangladesh. Every region is dotted by sites where hats are organized, usually once a week. Some hats specialize in produce, whereas the bazaar, or permanent market, consists usually of some permanent shops, and tea stalls, with the space in front of them for the itinerant traders and

producer-retailer. Bazaars are also the sites of husking mills, fertilizer stores, machine and welding shops, vehicle and rickshaw repair, and a myriad of other services. Farmers, craftsmen and traders engage in many forms of transactions in these markets, which also serve as a focus for the dissemination of information, both local and national. Recognizing this importance, BRAC has used rural markets in spreading information on fertilizer use, poultry raising and animal vaccination.

In many locations roads have reduced the use of canals, an important form of transport in the past. A study of Manikganj describes how in the late 1970s country boats and ox-carts were the principal means of transport. There was a canal from Manikganj to the Dautia which is now blocked, and today the people mainly must use bicycle rickshaws and van rickshaws for travelling short distances.(10)

At one time, most of the villages had canals which the people used for drinking water, bathing, cleaning their belongings, and fishing. The canals were created as the people needed to do earthwork to raise their homestead plots (as they still must do). Since canals were public (khas) land, the earth from the canals could be used freely. Canals were used by country boats as the principal link between villages. Nowadays, many of these canals have silted up and been converted into roads. Many of the people contacted preferred canals, which they benefitted from servicing. Instead, they now have to give up farmland to build roads which cannot serve them when there is a big flood.

## **2.7 HEALTH CONDITIONS AND FACILITIES**

Life expectancy is estimated to be 56 years for males, and for women it has actually fallen over the past ten years and is lower than that of males. There has been some improvement in infant mortality and maternal mortality.

Thirty percent of the total population have access to health care. The medical doctor-population ratio in rural areas in 1985 was 1:14,280. In 1985, at the upazila level and below, the ratio of health and family planning workers to population was 1:3,054. About 75 percent of the health facilities is provided by the government. Also, 199 NGOs are providing health care.

The epidemiological profile of rural Bangladesh is similar to that of other tropical developing countries that have large areas of water: diarrhea, hookworm, and malaria are the most prevalent diseases. Also, public health authorities are seriously concerned about the high incidence of tuberculosis. Cholera is under control, and Acquired Immune Deficiency Syndrome (AIDS) is not yet a problem.

Nutrition studies indicate a worsening health situation. Caloric intake declined by 23 percent over the 1962-64 to 1984-85 period from 2301 calories to 1773. The current diet for the great majority of the population is deficient in all food groups except cereals. Cereal, particularly rice, is the preferred food and is in demand beyond any reasonable nutritional standard. Women and children are most vulnerable to malnutrition. Males get preferential treatment and have first access to whatever little food is available to the family.

BIDS evaluations of the primary health care system note serious deficiencies with respect to staffing, facilities, equipment and transport. A single upazila health and planning officer must somehow supervise the staff of the upazila health complex as well as the health and family welfare centers in the different unions. Referral care facilities from the primary level to the upazila health complex and from the latter to the district hospital are non-existent.

BDG health centers provide services to only 18 percent of those in need. The others receive treatment from qualified non-government doctors and traditional practitioners. Poor utilization of BDG facilities is attributed to the belief that government doctors do not pay adequate attention to the patients; that centers do not provide the medicines that the patients are supposed to get gratis; and that doctors may ask for money for the service rendered.

## **2.8 EDUCATIONAL FACILITIES**

At the base of the educational system is the primary school, intended for six to ten-year-old students. Primary school lasts for five years. Of the approximately 44,000 primary schools in the country, 78 percent are government schools for which no fees are charged and the teachers are government employees. In keeping with the government's decision to decentralize

administrative functions, increased responsibility for implementing primary education programs has been delegated to the zila and upazilas.

The major inherent problems of primary education are low enrollments, high drop-out, and repetition. Poor curriculum and weak teaching are reflected in poor student achievement and unequal opportunity for students, especially females.

One of the most energetic change agent programs encountered may be the former CARE Women's Health Education (WHE) Program. One RMP ward leader in Bogra had spoken highly of training she had received at the village level in health education by a WHE field staffer. This was a reason that she gave for not using kobiraj (medicine men). Women who have had exposure to some form of training or education know the value of primary education for their children -- even if access to it is blocked by poverty.

## **2.9 LOCAL GOVERNMENT AUTHORITY AND ACCOUNTABILITY**

The government's decentralization program, which was begun in 1982, has made the sub-district or upazila the main focus of development activity at the local level. With "block grants" from central government in addition to food-aid resources and various externally-funded construction schemes, the total resources available to the upazila councils (upazila parishads) are quite impressive. However, capacity to plan and manage these resources is still very weak. Administrative and technical cadres posted to work at the upazila level are nominally under the authority of the councils and their elected chairman. But in fact they are neither fully accountable to the councils nor to their parent ministries while on secondment.

The union parishad is the local government unit in closest touch with the people. With only a secretary and a few village guards as staff, a chairman and members (whose main preoccupation is getting reelected) and nominated women members (who take little interest in union affairs), the union parishad is but a weak appendage of local administration. The union's principal activities are collection of taxes, control of village police, markets and ponds, and registration of birth and deaths. The chairman has authority and resources at his disposal which he can use for political purposes: for example, the power to appoint ration dealers and fertilizer dealers, to allocate

shallow tubewells, to lease ponds, and to designate VGD (Vulnerable Group Development) and RMP food aid beneficiaries.

Parishad chairmen and elected members are for the most part drawn from the rural elite because of traditional patronage relationships they can use to get elected. Invested with official status and political party support, an authority that traditionally entailed reciprocity has been replaced by one which furthers its own interests, often at the expense of the community. Ultimately, however, a chairman's success depends upon his ability to divert public resources to his constituency which includes competing kinship and factional interests. The need to balance these interests when making resources available serves as a check against excessive abuse of his authority.

There are also some younger parishad chairmen who derive support from political organizations, youth groups, and hoodlum gangs. Some of them, through intimidation and with poor law enforcement, have managed to compete with traditional elites and gain access to political power. Because of their need to build independent constituencies, these non-elite rural leaders could even conceivably contribute to a process of democratization and greater rural equity.(11)

Parliament passed a law in June 1989 to establish village parishads (pally parishad), to be elected by all the eligible voters in each village. The village parishad should be involved in all aspects of village development, the settlement of village disputes and maintenance of law and order. Its only sources of funds, however, are those which it receives from the union parishad, cooperatives or private groups – thus guaranteeing (if the law were implemented) that these councils would deteriorate into becoming but a further extension of the political patronage system. A precedent for some form of village council which represents all village factions, including landless and women, is found in the swarnibhar gram sarkar (self-reliant village government), which was established in 1980 and abolished two years later with the change of government.

Upazila councils have been given revenue-raising authority, but these sources provide less than 10 percent of the annual "block grant" from central government. Without a minimum level of responsible leadership and popular support, mobilization of local resources is not possible.

Low returns on land taxes are explained by the fact that local elites are (not surprisingly) reluctant to tax themselves, and other revenue-raising authority [e.g., market and ferry ghat (stairway) leases, business licenses, and various fees] can be easily used for purposes of private advantage.(12)

Union parishads collect taxes on the value of homesteads as well as the traditional chowkidari tax to pay for village police. Overly scrupulous attention to collection can pose political risks at the time of reelection, and payment in some places seems to be almost voluntary.

Improved mobilization of local resources depends ultimately upon enabling people at the village level to take stock of their resources and assert their priorities. Only by being brought into the planning process can the population at large exercise any influence on union and upazila councils and develop more responsible leadership. A BIDS survey of development resources and constraints in one of the better administered upazilas concluded that among those people who said that they were ready to contribute to local development activities (about half of the respondents), the poorer groups were more willing than the richer to do so provided they didn't have to carry a disproportionate share of the burden. It was clear from the study that the inequitable power structure was the major impediment to local resource mobilization and planning.(13)

One example of rural elite taking control of institutions that were created to address the needs of the small farmers is the Upazila Central Co-operative Association – Krishi Samabay Samity (UCCA-KSS). While the UCCA-KSS was designed on the Comilla model to organize small farmers, by the mid-1970s it was dominated by the large farmers. A Planning Commission study confirmed that the managing committees of most cooperative societies are dominated by rural elites more concerned about maximizing their own economic benefits than informing and involving the membership. Apparently the separate Bittaheen Samabaya Samity (BSS) and Mahila Bittaheen Samabaya Samity (MBSS) that were subsequently organized for assetless men and women to provide credit, mobilize share capital and savings, and provide skills training have been more successful in preventing domination by influential and powerful individuals.(14)

Most people have a deep-rooted suspicion of local government. People are not surprised to see that the rural rich mainly benefit from subsidies and government programs; they take it for granted. Vulnerable Groups Development (VGD) beneficiaries reportedly could not believe that their contributions to a savings plan were for themselves and not to pay the government for the wheat they were getting.

### **3.0 SOCIO-ECONOMIC IMPACT OF FFW ROADS**

#### **3.1 USAID/CARE FOOD FOR WORK**

In fiscal year 1990 the FFW funded a total of 1,435 earthwork schemes for the reconstruction of 7961 miles of roads, roads-cum-embankments, and embankments in 315 upazilas in 44 districts. In addition, the program supported 57 schemes for the re-excavation of silted and otherwise unserviceable drainage canals totaling 190 miles in length.

About 140,000 MT of wheat under Title II of PL 480 were made available for programming by the upazilas for these locally-initiated schemes. The upazilas submitted proformas totaling 132,600 MT from which 89 percent (118,000 MT) were approved by CARE on the basis of presurveys of all the proposed schemes. After the projects were completed, upazila closure reports showed a total of 105,000 MT had been paid out in rations to workers. On the basis of joint upazila/CARE post-surveys, reimbursement of wheat to the BDG was adjusted downward to total 65,000 MT. The amount reimbursed was 55 percent of the amount originally approved and 38 percent of the amount claimed for reimbursement. The 38 percent is regarded as "leakage" of wheat that was not used for the intended purposes.

According to the CARE annual report: "Assuming full implementation of all schemes, 3.75 million inhabitants of an estimated 7472 villages, mouzas, and growth centers would have benefitted from improved access to markets, health services centers, social service centers, educational facilities, and other public institutions."(15)

A total of 13.67 million person/days of employment were generated, which was nearly 40 percent less than the planned 22.66 million. Assuming each person worked 40 days during the season, some 342,000 workers were employed on the different schemes, receiving a daily ration of 1.75 pounds of wheat for himself and for each of five family members. If this were the case, according to calculations done by the social soundness assessment team, some two million persons directly benefitted from the wheat rations.

### 3.2 EMPLOYMENT ON FFW ROADS

Most FFW workers come from nearby the FFW activity. Migrants get work only in districts, such as Comilla, where cash wages for year-round agricultural labor are high. However, even in these areas the patronage system gives local residents an advantage in obtaining agricultural and other better-paid work. CARE figures show migrants constituting about 6 percent of FFW workers.

Workers indicated they were selected by the union parishad committee. Informants in some areas reported that responsibility for selecting and organizing the crew is given exclusively to the gang leader or sardar -- with the approval of the union parishad chairman. A BIDS survey of 32 WFP road sites found that 70 percent of the workers were recruited by the gang leader, with most of the others by project committees and union parishads.(16)

As discussed in Section 2.1, the landless laborer or marginal farmer is hired on a kinship or patronage basis or because it is in the interest of his well-to-do neighbor to do so. People seeking casual work never meet with landowners who need work done; this minimizes the likelihood of public confrontation and embarrassment. Notably, the absence of an open labor market makes it difficult to pin down precisely how FFW selection is done.

The few FFW workers that were interviewed for this study fit typical characteristics of most FFW workers: they were all married and had at least five children. Being destitute and landless is not precisely defined by CARE. Nevertheless, FFW workers appear to belong to the target group in the sense of coming from the "poorest section of the community." Likewise, the above-noted BIDS study confirmed that 80 percent of the FFW workers own less than one acre of land and 12 percent do not even own a homestead plot, thus clearly belonging to the target group. Most of the interviewed workers had been working on FFW schemes for at least ten years.

CARE is planning to conduct a survey of workers in 360 earthwork schemes to get the worker profiles that are now lacking. Without information, on socio-economic status, skills, and other resources it is impossible to know exactly who are the beneficiaries and the importance of FFW employment in terms of their needs for survival. Also, such information is essential in

planning other, perhaps more appropriate, food-aid interventions. Field interviewers will also seek reliable information on the modality of payment and pay rates received by FFW laborers.

The criteria for selection for a FFW work crew requires that the person be able-bodied and capable of holding up well under the strenuous conditions of the job. It is not so much a matter of age; the five interviewees ranged from ages 26 to 45. Their bodies were muscular though lightweight; most workers weigh no more than 64 kilograms (130 pounds). At the time of the interview, they were in a crew of ten workers, eight of whom were related; the other two came from a different ward. Generally speaking, crew sizes can range from eight to as many as 25 workers, depending on the project.

The extent of their understanding of the terms and conditions of FFW employment could not be easily determined. During the interviews, it became apparent that the workers were never explained the terms and conditions of employment. The BIDS study found workers were generally ignorant about the stipulated wage rate. The study calculated a weighted average rate of underpayment of around 26 percent. Bargaining for wage rate between the workers and the intermediaries through whom they get involved in the project appears to be standard practice.

The tools used for FFW work are owned by the workers themselves. If special tools are needed on a bridge or culvert project, the contractor will supply them. In both FFW and RMP work, the South Asian spade (kodal) is the principal tool used. The headload basket (jhuri) is also needed to move earth up the slope. Sometimes a pick-axe/hammer (gati) is used to loosen compacted road material. The kodal blade must be kept sharp to get a clean square from the top soil layer and remove vegetation from the road alignment. Another commonly-used tool is the tamper (durmoos) for compacting the road surface.

Employment of workers on bridges, culverts and other structures was not investigated. Such work is contracted out by the upazilas, and skilled workers engaged by the contractor are paid in cash. The appropriateness of using food aid for some of this work will be raised later with reference to the use of labor contracting societies (LCS).

### **3.3 EMPLOYMENT OF WOMEN**

Women constituting 25 percent of heads of landless households are the most vulnerable group in Bangladesh society. Within a segregated labor market their opportunities for earning a livelihood are extremely limited.

Given socio-demographic realities there will be increasing need in the future to provide women unskilled wage labor opportunities on rural infrastructure projects. The number of women on FFW projects during the past work season amounted to 3-4 percent of the total number of workers. Engaged in leveling and dressing work, they were for the most part organized into separate labor gangs, thus reducing the likelihood of sexual and other exploitation.

The Rural Maintenance Program (RMP) addresses the need of this target group. The program employs some 61,500 women maintaining roads. CARE field personnel, assisted by the union parishad, survey the key union-level roads and select and train the women for their work. Five women are selected from each of the three wards in each union. This provides a total of 15 women responsible for roughly 15 miles of roads. They are paid Tk. 24 a day, keeping Tk. 20 while Tk. 4 are deposited in an interest-bearing escrow bank account to accumulate as savings which can be withdrawn when they "graduate" from the program.

The program is regarded as successful: its purpose is to address the priority needs (chiefly food) of a particularly vulnerable target group (and their estimated 180,000 dependents). Selection of participants by the union parishad apparently respects this purpose. Ten percent of the cost of the program is met from the upazila block grant. Few rigorous quality controls are needed; yet work gets done for the most part and the women get their money. RMP gives highest priority to improving the status of its women participants, after which priority is given to improving the status of the roads. Among the intangible benefits to participants is a positive self-image; the work improves their perception of themselves and their place in the community. The program offers year-round employment. It fulfills what unquestionably will be a continuing need for road maintenance. The potential multiplier effect can be appreciated when one takes into account the personal disposable income that is generated from 61,500 savings accounts.

On the other hand, the women are almost entirely dependent on the program for their livelihoods. Although considerable savings have accumulated in their bank accounts, few have left the program, withdrawn their savings and become self-supporting. CARE is currently collecting profiles of RMP women in order to determine how to facilitate the "graduation" of at least some of them. One obvious drawback is the dispersal of the women and the consequent difficulty of linking them with other NGO programs providing credit facilities together with poultry-raising or other training.

It has also been found that delay in transfer of the union counterpart funds has resulted in a direct loss of income to the workers in terms of the interest foregone that they would have received. The SIFAD study concluded that the technical aspects of maintenance work could be improved by training, technical supervision and specifications of what work should be done at what places and at what times. The report recommended that RMP could benefit from better integration into the process of road rehabilitation.(17)

Also in the World Food Program (WFP)-supported VGD program, the tendency to select destitute women evenly among the union wards makes its very difficult to effectively organize them into groups and thus to draw on the specialized services and inputs of upazila technical staff and NGO programs. At least this is the case in areas other than "high distress" upazilas where large numbers of VGD beneficiaries are concentrated. (Moreover, where women live far away from the union center, they are more inclined to sell their wheat ration in the local market to avoid carrying it home.)

According to the last WFP evaluation (October 1989), considerable beneficiary savings were held in trust under the names of the union parishad officials, rendering the women vulnerable to having their savings misused. But now the practice is to place savings in individual accounts.

According to one source, by paying the union parishad secretary 100 takas, a women can have herself re-inscribed in the program, perhaps under a different name, after her two-year eligibility to receive wheat rations has expired. This was denied by a union chairman in a high

distress area who pointed out that there are many women qualified to be enrolled in the program who would complain.

### **3.4 SEASONAL NATURE OF ROADWORK**

Roadwork is done from January into May. The amount each person works is calculated to average 40 workdays over the five month period. In the past this was the agricultural slack season and such off-farm wage employment was in great demand, but now winter cultivation has become more important. The boro rice crop and wheat are planted in January, and rabi crops including pulses, oilseeds, onions, and potatoes are harvested in February; so there is a demand for agricultural labor during the same five-month period.

During the balance of the year, the FFW workers interviewed said they cultivate paddy, some through sharecropping. Some are engaged in wood and bamboo house construction. A few owned 6-12 decimals of land which they cultivate near their homesteads. Other reports confirm that agricultural labor is the primary occupation of most FFW workers and many have multiple occupations.

When land is under water during the flood period, there are no tasks to be carried out in the fields, and households face particular difficulties. Also, November and December are periods of hunger. In short, there are perhaps more critical employment slack seasons to which a program restricted to road rehabilitation cannot respond. A lot of road maintenance is required immediately after the rains, a need which WFP's post-monsoon program addresses. Still, given earthwork conditions at different times of year, it would be impossible to schedule the volume of rural infrastructure employment, and in the localities where it is needed, to coincide neatly with periods of greatest demand. Only a complementary effort to create self-employment opportunities can bridge periods of particular hardship in many parts of the country.

### **3.5 REMUNERATION: FOOD WAGE & MONETARY VALUE**

Each worker is in theory compensated with a ration of 1.75 pounds of wheat per day for himself and each of his estimated five family members. It is said that the system is self-targeting; only the poorest are willing to work for a food wage. Given the low status of the work itself, it

is assumed that even if cash wages were paid, persons without serious need for such work would not agree to do it.

Some of the wheat that is distributed as rations is sold at the local market through traders at a loss to the workers. Some is sold directly by the union parishad chairman as head of the project implementing committee (PIC), perhaps acting jointly with the upazila project implementation officer (PIO). Most probably the sardar has a hand in these diversions since he is primarily responsible for hiring the workers and determining their remuneration. CARE's final report states that "in no case did PIC records indicate that cash payments were made to workers." Still, CARE staff acknowledge that they have not observed a wheat distribution. Also, price of wheat on the local market is reported to go down during the FFW implementation season.

Compensation for roadwork is calculated on the basis of 52.5 seers of wheat for each 1,000 cubic feet of earthwork. Accordingly, the expected wheat payment during the 1991 FFW work season will be 230 seers per worker for an average 40 days work. This assumes an able-bodied male excavating about 115 ft<sup>3</sup> per day. Thus, the total number of seers paid to the worker is equivalent to 5.7 maunds or 471.5 pounds of wheat.

In November 1990 the local bazaar price for processed wheat was TK. 9 a seer, and the Dhaka street market price was Tk. 11. So the market value of the wheat that the worker receives during 40 days will be about Tk. 2070 (\$57).

However, CARE calculates that actual wage (wheat) payments made to workers amount to about 83 percent of what is due (i.e, the 52.5 seers). Underpayment of stipulated wages is common practice, a problem that is compounded by the fact that workers are not sufficiently informed of their entitlements. As already mentioned, the BIDS study of WFP food-for-work found that the average rate of underpayment was about 26 percent.

Sardars are paid 2.5 seers of wheat for each 1,000 ft<sup>3</sup> excavated under their supervision. Assume that a sardar is managing three 15-member crews and that they all work the average 40 days handling a conservative 105 ft<sup>3</sup> per day. Then the total earth moved by these 45 workers

during the full period is 189,000 ft<sup>3</sup>. The sardar accordingly gets 472.5 seers (968.6 pounds) of wheat for his services, which at Tk. 9 a seer totals Tk. 4,252.5 (\$118). In addition, the sardar occasionally receives some money or wheat from workers for employing them.

### **3.6 WORKER PREFERENCE FOR CASH WAGES**

Among the very poor who may spend 85 percent or more of their income on food, a food wage can be as relevant as a cash wage under certain market conditions. The great majority of the rural population (e.g., landless laborers, sharecroppers, and small landowners), are net buyers of rice. Small farmers sell rice at harvest time because they need cash and then buy rice before the next harvest.

Wheat is an essential staple for two meals a day in the rural areas. The importance of wheat in the diet was confirmed in a meeting of 23 WFP participants. For some 455,000 women in the VGD, their monthly ration of wheat (officially 31 kilograms but usually somewhat less) is critically important. Ninety-four percent of them are functionally landless and 61 percent are heads of households. WFP reports that about a half of the beneficiaries sell a part of their ration, usually about 8 kgs. or quarter of their entitlement, to buy other food or perhaps pay off a debt. Generally speaking, however, food tends to be managed and controlled by women at the household level, and it requires a decision to convert all or part of it into cash (almost certainly at a net transaction cost).

The majority of RMP crewmembers interviewed prefer their cash wage over a food wage. They said that their primary goal was to buy or lease land with their savings. The purchase of chickens, a goat or a cow was usually the next wish. But no evidence suggests that RMP workers have left the program and achieved such goals.

FFW workers said that they would prefer to be paid in rice rather than wheat, but if wheat was the only in-kind payment available, it would suffice. One former FFW worker (interviewed in the presence of several of his friends) said that "anything is better than nothing and more is better than less, so keep the wheat coming." They claimed that they did not sell any of it unless they needed cash urgently. The above-referenced BIDS study found that 44 percent of the

workers on WFP projects who received payments in wheat sold a portion of it. Also, in some FFW projects, payments are made in cash when wheat is not available.

RMP crewmembers interviewed in Rangpur reported the following: they would like an increase in their daily wage rate; they would like their RMP work to continue; and they would like to see tree planting on their roads. They were familiar with the FFW-built and reconstructed roads that are maintained by RMP workers within their union. They also know that BRAC and WFP have overlaid joint-venture tree planting programs upon these same roads.

### **3.7 PARTIAL MONETIZATION AND CLOSED MONETIZATION**

A primary concern in the SIFAD study was that food assistance is often inadequately complemented by cash, equipment and other resources. Funds generated by monetization are not only much easier to handle but provide a more flexible resource to support a much wider range of development activities. There is agreement between the ILO and the WFP that the cash component should account for at least half of the value of the total wages. Only when workers are engaged in schemes that will exclusively benefit them and their families are wages paid exclusively in food.

The SIFAD report refers, on the one hand, to open monetization: using the revenue from open market sales to provide exclusively cash wages to workers; and on the other hand, to closed monetization: workers are paid a cash wage and ration cards issued to them to permit them to buy from a stock of subsidized food.

Direct targeting of food is relatively expensive, logistically cumbersome and awkward to monitor. The RMP employs a cheaper and better system in that beneficiaries are paid a flat cash wage without any special food entitlement, and the wage bill is covered by an injection of donated wheat into the Public Foodgrain Distribution System. As noted, this program would benefit from better integration into road rehabilitation activities. Moreover, the SIFAD report suggested that the rural infrastructure development and maintenance functions might be combined, resulting in a better mix of resources in cash and kind. It would, of course, require a pooling of Canadian and US Title II commodities. A more serious objection from CARE's perspective is that such

blending in the interests of partial monetization would seriously complicate the present, very straightforward system of RMP member bank accounts.

When all is said and done, the recommended option is clearly on the side of monetization combined with some form of savings provision which will at least offer the possibility that workers can eventually become self-sufficient. There is widespread agreement within all sectors interviewed that monetization of Title II commodities would greatly facilitate handling and control of the commodities. Better informed of their entitlements, workers would be in a stronger position to protect themselves against the abuses of parishad chairmen, PICs and sardars. Alternatively, food wages continue to be distributed and, one way or another, illicitly monetized. Elaborate efforts to control against diversion complicate the task of monitoring and necessitates intervention into areas of local responsibility which CARE would just as soon, and should, stay out of.

### **3.8 SOCIO-ECONOMIC BENEFITS FROM FFW ROAD PROGRAM**

An often quoted study by IFPRI and BIDS assembled evidence that the incidence of absolute poverty is significantly lower in areas that are relatively well served with roads and other types of infrastructure. But the same study added that most dirt roads remain unsuitable for vehicular traffic most of the time, particularly during monsoon. Large investments in earthwork through food-for-work projects do not generate much traffic because of the absence of structures. The rapid deterioration of the road may even hinder the movement of bullock carts and people on foot.(18)

The most recent Abt study confirms the benefits in terms of farmgate prices, proportion of land devoted to HYV crops, increased production, reduced cost of farm inputs, etc., provided the roads have appropriate structures. Also land prices are higher along these roads. "The only significant discernable negative impact perceived by those interviewed is the assertion that the bridges have most benefitted large landowners and mill operators."(19) There is no doubt that large landowners benefit the most from road improvements since they rely most on modern agricultural inputs and the sale of farm surpluses, besides profiting from the increase in the price of land that usually results.

Field observations in the course of this social soundness analysis confirmed that the quantity and quality of feeder earthen roads is acceptable – meaning passable. The continuous passability of these feeder roads to paved roads or waterways could not be assessed without doing field observations during other seasons.

RMP and FFW program participants view both new road construction and reconstruction as enhanced pathways to other villages and markets. For most RMP crewmembers, the highest level of transport on their roads was that of rickshaws, usually needed in the event of an emergency visit to the village doctor or nearest medical clinic. One RMP worker said that road repair was definitely important even for purposes of the most frequently used transport, namely walking. While existing earthen roads and roads-cum-embankments are serving the rural people quite well, the upgrading of existing pathways seems senseless to some villagers.

### **3.9 PERCEIVED VALUE OF ROADS DEPENDS UPON SOCIO-ECONOMIC STATUS**

The interviewed workers view increased social communication at the market and between villages as a positive effect of the CARE roads. One former FFW worker in a Rangpur union commented that he really didn't care if more roads were rehabilitated because it was not his land that was involved. He was at the time standing on an FFW road within 400 feet of a newly-constructed (FFW) bridge structure. The extensive fields in paddy on both sides of the road were owned by absentee landlords.

A RESP study found that 75 percent of the households representing all socioeconomic classes affected by two roads believed that the road would provide benefits, mainly in improving communications and access to trade and other earning opportunities (such as road-side small shops and rickshaw pulling). Other perceived benefits included access to schools and use of the road embankment during floods. In this case the roads were important all-weather links which included bridges and culverts.(20)

### **3.10 WIDER IMPLICATIONS: RURAL-URBAN MIGRATION**

Permanent migration from the villages to the regional urban areas as a result of FFW roads could not be ascertained. However, rural-urban population movement is more likely related to perceived income opportunities, and improved roads are only incidental.

### **3.11 HEALTH AND EDUCATIONAL IMPACTS**

Food-for-work is not seen as a nutritional benefit but as a cash-wage substitute. The principle rationale of FFW for continuing despite serious deficiencies is the 52 percent poverty incidence, meaning that 59 million people have household incomes insufficient to sustain a diet of 2,122 calories per person per day. Also, there has been a decline in protein, fat, and micronutrient dietary intake in the past 15 years. Therefore, the nutritional benefit of the program in providing FFW workers with an income supplement to be used mainly on food is a very important consideration.

With regard to the health sector, another impact should be improved access to health and family planning services. The latest Abt study, was unable to conclude definitively, however, that improvements in road communications have led to increased use of health services. But the report suggested that the use of family planning and health services may increase because of improved communication, including outreach, as a result of ease of transportation.(21)

Likewise, the impact of the program on education is an important consideration. Underutilization of primary schools in villages is quite common. Due to poor transportation, attendance in the monsoon months is often very low. CARE roads without adequate culverts and other structures have been regarded as an obstacle to the passage of wheeled vehicles and even pedestrian traffic during the rainy season. The same Abt study found higher rates of increase in attendance reported along bridged and partially bridged roads than along roads without structures "implying that they may have started with a worse attendance problem."(22)

### **3.12 OCCUPATIONAL HAZARDS AND WORK-RELATED INJURIES**

Mortality, morbidity, epidemiological, or occupational hazard data on FFW and RMP workers are not available. There are no diseases or infections to which program participants are particularly exposed as a result of working on roads or excavating dirt, that is, relative to any other outdoor work involving exhausting physical labor.

Roadworkers do not drink much water on the job, and dehydration is common. Some get oral rehydration therapy at the upazila clinics.

Field observations in Mymensingh and Comilla districts noted that female roadworkers frequently lacerate their feet or toes with the cutting part of their tool. However, protective footwear, a first aid kit, and water canteens would not be culturally appropriate without training.

Roadworkers frequently lift baskets with earth onto their heads and carry it up the slope. This in itself predisposes a male worker to inguinal and umbilical hernias and female workers to uterine prolapses. Traumatic injury can result from falls and collisions with rickshaws or another crewmember. Snakebite and dogbite are also quite frequent.

A roadworker should ideally be screened by an early diagnosis and prevention primary health care system prior to roadwork. The worker may be nutritionally deficient or have a chronic disease. Undiagnosed, the condition could be exacerbated by strenuous work causing lower productivity and absenteeism.

The use of privies and boiled, filtered potable water, is almost non-existent in rural areas. Male defecation and urination off of road shoulders and near walls, water bodies, and structures are common culturally-acceptable practices.

Increased mobility of human and animal populations can expand the ecological ranges of most communicable and transmissible diseases. Case studies in Africa have supported the relationship of geographical mobility and settlement patterns and malaria transmission. Epidemiological and

disease ecology studies would be needed to establish causal relationships between increased road networks and disease and disease vector spread.

### **3.13 ADVERSE IMPACTS OF FFW ROAD PROJECTS: EXPROPRIATION OF LAND**

Land disputes result from road reconstruction work and proposed new alignments. Land can be expropriated without compensation to large landowners and marginal farmers alike. In the course of CARE road site surveys, villagers complain that the small farmers are suffering the most. Small farmers can least afford to give up any land at all, and giving up too much can render them landless. Also, the elaborate alignments of some roads indicate that special efforts are made to avoid the land of influential farmers.

Small holdings of less than 2.5 acres constitute more than 50 percent of the total land under cultivation in Bangladesh, and large holdings above 7.5 acres amount to less than 4 percent of the total. Consequently, it is inevitable that smallholdings are more prone to expropriation. This is confirmed by the RESP study of two feeder roads which found that the poorest people, representing 27 percent of all homesteads along the alignments, contributed 35 percent of the total land that was needed; this amount being equal to 7 percent of their total holdings. On the other hand, households having more than five acres, representing 13 percent of the households affected, contributed only 13 percent of the land required, an amount equal to 22 percent of their entire holdings. Similar inequities were found with regard to land temporarily needed for borrow pits and the resulting crop losses. The most precious asset which the poor may be obliged to contribute are their trees. One villager stated: "The loss of a fruit-bearing tree is like the loss of a child, which is reared with great pains and care."(23)

Compensation is not given for land, crops and trees that are taken for rural infrastructure schemes under the rationale that since the schemes are locally initiated, land and other assets should be given voluntarily as local contributions.

Local officials say that disagreements regarding expropriation of land are handled amicably. Field visits on the occasion of a road project pre-survey presented clear evidence to the contrary in the shape of heated disputes between officials and landowners. It is common practice for the

upazila chairmen to send a letter to the CARE sub-district office stating that there are no potential land problems, when in fact there may be numerous affected landowners who are upset by a proposed alignment. CARE even receives letters from groups of aggrieved farmers (sometimes mistakenly relating to WFP road alignments) seeking some form of redress. Households also lodge complaints with the local leaders, usually union parishad members or the chairman of the project committee, but it seems that these complaints are often ignored.

Studies show how insecure many people feel their land possessions to be. Disputes over borderlines are very common. It is easy to encroach a foot or two into an adjacent plot of land. When maps of mauzas (smallest revenue areas) are updated for tax purposes, small adjustments are made by the government officials, usually with the help of a bribe. If the aggrieved party has good support from a more well-off patron, he may call for a shalish (customary court operating in the village) or go to a government court.(24)

### **3.14 TAKING TOPSOIL AND OTHER DAMAGE**

There are far-reaching implications in proposed new alignments because they can remove parallel drainage and irrigation canals in adjacent paddy fields. This was documented in a union in Tangail where a proposed new road segment would have required the removal of a small irrigation canal. Complicating matters further, the local water development board would then require that the canal be relocated on the landowner's behalf (it was unclear as to what party would incur the expense of relocation).

Rehabilitation of existing roads entails less removal of topsoil than construction of a new alignment. However, landowners disapprove of RMP workers removing topsoil to repair potholes, roadcuts, and slopes and often permitted workers to dig out only a narrow strip at the base of the embankment. Then during the monsoon the roadway may erode and wash out, spilling material out over the crops that are immediately adjacent.

### **3.15 ROADS AS BARRIERS**

The converse of the impact of roads upon people is the impact of people upon roads. The cost-effectiveness of roads is undermined when roads erode quickly. Negative impacts of people on rural roads included: road wash-out created by a two-person, water-bailing team moving water from one side of the road to the other for irrigation purposes; accelerated erosion caused by a two-man team working to level the slope near the roadway to facilitate bringing a tractor up to the road; erosion through denudation of vegetation caused by tethered cows and goats grazing on slopes off of road shoulders; and holes in the road created when conical pits with external side airvents were dug in the roadway to serve as underground stoves.

Roads also act as a barrier in restricting access to open-capture fisheries. Because of the dependence of the rural poor on diversified sources of income, this adverse impact is especially disturbing. Seventy percent of the rural population are involved in fishing.

During the floods some roads act as a barrier to the passage of the country boats upon which so much local transportation depends.

### **3.16 EQUITY ISSUES: POLITICAL USE OF FOOD AID**

The value of externally-donated food aid channeled through the upazila parishads usually exceeds that of the block grants received from central government. Food aid and FFW projects thus serve to entrench the political position of the rural elite. Widespread distribution of wheat in response to the pressures of political constituencies takes precedence over questions of cost-effective utilization.

Low priority is given to the planning function. Planning is described as "wish-lists" of physical infrastructure.(25) Few upazila plan books are in satisfactory form. Elsewhere they consist, at best, of rudimentary maps showing the location of completed infrastructure. Schemes are selected haphazardly as seen in the roads that come to an end in a field or at the edge of a watercourse or parallel another road not far away. Upazila maps show a web of roads connecting places where footpaths would do.

Because of bureaucratic infighting between technical officials (with their separate loyalties) and local politicians there is little coordination regarding sectoral priorities. Rural elites make the planning decisions. Each union chairman claims an equal share of FFW resources irrespective of population and area. The interests of the parishad chairman, in consultation with the executive officer (UNO) and the PIO, ultimately determine priority. Almost entirely dependent upon both food and monetary resources from Dhaka which become part of a political patronage system, there is little compunction to address grassroots requirements in a reasonably planned manner. While there is some consultation on the part of union and ward members with the people who elected them, villager participation in any real sense is absent. Heavy emphasis is given to projects for which politicians can claim credit to enhance chances of reelection -- besides offering opportunities for contracts and kickbacks.

Roads are the easiest type of work to undertake, especially given the limited time available for planning and the nature of the supervisory arrangements. Roads require minimum technical supervision, and the earth is obtained nearby by traditional methods. This concentration on roads and the need to generate employment in certain localities have distorted real development priorities. Even so, locations do not always correspond with levels of distress and local demand for seasonal employment. The need for seasonal employment exceeds road rehabilitation requirements; there may be little correspondence between the two.

### **3.17 INCREASED SOCIO-ECONOMIC POLARIZATION**

New road construction further polarizes the economic class structure. One Bangladeshi university student proposed the following assuming there is no radical land redistribution in the next five years and that the political status quo is maintained, new road construction (and even road improvements) will accelerate land investment and small-plot buy-outs by agri-business or venture capitalists. There are many ways to get around restrictions on land acquisition. The "farm-to-market" concept behind such roads will then be realized only with respect to the needs of the already advantaged part of the population.

Since many of these projects are administered through local councils and PICs, politically well-connected individuals with prior knowledge can buy up land which is to be improved, benefitting from what amounts to be free labor.

### **3.18 MONITORING OF FFW**

CARE reviews three-year performance records of participating upazilas. Relative performance is determined on the basis of a number of variables which emphasize upazila ability to follow prescribed procedures, records, and reporting. Although the amount of planned work accomplished is given a fair amount of weight, the variables used to determine wheat reimbursement are not particularly significant in the development of improved institutional capability. In fiscal year 1990, CARE canceled all FFW contractual dealings with 14 upazilas because of poor performance, reducing the total number from 315 to 301. In fiscal year 1991, another eight upazilas may not pass the performance review.

In proposing a merging of food resources into a revised block grant structure, SIFAD emphasized the monitoring role that should be played by the Directorate General of Monitoring, Evaluation and Inspection (DGMEI) of the Local Government Directorate (LGD).

Another suggestion to improve accountability would be through an independent agency, Bangladeshi or foreign, selected by competitive bidding, which would be responsible for keeping the system accountable. This would take away an entrenched responsibility of the upazila administration and remove some of the burden from the CARE administration.

The present system of CARE monitoring of FFW earthworks entails joint pre-surveys of each and every proposed scheme, random monitoring of some of them during implementation, and sample post-surveys after completion. If the results show that less wheat than the amount programmed is all that is justified, reimbursement is reduced accordingly. The system is very staff-intensive: the CARE monitoring team of approximately 250 individuals costs USAID/Bangladesh one million dollars a year. It is criticized as arbitrary and unfair, particularly in cases where CARE does not reimburse the upazila when the final volume measurement of work actually

done exceeds the amount originally programmed. A senior planning official said that the system is inherently invasive and detrimental to the development of upazila accountability.

A simpler system to accomplish goals similar to those of FFW could reimburse upazilas on the basis of the number of kilometers of road rehabilitated or realigned with perhaps a built-in factor to address different soil and other conditions, thus avoiding the need for detailed calculation and checking of volume of dirt moved and presumed number of workers.

There are a variety of earthmoving activities, not related to FFW, occurring in rural Bangladesh. Few if any of these are measured for cost effectiveness in terms of volumes of earth moved. To the social soundness team, the practice of justifying wheat disbursement on the basis of volume of soil displaced merits further examination.

### **3.19 CONTROLLING LEAKAGE**

"Leakage: a euphemism which covers a number of dimensions of lack of accountability, including the sale of wheat destined as food wages (in the definition of some donors); the use of wheat to compensate some of those who lose land in road construction work; payments to other people performing some managerial task at the local level; and outright misappropriation."(26)

CARE monitors 15-20 percent of the road schemes during implementation to assess the quality of work and quantity of earth moved and to determine whether workers are being paid accurately and fairly. The difficulty of obtaining accurate answers to this dilemma has already been discussed. Under certain circumstances, workers even run a risk of dismissal when seen talking to CARE staff. Monitoring generally reveals that a third of the allocated wheat is not used for authorized FFW purposes.

The RMP system is, by contrast, refreshingly straightforward: a monetized foodgrain wage rate with few underpayments; the automatic deposit of part of the payment into escrow bank accounts on behalf of the beneficiaries; no elaborate quality controls yet the work (more or less) gets done; and scope for misappropriation minimized since monetization of wheat is a BDG responsibility (assessing a reasonable 7.5 percent administrative overhead rate). Problems related

to physical loss of the foodgrain itself, discrepancies as to its relative worth per unit of labor, and underpayments of wages to the labor force are minimized if not altogether eliminated.

## **4.0 IMPROVING THE FFW SYSTEM**

### **4.1 MONETIZATION**

Through partial monetization, a scope for misappropriation and misuse of donated wheat, which inevitably will take place and must therefore be accepted as a precondition, can be kept within reasonable limits. The other more fundamental and long-term change that must take place, involves empowering the rural poor to become their own advocates and insist on their rights and entitlements.

At least some partial monetization of wheat shipments is needed not only to meet transportation and other logistic costs but also to support revolving credit funds for development activities. Credit resources generated in this way will enable poultry raising, tree planting, cottage industry and other small projects, which are needed to make food aid beneficiaries eventually self-supporting, to get started.

### **4.2 MAKING UPAZILAS MORE ACCOUNTABLE**

The absence of upazila accountability is at the root of FFW program deficiencies and leakages. Upazilas are not penalized for misappropriation or otherwise misusing donated wheat. BDG is reimbursed each year an amount of wheat that can be confidently determined to have been used for the agreed purposes. CARE also has a system for reducing the upazila's following year's allocation based on miscalculation or inaccurate projections of planned work, but there should be some further penalty for the misappropriation or misuse of donated wheat. BDG has title to the wheat; the upazilas are merely consignees. The BDG should therefore not levy claims for the value of leakage against the offending upazilas.

Local upazilas and unions can and should be expected to contribute to the maintenance and other recurrent costs of the projects they undertake. If the parishad feels that it is not worthwhile maintaining the road then it was probably not worthwhile to make the footpath into a road in the first place. Or else the rickshaw owners, who stand to benefit most from upgrading the path to a road, should contribute to its maintenance.

#### **4.3 REFORMING PROJECT IMPLEMENTATION COMMITTEES**

PICs are constituted in such a way as to merely function as an extension of the local authority system. They are comprised of the union council chairman and parishad members from the ward where the project is located. In some case, PICs are not even formed. Instead the union chairman fulfills the function. Even if there are representatives of the landless on project committees, as there should be, it makes little difference given prevailing patron-client relations. A review of planning and participatory methodologies in six donor-assisted area development programs concluded that in none of the programs were landless or women actively involved in project planning or represented on project committees.(27)

PICs are supposed to act in both the interests of the workforce and the interests of the community at large. In fact, they guard neither set of interests effectively. They generally do not inform all of the villagers in advance of the proposed new roadwork and its consequences in terms of adjacent land that will be needed. Nor are workers sufficiently informed in advance of their wage entitlements and how they are calculated. PICs do not properly maintain the "muster roll" where the names of workers are recorded and their daily attendance and payments made to them are registered, thus facilitating underpayment of wages and misappropriation of wheat by PIC members. Aggrieved workers have nowhere to turn, and if they strike there are always other more compliant workers, perhaps migrants, to take their place.

SIFAD suggested that PICs might be constituted as implementation agents, paid for their work and held more closely accountable for the implementation of schemes.

#### **4.4 USING LABOR CONTRACTING SOCIETIES**

A labor contracting society (LCS) is a group of landless men and women laborers who are organized by an NGO, the Bangladesh Rural Development Board (BRDB) or by a donor-assisted project (notably RESP) to implement under contract small earthworks and other schemes, such as re-excavating khas ponds, tree planting, casting of concrete pipe and installation of culverts. RESP maintains that the number of members in a LCS should be 20-30. The members select from among themselves a chairman and a secretary. The total cost of one contract with an LCS

does not normally exceed Tk. 75,000. Work on larger schemes may require contracts with more than one LCS.

In the case of upazila-level schemes, the contract is signed between the upazila nirbahi officer (UNO) and the upazila engineer (UE) as one party and the chairman and secretary of the LCS as the other, and witnessed by the affiliated agency, say RESP or it could be CARE. The agency stands guarantor for funds (or food?) advanced to the LCS. The contract amount is paid in three installments: as a mobilization advance, when work is half done, and on completion of the project. Cash payments are deposited into a bank account in the name of the LCS.

Preferably LCSs are formed by an NGO which provides initial motivational training. A few days of technical training can then be furnished by, say, CARE engineers, during which time the LCS members are given a training allowance. A group that has been successfully formed and has experience working together on one scheme can then be readily trained to undertake some other type of work, hopefully thus becoming eventually self-reliant. Otherwise, members of the group, which has been formed to work in a particular locality, find themselves without any follow-up work except perhaps in a couple of years when the road needs to be redone. An LCS formed to re-excavate a derelict pond, on the other hand, remains intact because of its continuing fish-farming activities.

RESP believes that relying on labor contracting societies, instead of implementation committees, for earthwork and culvert casting and installation, results in a fairer distribution of jobs and less exploitation of workers. At least laborers have gained some influence over their working conditions. The quality of work is at least as good if not better than that done by contractors, PCs and PICs. Half of LCS members working on RESP-supported projects are women. While the average daily wage received by LCS laborers is higher than that paid through PICs, total labor costs may not be much more because of less misappropriation and leakage.

Even though the concept of LCS is gaining official acceptance (and is included in the 5-year plan) upazila authorities are not always supportive for obvious reasons. They may withhold technical support, delay profiling of alignments, or not provide prompt and timely measurement

of the work that has been done. Nor, under one pretense or another, are they above holding back on payments stipulated in the contract. Hence the importance of an NGO or RESP (or an agency such as CARE) to back up the LCS in its dealings with upazila staff and to minimize harassment.

The LCS may also encounter hostility on the part of important landowners and village elites. They don't have the leverage that a PIC has when it comes to taking land for borrow pits needed for road rehabilitation. One report also noted that "local touts and musclemen" try to sneak into groups, threaten physical assault, and create problems during the time of forming women LCS groups.(28)

Any decision to use LCSs in IFFD would require first an analysis of whatever experience there is with the use of food aid as payment. Also, without genuine support of an LCS on the part of local authorities, NGO involvement in group motivation, contract negotiation and the administrative aspects of project implementation is critical. Some 40 percent of RESP's local staff in greater Faridpur is involved in non-technical training and support of LCSs, such as in accounting, planning labor requirements, and contract negotiation.

#### **4.5 MORE ATTENTION TO SCHEME PROPOSALS**

CARE should devote more staff attention to the scrutiny of scheme proposals as opposed to monitoring implementation and compliance. Greater emphasis should be placed on working with upazila parishads at the earlier identification stage of the process, making use of a more rigorous proforma to prioritize proposed projects.

Before any work is begun, a full description of the scheme should be prepared by upazila engineers showing the tentative alignment, including, for example, information as to which side of the road to be widened. The mauza map, which records property ownership, should indicate tentative locations of all permanent land and tree requirements, as well as temporary land required for borrow pits. Labor requirements for the duration of the project should be spelled out. This information should be confirmed by the CARE engineers. The map and assessment of requirements should be presented to the villagers by the union parishad members, sometimes with CARE staff attending, for general discussion and approval. This should be done before a project

committee is appointed so that villagers, including representatives of the poor, can be included on the committee. The same procedure should apply in the case of other infrastructure projects related to flood control, drainage channel excavation, public buildings, village grain storage, market improvements or whatever. While proforma should require that this procedure be applied for all schemes, CARE's direct involvement in such a time-consuming and staff-intensive process will, of course, only be possible on a selective basis.

Consideration should also be given to compensating households owning less than, 1.5 acres of land when some of that land will be confiscated in order to carry out the scheme. Compensation could be made in wheat based on the foregone value of production over a certain period of time.

#### **4.6 IMPROVING UPAZILA PUBLIC WORKS PLANNING**

Among the problems which upazilas face are the lack of a cohesive technical team serving the parishad in the area of rural infrastructure and the absence of good maps at appropriate scales on which a good planning system could be built. The Abt study (1989) noted that upazilas with fewest number of unions do the best job at road planning and tend to concentrate resources along the better alignments. This is probably because they have fewer political constituencies to satisfy.

It would be a mistake to be too critical of the upazila administration. The same Abt study states, on the basis of interviews in 18 upazilas: "Most of the chairmen indicated attempts to establish priorities systematically...Because the initial proposal to be placed before the upazila parishad is most often prepared by the upazila engineer following suggestions put forward by union chairmen, technical feasibility plays a major part in the preparation of the priority list. There is also a bias towards closing gaps that link important growth centers with upazila headquarters. Several officials reported that, although development considerations are important, they sometimes have to yield to political pressure because of the nature of their positions. For example, the chairman of one upazila mentioned that a certain minister demanded that several bridges be built in his union...In another upazila, the officials argued that each union in the upazila had equal rights to the upazila resources, and so resources had to be spread out."(29)

New plan books were recently distributed to the upazilas. They provide specific instructions on how to prepare a 1:50,000 base map, maps to the same scale of planned road alignments budgeted for each future year, hydrological maps showing water bodies and drainage patterns, and land-use maps with such features as derelict ponds, khas lands and marshlands. How far along upazila engineers are in completing these maps depends on staffing and other considerations. The cooperation of other departments is a formidable challenge to completing this work. For example, cooperation from the agricultural extension officer is necessary to finalize the land use map. Not surprisingly, given the political dimension of roads, road maps seem to be done ahead of the others. A technical subcommittee under the UNO determines the priority of the competing requests from the union parishads, but the final decision is ultimately a political one by the upazila parishad members.

Some donors are already providing assistance in the area of upazila infrastructure planning such as the district level RESP (SIDA/NORAD) engineers who work with upazila engineers in their area of operations. Abt concluded that CARE sub-offices are well placed to assist upazilas (and donors) in how to make decentralized planning and implementation effective. A practical level, the donors' program to strengthen upazilas should be centered around planning and implementing the construction and maintenance of the CARE roads.(30)

CARE's plan to assign ten assistant field engineers to work closely with selected upazila engineers over a period of four months seems most appropriate. This will represent a welcome shift of emphasis from preoccupation with monitoring to the type of technical assistance role which CARE staff are eminently suited to fill. Gradually that role can be extended to include the full gamut of rural infrastructure: roads, canals, embankments, improved markets, grain storage facilities, etc.

The Rural Works Program in the 1970s emphasized irrigation and flood control projects whereas FFW in the 1980s became overwhelmingly devoted to roads. Owing to the delicacy and complexity of natural drainage patterns, it is difficult to plan small water control schemes of the type that upazilas might undertake -- in short, local initiative schemes. Also, the period of the year when drainage canals can be excavated is quite short; the work is less visible than roads and

bridges and, once it rains, difficult to verify. Nevertheless, with the emergence of the Flood Action Plan (FAP), an increasing portion of IFFD resources will undoubtedly be shifted into water control projects, provided upazilas have access to the necessary technical expertise to design the schemes properly. This is also where CARE should be ready to help.

Any effort by CARE to rationalize road and other infrastructure planning will require agreement, particularly by WFP, to cooperate fully in plan book decisions and to limit its food aid support to roadwork that is clearly needed and environmentally sound (e.g., in respect to drainage patterns, placement of structures and other considerations). Without such agreement, establishing planning discipline will not be possible.

#### **4.7 DIVERSIFICATION**

Diversification beyond upazila infrastructure planning and implementation and into such activities as social forestry, roadside tree planting, fishpond excavation and rehabilitation of derelict ponds, opening local drainage and irrigation canals, and market improvements – all of which lend themselves to food aid support – should be considered as an essential component of any follow-on IFFD project. Diversification is needed so that households of landless and near-landless who are dependent on outside wage employment during certain periods of the year can eventually become self-supporting. Otherwise, they will have to depend year after year upon IFFD road and other infrastructure projects. Also, as already noted, poor households rely upon a diverse range of resources for their survival.

To address the need for diversification entails working at the union and village levels in accordance with certain basic principles and guidelines:

1. Landless, near-landless and women need a strong group organization before they can influence local-level decision making. Otherwise, committees formed at whatever level will inevitably be dominated by the rural elite. The development of groups is also necessary to draw on the specialized services and inputs of government line ministries and the support of local NGOs. Target group formation is therefore a critical prerequisite to any successful intervention.

2. Emphasis should be on giving such groups control over resources (such as irrigation pump groups organized by Proshika or roadside tree planting groups under RDRS). Small mutual aid groups must acquire communal assets because of fragmentation of holdings and factional divisions within the village community which otherwise inhibit cooperation. Communal assets provide the needed collateral for obtaining credit and acquiring draft animals, farm implements and other equipment which individuals on their own cannot afford.

3. Many group activities require obtaining usufruct rights to khas lands, chars, canals, and open-water fisheries, which belong to the government and, within certain limits, are under the control of the upazila. Only when acting as a group can the target beneficiaries assert the rights to lease these public resources. The distribution of khas lands to the landless and near-landless and to their cooperatives has been held up because the land is often occupied by influential persons who have not been evicted. But some NGOs have been successful in organizing groups of landless to occupy vacant khas land, or the NGO has leased the land until the group has saved enough to buy in.

4. Without savings discipline, members of the group cannot gain access to independent sources of credit (including Grameen Bank) and will instead be curtailed by patron-client relations and exploited by the more powerful sections of the community. The propensity of impoverished households to regularly save very small amounts of money in order to provide some modicum of security, is characteristic of Bangladesh society.

5. As groups, beneficiaries can assemble at the union center at pre-determined times to receive food rations. Groups who appoint leaders are better able to insist on receiving their full wheat allowance. Union parishads should ideally contribute modest amounts from their block grants (as in the case of BRAC/VGD poultry projects).

6. Since landless women and female-headed households are generally among the poorest in the society, particular attention should be given to the formation of groups of women for savings and income-generating purposes. Here VGD experience is especially relevant and can be replicated in other upazilas. Also, women's participation in the design and delivery of health

services must increase in order to improve their health, nutritional and fertility status. (For example, CARE might identify Ganoshesthaya Kendra primary health areas where there is a concentration of IFFD and RMP workers. Involving RMP workers in the GK approach to rural health care will facilitate their graduation from RMP after two years road-time. Their RMP work schedule could be reduced, and the number of workers at the union/ward level increased to achieve wider coverage.)

7. Optimum use must be made of prior NGO experience with a diversified range of poverty-oriented activities, not just BRAC and Proshika but also many of the smaller indigenous NGOs. NGOs have had extensive experience with group formation, consciousness-raising and savings discipline; in developing group confidence to act as advocates for its members and to hold local authority accountable. Also, bringing NGO staff into contact with the wheat distribution process may mean that it becomes more difficult to conceal the short issue of rations to beneficiaries besides raising the level of professionalism. Involvement of NGOs is also important in bringing in cash resources which, blended with CARE food aid, provide the mix that is needed.

8. It is also essential to work closely with upazila officials, for example, to lease khas land and water rights, to call on the services of upazila technical staff; also, with union parishads which are more closely accountable to local interests and pressures. Cooperation is necessary to bring to bear a potentially wide range of different technical skills, for example, in functional education, savings schemes, health and family planning, credit schemes, and skills training. Because of the importance of good liaison, some NGOs have central coordinating committees at upazila headquarters.

9. Tap CARE's prior experience: a retrospective search through CARE archives may reveal highly relevant material on diversification (reclamation of derelict fishtanks, reservoir use for fish ponds, ecological models for treeplanting, etc.). Undoubtedly CARE already has some very good ideas in-house that should be re-evaluated for implementation.

#### **4.8 INSTITUTIONAL ARRANGEMENTS**

The introduction of this IFFD diversification component can be done gradually in upazilas with proven performance records and in unions where particular NGOs are already active or would like to operate. Choice of where to work should depend upon the demonstrated interest of the upazila chairman and UNO, and, of course, the interest of the particular union parishads directly concerned. In short, while CARE would be directly involved at the upazila level in infrastructure planning and implementation, NGOs using Title II food would be collaborating by initiating projects at the village level in particular unions. The extent that focussing food aid in this manner will have a demonstration effect on neighboring upazilas and unions will determine the ultimate geographic coverage of the IFFD program.

Since each NGO requires flexibility and autonomy to develop its own program and preserve its separate identity, a system of CARE sub-grants will probably be needed. How to minimize CARE oversight responsibilities and bureaucratization, yet still allow CARE to fulfill its overall monitoring responsibilities would need to be carefully worked out.

In short, CARE should be responsible for the targeting and programming of the food resources, relying on other institutions having the grass-roots experience and trained personnel to be responsible for implementation. CARE should not attempt to build up its own capacity except with respect to rural infrastructure projects, of which roads should be but a part.

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