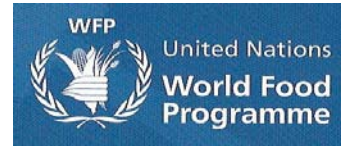


Rural Bangladesh

Socio-Economic Profiles of WFP Operational Areas & Beneficiaries





RURAL BANGLADESH

SOCIO-ECONOMIC PROFILES

OF WFP OPERATIONAL AREAS & BENEFICIARIES

WORLD FOOD PROGRAMME

October 2006

Prepared by



TANGO INTERNATIONAL

Published:

A co-publication of the United Nations World Food Programme, Bangladesh and TANGO International, USA

The publication can be obtained from Vulnerability Analysis and Mapping (VAM) Unit, WFP, IDB Bhaban, E/8-A, Rokeya Sharani, Sher-e-Bangla Nagar, Dhaka-1207, Bangladesh

Cover page design:

Mohammad Mahabubul Alam, WFP

ACKNOWLEDGEMENTS

This socioeconomic profiling study was made possible by the concerted commitment within WFP-Bangladesh to refine geographic, community and household targeting for the new Country Programme (CP) in order to address the long-term development challenges of structural poverty within the most food insecure regions of rural Bangladesh. The study will hopefully serve as a key input for the Country Programme Activity Plan (CPAP) and the planned RBM baseline surveys.

The willingness of WFP to coordinate this major undertaking, with financial assistance from the Department for International Development (DFID) under WFP-DFID partnership in Bangladesh, is a large measure of the overall success of the study.

The main focus of energy and vision emanated from Mr. John McHarris, Disaster Preparedness & Response Advisor and from Ms. Nusha Yamina Choudhury, Head of the Vulnerability Analysis and Mapping (VAM) Unit. Without their active support, assistance, and patience with TANGO in the field, we could have never completed this assessment. We also appreciate the famous Bangladesh hospitality that you showed us.

We would also like to thank MITRA and Associates, who partnered with TANGO in managing the study by hiring and supervising enumerators, overseeing the data collection process, managing the data entry process, and delivering a clean data set. MITRA did an excellent job for which the TANGO team will remain grateful. The team received invaluable and generous support from Mr. S.N. Mitra, Executive Director of MITRA and Associates; Mr. Fuad Pasha, Mr. Jahangir Sharif as well as from a highly professional group of supervisors, quality control officers, research officers, computer programmers and operators, and other support staff. TANGO is grateful to Mr. Mahbubur Rahman – the local Consultant – for his invaluable support in training the qualitative teams, ensuring quality control, compiling reports, translating the instruments used in the study and implementing the qualitative study.

The success of this assessment owes inestimable credit to the outstanding team that performed the fieldwork under great duress but always with courage and patience. This bright and dedicated group of individuals drawn from the public—each of them a development practitioner in fact or in spirit—will always occupy a warm spot in our hearts.

Finally, we wish to acknowledge the generosity and hospitality of the communities and the thousands of households that opened their homes to our team, took the time to explain their lives to us, and patiently sat by as we asked question after question. It is our sincere hope that the enduring residents of rural Bangladesh will become the beneficiaries of this study and will experience improved lives and livelihoods as a result of these efforts.

Thank you.

The TANGO Team

Phil Sutter
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ACRONYMS

ADB	Asian Development Bank
BADC	Bangladesh Agriculture Development Corporation
BBS	Bangladesh Bureau of Statistics
BDHS	Bangladesh Demographic & Health Survey
BIDS	Bangladesh Institute of Development Studies
BMHS	Bangladesh Maternal Health Survey
BRAC	Bangladesh Rural Advancement Committee
BRDB	Bangladesh Rural Development Bureau
CARE	International NGO operating in Bangladesh
CBO	Community Based Organization
CHT	Chittagong Hill Tracts
CNI	Community Nutrition Initiative
CPAP	Country Programme Activity Plan
CSI	Coping Strategies Index
DFID	Department for International Development
DPT	Diphtheria, Tetanus, Pertussis (whooping cough)
DRR	Directorate for Relief and Rehabilitation
DWA	Department of Women's Affairs
FFA	Food for Assets
FFE	Food for Education
FFW	Food for Work
FG	Focus Group
FGD	Focus Group Discussion
GDP	Gross Domestic Product
GOB	Government of the Peoples Republic of Bangladesh
HH	Household
HIES	Household Income Expenditure Survey
HKI	Helen Keller International
HYV	High yielding variety
IFPRI	International Food Policy Research Institute
IFS	Integrated Food Security
IGA	Income Generating Activity
IPM	Integrated Pest Management
Kcal	Kilo calories
MC	Micro-credit
MCI	Micro-credit Institution
MFI	Micro-finance Institution
MOE	Ministry of Education
MOH	Ministry of Health
MWCA	Ministry of Women & Children's Affairs
NE	Nutrition for Education
NGO	Non-Governmental Organization
N/W	Northwest
ORS	Oral Re-hydration Solution/salt
PPS	Probability-proportional-size sampling technique

PRA	Participatory Rural Appraisal
PRSP	Poverty Reduction Strategy Paper
RBM	Results-based Management
RMP	Road Maintenance Programme
TANGO	Technical Assistance to NGOs International
TBA	Traditional Birth Attendant
TNC	Training & Nutrition Centre
TOR	Terms of Reference
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UNO	Upazila Nirbahi Officer
UP	Union Parishad
VAM	Vulnerability, Analysis & Mapping Unit
VGD	Vulnerability Group Development
WFP	World Food Program
WHO	World Health Organization

EXECUTIVE SUMMARY

This socio-economic profiling study was commissioned to provide WFP with a more in-depth and robust analysis of socio-economic and livelihood indicators in order to confirm existing geographic targeting and more precisely target communities and types of households in the new WFP Country Programme.

This study should be understood in the context of recent rapid change in rural Bangladesh, which has made great strides in food production, public health, family planning, and education in recent years. Nevertheless, a large proportion of the population continues to endure an annual struggle for survival. Almost half of the population live in absolute poverty and malnutrition continues to impact children profoundly. Unique factors influence food availability and access in rural Bangladesh. Despite rapid gains in national food availability and near food self-sufficiency, many rural households, particularly households lacking access to land and diversified livelihood opportunities, remain food insecure. Food insecurity is also linked to low income levels. The ability of the poorest households – the hard-core or ‘invisible’ poor – to purchase food is limited by their insufficient incomes. One of the major themes of this study is that despite the progress toward alleviating food insecurity at the national level, the relatively large group of extremely poor or ‘invisible poor’ rural households do not participate in virtually any aspect of the movement toward development and are falling further behind other groups of households.

Objectives of the Socio-economic Profiles

The overall purpose of the study was to develop a socio-economic profile of WFP’s six priority rural areas of Bangladesh based on a logical framework of the linkages between food security, nutritional status, livelihoods, and socio-economic indicators. The study sought to characterise major issues and causes of food security and food insecurity; identify the poorest and most food insecure communities and households within the six priority rural areas of the country, shed light on the coping strategies of poor households vulnerable to transitory food insecurity, develop analytical indicators for measuring food insecurity and targeting beneficiary selection criteria for the country programme 2007-2010, and provide recommendations on potential interventions to realize improved livelihoods, enhanced food security, and modified safety nets targeting the ultra poor.

Methodology of the Study

In order to triangulate information and develop an in-depth analysis of socio-economic profiles a combination of data collection were utilized:

- ◆ A review of secondary data and literature;
- ◆ Qualitative community profiles of 22 villages evenly spread throughout the six WFP priority zones, based on:
 - Key informant interviews;
 - Focus group discussions with separate community groups of men and women;
 - Coping strategies exercise aimed at identifying the frequency and severity of major coping strategies employed during times of shocks; and a
 - Wealth ranking exercise;

- ◆ Household survey of 2,760 households from 138 villages across the six WFP priority zones.

The sampling strategy included a two-stage sampling procedure in order to ensure a random sample of all households within the six WFP priority zones. The household sample included twenty randomly-selected households per village and 23 villages per zone, for a total of 460 households per zone and 2760 villages in the six-zone survey area. Sample villages were selected using the probability-proportional-to-size (PPS) technique. A separate weight factor was constructed for each zone to ensure that all households had the same probability of selection. From the quantitative sample of the six zones, TANGO then selected 22 villages through random sampling, four villages in each of five zones and two villages from the substantially smaller Coastal zone for the qualitative assessment.

SOCIO-ECONOMIC PROFILE FINDINGS

The socio-economic profiles: Profiles of household types were created by analysing differences across the six zones, by sex of household head, and by creating socioeconomic groupings or classes of households. The statistical tool, *Principal Component Analysis*, was used to create clusters of households by extracting components from a combined set of variables related to food security and vulnerability.

Indicators selected to explain food security and vulnerability include:

1. Number of months with access to adequate food (up to 12 months);
2. Dietary diversity as defined by the number of food groups acquired in a week (up to 14 food groups);
3. Number of meals eaten in 24 hours;
4. Household income (as defined by monthly household expenditure, which is the proxy for household income); and
5. Household assets (the value of a set of the most important assets, including land, livestock, productive assets, appliances, and non-productive assets).

The clustering exercise revealed four discrete socio-economic classes of households each with dramatic differences in their ability to access assets and resources, livelihood options, food security, and overall livelihood security.

- ◆ Group 1, **Non-vulnerable** households – approximately 16% of the surveyed households – average eleven to twelve months of adequate food provisioning per year, consume a diverse diet consisting of twelve food groups, eat three meals per day, own assets averaging 8,876,000 taka in value, and have an average monthly per capita income of 2,157 taka (defined by per capita household expenditures). Non-vulnerable households are food and livelihood secure, particularly in relation to all of the other households residing throughout the six WFP rural priority zones of Bangladesh.
- ◆ Group 2 – approximately 37% of the surveyed households – are households who are ‘**on the edge,**’ but moving forward in several respects. On-the-edge households average ten months of adequate food provisioning per year, consume a relatively diverse diet consisting of ten food groups, also eat three meals per day, own assets averaging 1,759,000 taka in value, and have an average monthly per capita income of 1,089 taka. On-the-edge households are also food secure and are relatively livelihood secure

compared to vulnerable and *invisible poor* households, but their incomes are approximately half that of non-vulnerable households.

- ◆ Group 3 – approximately 32% of the surveyed households – referred to as ‘**vulnerable**’ households – they average eight months of adequate food provisioning per year, leaving four months of food insecurity, consume a less diverse diet consisting of eight food groups, eat less than three meals per day, own assets averaging 495,000 taka in value, and have an average monthly per capita income of 775 taka. Vulnerable households are food insecure for significant periods of time throughout the year and are relatively livelihood insecure, possessing few assets and inadequate incomes.
- ◆ Group 4, Highly Vulnerable Households – approximately 15% of the surveyed households – which TANGO refers to as the ‘**invisible poor**’ – average three months of adequate food provisioning per year, although most of the invisible poor are food insecure for the entire year, consuming an inadequate diet consisting of seven food groups, and eating only two meals per day on average. The invisible poor own virtually no assets, averaging only 91,000 taka in value, and have an average monthly per capita income of 674 taka. Also known in Bangladesh as the ‘ultra poor’ or the ‘hard-core poor,’ the invisible poor, are highly food insecure, depend on food assistance, and are called the invisible poor because they lack access to virtually every aspect of financial, natural, human, social, and political capital in Bangladesh. This includes a lack of access to many development, income-generating and safety-nets programs offered by NGO, government, and bilateral agencies operating in rural Bangladesh.

Assets & Resources: Asset ownership was highly correlated with income and food security indicators. The value of household assets for the non-vulnerable group is approximately 95 times more than that of the invisible poor. In a land hungry country, where rural families depend on agricultural production on cultivable land as the major source of their livelihoods, land continues to represent the most essential asset defining rural food security. Yet only four out of every ten households own any cultivable land; the invisible poor are invariably functionally landless. Non-vulnerable households own more than 265 decimals of functional land for cultivation, while the mean area of land owned by the invisible poor is only 38 decimals. The value of assets owned by female-headed households is approximately two-thirds the value of assets owned by male-headed households. Female-headed households also own smaller areas of land, fewer numbers of livestock and fewer numbers of other productive and unproductive assets compared to male-headed households.

Livelihood Strategies: Landlessness increasingly encumbers households in rural Bangladesh. Less than half of the survey households cultivated on farmland last year, however only fourteen percent of invisible households engaged in **agricultural production** on farmland in contrast to eighty percent of the non-vulnerable households. The proportion of households engaged in cultivation on farmland increases by socioeconomic household status. Non-vulnerable households cultivate on significantly larger areas of land compared to households from any other socio-economic group. New technologies have increased agricultural production during the last decade. However, distribution of and access to the new technologies has been highly uneven, benefiting landed farmers with access to assets and resources, while bypassing a large group of less fortunate farmers. The poorest households are heavily dependent on labour for their household income needs. Less than a quarter (22%) of female-headed households cultivate on farmland compared to half of their male-headed counterparts. These female-headed households have fewer household members able to participate in the labour force and have high dependency ratios. The non-vulnerable

households, who farmed on seven times more land than did the poorest households, invariably cultivated on their own land. On the other hand, vulnerable households as well as the invisible poor cultivated in sharecropping arrangements. The two middle category households have far greater access to *Khas* land¹ than do the invisible poor.

Approximately half of the working age population is currently working. Manual labour, including agricultural labour, non-agricultural labour and pulling rickshaws or rickshaw-vans, is the most important primary rural **income strategy**, involving nearly forty percent of all adults. Particularly dependent on manual labour, the invisible poor face severely limited livelihood or income earning opportunities relative to other socioeconomic category households. Agriculture is the most significant primary income strategy for the other socioeconomic category households. Overall 87 percent of individuals have stable permanent income. A larger proportion of the Chittagong Hill Tracts (CHT) population, *Char* (riverine island) dwellers, and *Haor* (seasonally flooded low-lying area) households are dependent on seasonal income than are households from the other three regions.

Changes in Livelihoods & Income: Asked about changes in their income status over the past three years, half of the households in the sample perceived no income changes, slightly less than one-quarter of households believe their incomes to have declined, and slightly more than one quarter have enjoyed increased incomes. The income gap between the poorest and relatively wealthy households is increasing in rural Bangladesh. The self-perceived position of the invisible poor has clearly deteriorated. Only six percent of the invisible poor have seen improved incomes while more than forty percent believe that their incomes have declined. In contrast, half of the non-vulnerable households claim income improvements and only fourteen percent have experienced a decline in household income. Female-headed households tend to have experienced income decline in comparison to male-headed households. Incomes have apparently increased for Drought zone households but have tended to decline for households from the *Chars*.

The reasons cited for changing livelihood and income fortunes differ dramatically by socioeconomic category. For non-vulnerable households, improved crop varieties or increased area of cultivated land – agricultural production enhancements – were prominent in explaining improved livelihoods. On the other hand, the invisible poor, who lack essential assets or resources vital for investment, attribute any improvements to diversified income sources or increased numbers of income earners. Non-vulnerable households experiencing declining fortunes blame ‘market failures’ most frequently. The invisible poor attribute declining incomes to employment loss, prolonged illnesses within the household, and to inadequate access to health services. For 93% of female-headed households, the death of the primary income earner was a major reason for declining household livelihoods.

Financial Capital: One of the most significant positive developments in rural Bangladesh over the past two decades has been the large expansion of institutionalised credit operations. These operations have replaced rural household dependence on moneylenders, who charged usurious interest rates in the context of a highly unequal rural patron-client system. This

¹*Khas* land are huge areas of land, originally belonging to big estates or large chunks of land acquired by the government for railways or other large land-based projects or abandoned properties, later vested in government. These *khas* lands are managed directly by the government through government appointed managers or trustees (http://banglapedia.search.com.bd/HT/L_0047.htm).

development revolution was recently brought to global attention by the Nobel Committee, which recognized Mohammed Yunus for his pioneering work in establishing the Grameen Bank program of allowing poor, rural women the opportunity to take loans for investing in small economic enterprises. Microfinance institutions (MFIs) have promoted household savings into what is becoming a widespread livelihood strategy in rural Bangladesh. Savings is highly correlated with household membership in NGOs and other MFIs. Non-vulnerable households save significantly more than do households in the other socioeconomic classes. However, MFI activities have largely bypassed invisible poor households.

Less than half of all households in the WFP priority regions have at least one outstanding loan. Most loans appear to have been taken by middle socio-economic households. The study found discernible associations between the type of lender and the socio-economic status of the client. More vulnerable households tend to suffer less favourable lending terms, because lenders have a preference for perceived less risky (i.e., less vulnerable) clients. Vulnerable households, who tend to lack collateral, also find it more difficult to establish credentials with formal institutions. More than three-quarters of non-vulnerable households invest their loan in some kind of enterprise. However, micro-credit does not appear to assist vulnerable households in easing capital constraints; three-quarters of their loans are directed toward household consumption needs. Also alarming was the finding that almost one-quarter of the loans taken by vulnerable households are directed toward repayment of previous loans. It is clear that despite the positive trends in micro-finance and IGA opportunities in rural Bangladesh in recent years, the poorest and most vulnerable households, particularly those in the *Char*, *Haor*, and Northwest regions of the country, continue to be plagued by a debt burden that can erode livelihoods.

Education: The study confirms impressive strides in primary school attendance throughout rural Bangladesh. The study found that approximately 65 percent of school-aged children (5 to 18 years) are currently enrolled in and regularly attend school. Many communities commented on improved educational quality in recent years. Helped by government encouragement promoting girls' school attendance, the gender gap has been bridged in all of the six WFP zones except for the Chittagong Hill Tracts, where many girls continue to stay away from school. School drop-out rates, however, accelerate substantially following primary school. Less than thirty percent of rural Bangladeshi children continue on to secondary school enrolment.

Health: Almost eighty percent of the adult population consider themselves to be in good health. This is good considering the widespread lack of confidence in the quality of health services at the village level. There is a significant correlation between illness and household vulnerability. Confidence in health providers varies significantly across the regions. With the exception of vaccination services – more than 95 percent of children were vaccinated against common preventable diseases – health extension services in the remote areas of Bangladesh are unreliable, irregular, or invariably non-existent, and health centres lack sufficient staff to serve the population. Survey participants ranked village doctors as the most popular health provider (45%) followed by general health practitioner or doctor (23%), and village pharmacy (13%). Only nine percent of people reported going to the *Upazila* Health Complex in the event of a sickness and another nine percent of individuals reported that they sought services from a rural dispensary or satellite clinic.

Water & Sanitation: Up to 97% of rural Bangladesh households continue to rely overwhelmingly on tube wells as their primary source of drinking water. The exception is the Chittagong Hill Tracts, where fewer than half of the population have access to tube well water and access to clean potable water remains problematic. Household sanitation behaviour varies widely by socioeconomic class. Most vulnerable households (56%) do not use latrines while non-vulnerable households rely either on a pit latrine (54%) or a flush toilet (37%).

Social Capital: The stock of social capital that households can use depends on the strength of the network or connections they build. Access to social capital enables households to secure resources and opportunities. Household memberships in organizations working at the community level are low in the study area, where fewer than half of all households have pursued membership in any organization. Not surprisingly, the proportion of vulnerable or invisible poor households with memberships in any organization is substantially lower than the proportion of non-vulnerable households. Nearly one fourth of all households pursue memberships in NGOs and Community Based Organizations (CBOs). Most of the NGOs and CBOs work on micro finance. On the contrary extremely poor households generally do not qualify for micro credit due to lack of collateral. Hence, a substantial proportion of households from each of the two better-off categories participate in NGO/CBO activities.

The Government safety net programmes like VGD and RMP have also failed to adequately target the extreme poor. The findings of the study indicated that of all the households participating in the safety net programmes sixty-seven percent were from the bottom two groups; hence, thirty-three percent of the households do not qualify for the programmes. In the study area approximately seven percent of the surveyed households were found to be beneficiaries of the VGD programme. Fifty-nine percent, of these VGD beneficiary households belonged to the invisible poor and vulnerable groups. Participation of the better off groups that is the non-vulnerable and on the edge households in VGD programme was higher in Coastal and CHT areas respectively. Though this study was not precisely designed for a robust assessment of safety net programmes like VGD, RMP and others, the important point that came out from the findings is that a substantial proportion of the better off households participate in a programme particularly meant for the extreme poor or invisible poor². The major problem here is apparently not with the geographic targeting but rather with the beneficiary selection process, which is plagued by political, social, and perhaps financial influence at the union level. Understanding that the VGD beneficiary selection process has in the past resulted in substantial inclusion errors³, WFP in its new country programme for 2007-2010 has expended considerable effort aimed at improving the targeting and selection process.

Food Security: Most households in the sample appear to be food secure. It should be noted that study data was collected during a relatively favourable time (i.e., within two months of a major harvest for most localities). Eighty percent of all households, including virtually all of the non-vulnerable and on-the-edge households and more than eight out of every ten vulnerable households, regularly consume three meals per day. On the other hand, less than

² A recent (2006) study on “Relative Efficacy of Food and Cash Transfers” by IFPRI & WFP showed that 65% of the VGD beneficiary households belong to the lowest 30% expenditure deciles/groups. WFP’s 2006 monitoring findings on VGD estimated that 18% of the VGD card holders do not qualify for the programme.

³ Inclusion of non-deserving participants/beneficiaries in a programme is termed as inclusion error.

one-quarter of the invisible poor consume three meals; most of the poorest households regularly eat two meals a day.

Diet diversity, a proxy for nutritional adequacy and an essential aspect of food security, is clearly problematic for the poorest households in the WFP programming zones and should constitute a targeting indicator for food security programming. Two-thirds of invisible poor households consume seven or fewer items in the diet. In contrast, all non-vulnerable households consume more than nine items in the diet. Diet diversity appears to be problematic in the Coastal and *Char* zones and for female-headed households, half of which consume seven or fewer items daily. Food security, as measured by the number of months of adequate food, yields a similar pattern. More than nine of every ten non-vulnerable household have adequate food for at least ten months. In contrast more than half of the invisible poor never have adequate food throughout the year. The *Char* and Northwest zones appear to be the most food insecure regions of the country.

The Coping Strategies Index: Households in rural Bangladesh employ a variety of strategies to cope with shocks, including economic, political and socio-cultural shocks as well as natural disasters such as flooding and cyclones. Not surprisingly, the poorest households tend to employ adaptive coping strategies far more frequently than do non-vulnerable households. A Coping Strategies Index (CSI) tool was used to capture these dynamics. Households experiencing food supply shortfalls were asked a series of questions regarding coping. Information on the frequency and severity of coping is recorded, and forms the basis for a CSI score. The CSI scores confirmed that relative to the other groups, the invisible poor and female-headed households feel compelled to resort to more severe coping strategies when managing food supply shortfalls:

◆ Non-vulnerable HH:	12
◆ On-the-edge HH:	21
◆ Vulnerable HH:	21
◆ Invisible Poor HH:	33
◆ Male-headed HH:	23
◆ Female-headed HH:	36
◆ All Households:	24

Most households employ a few common coping strategies during difficult periods of time of the year, or in response to a shock or abnormal event. The most commonly employed coping strategies include:

- ◆ Limiting portions at meal time;
- ◆ Relying on cheaper & less preferred foods;
- ◆ Borrowing food;
- ◆ Purchasing food on credit; and
- ◆ Reducing adult consumption to allow children to have adequate food.

The CSI correlates closely with three measures of food security – dietary diversity, number of meals eaten in 24 hours, and access to adequate food. This result suggests that the CSI can be used as a proxy indicator to measure food insecurity in the WFP priority areas.

RECOMMENDATIONS

The following recommendations were derived from the study:

Targeting: WFP should work with its partners to implement an improved targeting strategy to ensure the inclusion of the poorest and most food insecure households. Although WFP's geographic targeting identifies appropriate and accurate targeting at the regional level, the findings of the study indicate that at local and household levels, there remains considerable room for improvement in targeting. Safety net programmes currently reach a disproportionate number of vulnerable and on-the-edge households – the two middle class categories of households identified in this study. The invisible poor have frequently been bypassed. Household targeting deficiencies are hurting many poor families with limited skills, limited livelihood resources, and poor social capital.

VGD Selection & Targeting: WFP should convene a series of workshops involving stakeholders (union and *upazila* officials and committee members, MWCA and NGO staff) to discuss various measures to improve the selection process. One measure that WFP has recently taken up is specific rewards and/or punishments to unions that have performed well or poorly respectively.

WFP has partnered with the Ministry of Women and Children Affairs (MWCA) to implement improvements to the VGD beneficiary selection process with the purpose of reducing inclusion errors. The selection process however apparently remains problematic, particularly at the Union *Parishad* level.

Tracking Vulnerability:

Vulnerability monitoring systems need to be established to track changes in the population's food security status. Information generated from such systems would then be available to inform resource allocation through safety net programs, and whether resources should be scaled up or scaled down.

A number of macro-economic factors, exacerbated by changes in the agricultural sector at the micro- and meso-levels, are impacting the vulnerability of the poorest households, particularly the invisible poor. Informal and formal safety nets are currently smoothing consumption, but some disturbing coping responses indicate that shocks could easily push poor households into destructive practices. For example, three-quarters of the poorest households are relying on loans to manage income shortfalls, producing a cyclic pattern of debt for many households. Invisible poor and vulnerable households without access to micro-credit are paying higher interest rates than other households. In the near term, social protection measures are needed to prevent more vulnerable households from sliding further behind at the same time that longer-term measures are implemented to strengthen the economy.

Coping Strategies Index:

The CSI is a monitoring tool designed to measure the frequency and severity of food security related consumption or adaptation coping behaviours. The CSI monitors the frequency of a particular coping strategy – how often does the household engage in that coping behaviour –

as well as the severity of the behaviour. The CSI index value is developed by multiplying severity scores by frequency scores. The measure includes only those strategies that are most important in a particular local context. WFP VAM and its partners should consider employing the CSI as a surveillance system in sentinel sites to monitor food security.

Food Security and Vulnerability Indicators: The following variables emerged from this study as important indicators of household food insecurity and vulnerability:

- Number of months of household access to adequate food for all household members from all sources;
- Meal frequency – number of meals eaten per day;
- Dietary diversity – number of unique food groups consumed over 7 days;
- Asset ownership, particularly agricultural land, cattle, poultry, bicycle, and the number of rooms occupied;
- Number of income sources;
- Household dependency ratio; and
- Type of household – female-headed households are usually vulnerable and food insecure.

WFP has already incorporated criteria related to food security, asset ownership, female-headed households in its beneficiary selection for VGD programme. WFP should also consider other criteria like dependency ratio and income sources, which are equally important in identification of the ultra poor.

Diversifying Incomes: Greater diversification of household income sources is required to enhance livelihood resilience and reduce the vulnerability of households. The invisible poor cited income diversity as the most crucial variable of potential income increase. WFP's development package already contains training on small-scale income generating activities, health and nutrition. In the new country programme WFP has diversified the package by appending training on homestead gardening, civil and legal rights, literacy and numeracy, HIV-AIDS awareness and prevention measures, budget management and disaster risk reduction. WFP should consider supporting targeted vocational training in communities identified through a participatory appraisal process. The support should also include entrepreneurial and micro-business financial management training. WFP has already commenced the process of complementing training activities by facilitating linkages with appropriate financial partners to enable vulnerable groups and individuals to access small-scale micro-finance and business loans.

Food for Education: WFP's long established global and Bangladesh expertise in targeted Food for Education (FFE) programmes can be used to improve the quality of primary education.

Nutrition Programming: WFP already plays a critical role in battling malnutrition in Bangladesh through its interventions in school feeding and the VGD programme. WFP is now planning on using food aid and other resources to support nutrition programming at the community and national levels as well as in conjunction with the FFE programme. This strategy might include supplementation for high risk groups, micronutrient fortification of basic foods, education and raising awareness within communities of the importance of nutrition, and encouraging diversification of food consumption.

I BACKGROUND & OBJECTIVES OF THE STUDY

The World Food Program (WFP) in Bangladesh is currently planning for the new Country Programme to be proposed for the years 2007-10. An essential part of this process includes exercises designed to prioritise activities and target resources most effectively and efficiently in the regions and areas of highest need. In partnership with the Government of Bangladesh (GOB), WFP undertook a geographic targeting exercise, applying a variant of the small area estimation technique.¹ The analysis, originally pioneered by the World Bank to target development assistance, yielded estimates of the proportion of population below the lower poverty line by Upazila. The lower poverty line is defined as food calorie consumption levels below 1805 Kcal per day. The mapping exercise identified six geographic regions of the country as highly food insecure Upazilas.

Based on the targeting exercise, WFP then undertook rapid appraisals in some of the most severely food insecure unions in the six WFP priority areas. It became clear, however, that a more in-depth and robust analysis of socio-economic and livelihoods indicators was necessary in order to confirm the geographic targeting and more precisely target communities and types of households in the new WFP Country Programme.

1.1 Objectives of the Socio-Economic Profiles

The overall purpose of the study is to develop a socio-economic profile of the six priority rural areas of Bangladesh based on a logical framework of the linkages between food security, nutritional status, livelihoods, and socio-economic indicators. The study will serve as a key input for the planned Country Programme Activity Plan (CPAP) as well as the planned RBM – Results-based Management – baseline surveys.

Specifically, WFP undertook the socio-economic profiles in order to:

- Characterise the main issues and causes of food security and food insecurity by studying livelihood strategies, income and expenditure patterns, food consumption and dietary intake patterns, community risks and hazards, child-care and health practices, social dynamics, and access to services including water sanitation, education, and health;
- Provide primary data on the characteristics of the poorest and most food insecure communities and households within the six priority rural areas of the country;
- Understand the common coping strategies of poor households vulnerable to transitory food insecurity and hazards;
- Develop analytical indicators for measuring food insecurity amongst rural poor households within the six priority regions of WFP future interventions;
- Inform WFP of community and beneficiary selection criteria for the next country programme;
- Contribute to emergency preparedness and response capacity through the generation of baseline and background data; and
- Provide recommendations to decision and policy makers on potential interventions to realize improved livelihoods, enhanced food security, and modified safety nets targeting the ultra poor.

¹ BBS, GOB & WFP, *Local Estimation of Poverty & Malnutrition in Bangladesh*, May 2004.

The Conceptual Framework, including the Analysis Plan for the Socio-Economic Profile, is attached as **Annex B**.

1.2 WFP IN BANGLADESH

The purpose of the WFP Country Programme in Bangladesh is to alleviate poverty and enhance food and nutrition security for the extreme poor. WFP food support and development services target the poorest of the poor with the aim of graduation from the lowest poverty line, defined as consumption of less than 1800 Kcal per day. WFP provides food in addition to human development skills and micro-finance services to enable extremely poor households to escape from the vicious cycle of chronic food insecurity and malnutrition. Participating households who graduate from the food assistance programming cycle are assisted in joining the development interventions of partner NGOs in order to sustain their improved food security status garnered as a result of participation in the food assistance and development package services. Major WFP Country Programme interventions currently include the Vulnerable Group Development (VGD) Programme, Integrated Food Security (IFS), and the Nutrition for Education (NE) Programme.

Vulnerable Group Development: The world's largest development intervention exclusively targeting vulnerable women, VGD currently provides 750,000 participating ultra-poor households totalling approximately 3.75 million beneficiaries with a monthly food ration of 30 kg of wheat or 25 kg of fortified wheat flour (*atta*) in addition to a development service package consisting of human resource skills – social and legal awareness training – as well as income generation training and savings and credit. The VGD cycle operates for 24 months after which VGD women mainstream or graduate into development programmes implemented by WFP partners in order to assist participating women in sustaining the food security gains and further improving their livelihoods. VGD includes the Income Generation for VGD implemented by NGOs in 383 upazilas, Food Security for VGD implemented in 57 upazilas, and the Union Parishad VGD implemented in 33 upazilas. The VGD programme is coordinated by the Ministry of Women and Children Affairs (MWCA).

Integrated Food Security: IFS promotes household food security, disaster preparedness, and improved nutritional status of vulnerable groups in highly food insecure areas of the country by providing food and cash wages and nutritious food supplements to extremely poor women, men, adolescents, and children. IFS targets 920,000 beneficiaries through three programme components, including Food for Assets (FFA), Training and Nutrition Centre (TNC), and the Community Nutrition Initiative (CNI). FFA and TNC participants receive human skills and income generation training as well as savings and credit through partner NGOs. CNI provides children between the ages of 6 and 72 months and pregnant and lactating women with nutritious food and nutrition knowledge. Community participation in programme planning and implementation is integral to the IFS programme process.

II METHODOLOGY

The assessment team has employed a combination of data collection procedures in order to triangulate information in developing an in-depth analysis of socio-economic profiles of the six WFP priority regions of Bangladesh.

2.1 *SECONDARY SOURCE REVIEW & INSTITUTIONAL STUDY*

Prior to undertaking the qualitative assessment and quantitative survey, an advance team collected and perused relevant secondary sources of data in order to:

- Gain a basic understanding of the food security, nutrition, and socio-economic context of rural Bangladesh;
- Derive basic statistics and livelihoods indicators with which to compare to information gleaned from the socio-economic profiles study;
- Identify the physical and institutional contexts affecting household decision-making, livelihoods strategies, and resource access and allocation;
- Compare vulnerability measurements across studies in rural Bangladesh; and
- Formulate additional and relevant research questions;

Information gleaned from this review helped define the socio-economic profiles study. The secondary source review included documents from GOB, donor organizations and NGOs operating in the rural Bangladesh context, academic studies, census data, GOB statistical data, food insecurity and vulnerability profiles and assessments, and relevant reports on previous development and food assistance interventions in rural Bangladesh. Documents are listed in the **Bibliography** at the back of the report.

2.2 *ENUMERATOR/FACILITATOR TRAINING WORKSHOP*

Prior to conducting the fieldwork, all participating team members were trained during a five-day workshop that included classroom instruction in food and livelihood security concepts, and livelihoods assessment methodologies. The large assessment team was divided into a qualitative team comprising 15 facilitators, four supervisors and an overall qualitative supervisor, and a quantitative team comprising 36 household survey enumerators and nine survey field supervisors. The qualitative and quantitative teams learnt and practiced qualitative facilitation and survey questionnaire techniques respectively, using the draft topical outlines and survey questionnaires. The training workshop was participatory, including a lot of group activities.

The qualitative community facilitation team and quantitative household survey team tested the instruments in three rural communities as part of the training process. Field-testing:

- (1) Provided participants with practical experience in facilitation methods and interview techniques;
- (2) Allowed the team to incorporate final relevant changes to the instruments prior to commencing the actual survey; and
- (3) Reduced the potential for enumerator and facilitator errors during the profiling study.

The training workshop agenda can be found as **Annex C**.

2.3 SAMPLING STRATEGY & PROCESS

2.3.1 Quantitative Household Survey Sample

TANGO and MITRA employed a two-stage sampling procedure in order to ensure a random sample of all households within the six WFP priority zones. TANGO began by calculating a minimum required sample size per zone – 406 households – and added in an additional 12 percent as cushion to take into account non-response and questionnaire error factors. In order to minimize the design effect and ensure that all households within each zone had an equal probability of selection, TANGO targeted 20 households per village. In order to obtain a sufficient number of households per zone, TANGO targeted 23 villages per zone, for a total of 460 households per zone and 2760 villages in the six-zone survey (20 households x 23 villages x 6 zones).

MITRA developed a sample frame of all villages within each of the WFP priority zones, based on 2000 census data. The lists were arranged geographically in order to ensure adequate sample coverage. MITRA then randomly selected villages systematically from the list, employing the probability-proportional-to-size (PPS) technique.

MITRA then sent out teams to each of the 138 villages randomly selected for the survey to develop a complete census by listing all households in each village. After listing households alphabetically, a sample of 20 households per village was randomly selected, providing the team with a complete list of households for the household survey. A separate weight factor was constructed for each zone to ensure that all households had the same probability of selection.

The Sampling Strategy for the Socio-economic Profiles Study is attached as **Annex D**.

A map of the priority six regions for the allocation of WFP resources is included as **Annex E**. The six priority regions include:

1. Chittagong Hill Tracts (Bandarban, Rangamati, and Khagrachhari);
2. Drought zone (Rajshahi, Nawabganj, Naogaon, and Natore);
3. Northwest (Dinajpur, Rangpur, Joyperhat, Lalmonirhat, Nilphamar, and Thakurgaon);
4. North-central chars (Kurigram, Gaibandha, Jamalpur, Sirajganj, and Pabna);
5. Haor basin (Sherpur, Netrakona, Mymensingh, and Kishoreganj); and
6. Coastal zone (Bhola).

A complete list of villages selected by zone is included as **Annex F**.

2.3.2 Qualitative Community Assessment Sample

TANGO selected 22 villages for participation in the qualitative community profiles. The 22 villages included four villages from each of five zones and two villages from the Coastal zone, which is substantially smaller, representing only one district, and more homogeneous than the other four zones. The four villages from each of the five zones and two villages from the Coastal zone were purposively randomly selected from amongst the 23 villages already selected for the quantitative survey, ensuring wide geographic coverage in representative districts for each zone.

A list of the qualitative sample villages is included as **Annex G**.

2.4 ASSESSMENT PROCESS

The qualitative and quantitative assessment teams worked independently of each other. The quantitative team divided into nine teams of four enumerators and one supervisor each. Six of the teams remained in one zone and three teams visited two zones each, each team completing 20 household questionnaire interviews in a village in a day. The qualitative team split into three teams of five facilitators and one supervisor each. The teams each visited two zones, collecting qualitative information in six to eight villages in the two zones. The teams spent one to two days in each village, facilitating male and female focus group discussions, key informant interviews, coping strategies index and wealth ranking exercises. Qualitative team members assisted supervisors in entering qualitative data into matrices.

2.4.1 Qualitative Community Profiles

The qualitative assessment teams visited 22 villages a facilitated a variety of exercises using Participatory Rapid Appraisal (PRA) techniques, described below. The qualitative assessment aimed to enhance our understanding about local livelihood systems – the economic, socio-cultural and political context and the constraints leading to food insecurity, vulnerabilities, marginalization, and risks of poor families living within this context. The major objective was to gain maximum in-depth knowledge regarding the underlying causes of food insecurity among vulnerable populations. This information complemented the quantitative information and helped in the interpretation of the household level data.

a. Key Informant Interviews

Assessment team members met with key informants, who included chairmen, members, teachers, and other community leaders in each of the 22 communities selected for the qualitative assessment, in order to obtain a “snapshot” of community issues and a community profile. The key informant interview topical outline sought information about:

- Demographic trends;
- Settlement history;
- The economic base and village resources of the community; and
- Community infrastructure, including water, schools, health facilities, extension service facilities, markets, and roads.

The key informant village profile format is included as **Annex H**.

b. Focus Group Discussions

The qualitative assessment teams facilitated two focus group discussions, dividing residents into male and female groups, in each of the 22 villages. Group size ranged from five to 15 participants. Facilitated focus group discussions followed the topical outline but were allowed to develop naturally with greater attention paid to topics the participants felt were the most important. Gathering information from different focus groups proved useful in comparing perceptions and priorities. The focus group discussions included:

- Community profiles;

- Community perceptions of access to and quality of services, resources, and infrastructure, including transport, schools, markets, and health facilities;
- Area features, including forests, water, climate, and erosion;
- Social organization within the community;
- Livelihood strategies, including agriculture, animal husbandry, horticulture, use of forest products, fishing, and other income generating activities (IGAs); and
- Summaries of community problems and priorities.

The focus group topical outline is included as **Annex I**.

c. Coping Strategies Index

The Coping Strategy Index (CSI) seeks to answer the question, “What do you do when you don’t have enough food, and you don’t have enough money buy food.” The CSI is an indicator of household food security that is relatively simple and easy to use and corresponds well with other more complex measures of food security. Essentially, the CSI is a series of questions about how households manage shortfalls in food supply. As a monitoring tool, the CSI measures change in household food security status.

Coping strategies include actions that households take, such as adjusting normal livelihood and consumption patterns in order to face obstacles or hazards, such as floods or other natural disasters, impinging on the household’s ability to access food. The different strategies employed by households to cope with food shortages depend on many factors or risks, the severity and frequency of which define their fundamental vulnerability to a shock to the livelihood system. Coping strategies typically progressively become more severe and irreversible the longer and more intense the problem or shock becomes.

The basic premise in implementing the CSI is to measure the frequency and severity of consumption or adaptation coping behaviours in order to monitor coping trends and discover a potential problem before households begin to engage in more severe forms of divestment coping strategies. The CSI monitors the frequency of a particular coping strategy – how often does the household engage in that coping behaviour – as well as the severity of undertaking that strategy for the household. The CSI is the product of severity x frequency of a set of coping behaviours.

Based on this premise, the assessment team developed a list of appropriate questions based on previous experience in the rural Bangladesh context. After identifying the coping strategies list, the qualitative team asked each of the 22 community groups to rank the severity of the list of 12 coping strategies. In the meantime, the quantitative team collected frequency data from individual households employing coping strategies in response to shocks that may have occurred during the past year. The coping strategies are then weighted according to their severity before adding them together and eventually multiplying the weighted coping activities by the frequency of application.

The CSI matrix is included as **Annex J**.

d. Wealth Ranking Exercise

Following the focus group discussions, selected residents comprised of men and women from the community were asked to participate in an exercise to determine:

- Perceptions of poverty and vulnerability;
- Wealth groupings by community-defined attributes;
- Proportions of community residents belonging to the identified wealth categories; and
- Specific household identification for participation in the household questionnaire survey, based on proportionality of wealth groups.

Community residents defined three or four wealth categories, ranging from “very poor” to “poor” to “middle” or “middle poor” to “better-off” to “rich”. The wealth ranking exercise provided the assessment team with key indicators of poverty and vulnerability by wealth category, including (amongst other variables):

- Food consumption patterns,
- Access to land, livestock, and assets;
- Income sources; and
- Social capital within the community.

The wealth-ranking format is included as **Annex K**.

All of the qualitative matrices from the six communities are included as **Annex N**.

2.4.2 Household Survey

The nine teams of household survey enumerators spent approximately two weeks in the field visiting 2760 households from 138 villages across the six WFP priority zones. The enumerators administered a household questionnaire to each randomly selected household participating in the survey. The English version of the household questionnaire is included as **Annex L**. Enumerators recorded information at the household level into a Bengali version of the questionnaire. TANGO developed a field manual, which is attached as **Annex M**, in order to help guide the enumerators and supervisors

The survey questionnaire solicited data about:

- Demographics, including education and economic activities;
- Food consumption and food expenditure patterns;
- Household expenditures, incomes and assets;
- Savings & loan patterns;
- Household livelihood strategies;
- Health, maternal and child care;
- Shocks and coping strategies;
- Group membership and affiliation; and
- Access to safety nets.

2.5 DATA ENTRY & PRELIMINARY ANALYSIS

The quantitative data entry process commenced as the questionnaires were collected from the field, after supervisors from each team had begun the process of cleaning the questionnaires for mistakes. MITRA managed the data entry process, applying a double-entry system in order to minimize data entry errors. After entering all of the questionnaires into the Excel format, MITRA cleaned the data and then compiled the files into SPSS in order to facilitate analysis. TANGO ensured that all of the files were clean and logical prior to commencing the analysis process.

2.5.1 Cleaning of the Food, Asset, Savings and Expenditure Data

Food consumption, expenditure, and asset data collected in household surveys are invariably subject to a host of potential errors, including household reporting errors, enumerator recording errors, and data entry errors. The raw data from this survey were subject to a thorough cleaning so as to avoid any influence of major errors on the estimates of dietary diversity, meal frequencies, per-capita household income, and asset ownership. These variables are also used in the Principal Component Analysis to cluster socioeconomic categories. Data cleaning required three stages.

First, the variables were cleaned manually by examination for outliers at both ends of the distribution separately for each WFP Priority Zones. Detected outlying unit values of particular data for that specific observation were set to missing. In the second stage, all values greater than three standard deviations were set to missing for the specific observation. Applying these two cleaning methods, approximately 1.2 percent of observations were identified as outliers. In the final stage all missing values were replaced by the median values.

In the end the cleaning process whittled away approximately 100 completed survey questionnaires, resulting in a final sample total of 2,661 households comprising 12,682 individuals.

III LIVELIHOODS IN RURAL BANGLADESH: A SECONDARY REVIEW OF THE SOCIO-ECONOMIC CONTEXT

3.1 The Economic Context

Poverty: Bangladesh is one of the poorest and most densely populated countries in the world; most of the land mass occupies a fertile delta of three major rivers. More than 85% of the poor live in rural areas (BBS/World Bank 2002); more than one-third of the population live on less than one dollar a day and below the national poverty line (data 1990-2001, UNDP). By most estimates, Bangladesh has witnessed a modest poverty reduction rate since 1990, declining from approximately 55% to approximately 45% by the year 2000. Notwithstanding this improvement, however, the proportion of the poorest as a sub-category – defined according to a lower poverty line – remains disconcertingly high at around twenty percent of the population. (*Bangladesh PRSP, 2005*)

The most recent poverty trends, based on wage data (through 2003) triangulated with qualitative poverty assessments, suggest a decrease in the incidence of extreme poverty (Sen & Hulme, 2004). The decline is largely due to strong sustained economic growth. In addition, the Government of Bangladesh contributed to this decline by investing in services such as health, education, social safety nets, and micro-credit program (TANGO, *Northwest Bangladesh Livelihoods Survey, 2004*). Bangladesh has experienced greater progress in reducing human poverty, which includes education, health and other sources of human capital, than in reducing income poverty alone, a result of significant improvements in primary education enrolment, fertility rates and other social indicators. Although the proportion of people living below the poverty line has declined, the number of people living below the poverty line continues to increase as population numbers rise. At this rate, it will be 50 years before Bangladesh has successfully rid itself of poverty (Toufique & Turton, 2003).

Poverty continues to affect women more aversely than men. Female-headed households are still more likely to live in poverty, and women are more likely to be less educated and more malnourished than their male counterparts. Extreme poverty is most evident among landless populations. (TANGO, *2004 Northwest Bangladesh Livelihoods Survey*). In areas where land is in short supply and a scarce asset, the poorest people tend to be landless and rely mostly on selling their physical labour to make a living. The extreme poor lack assets to buffer themselves against crisis, leaving them vulnerable to both idiosyncratic and collective risk. Because the poor lack assets, education and social networks, they gain access to only the poorest paying intermittent and seasonal jobs, forcing them to engage in a multiplicity of poorly remunerated and unstable occupations (Kabeer, 2002). One increasing phenomena is the increase in the category of “breakeven” households that live just above the poverty line, but still below the “comfort line”. Sen and Hulme (2004) describe this group as the “vulnerable band of the non poor who can descend into poverty in the event of an unforeseen shock”.

The precarious nature of a majority of rural households’ livelihoods in Bangladesh increases their vulnerability to future poverty. Currently, one-fifth of the population in Bangladesh is on the verge of poverty as their livelihood strategies are highly vulnerable to risk and future shocks, such as the illness of family member or loss of land due to erosion or severe flooding (Toufique and Turton 2003). Crises that typically trigger downward movements of

vulnerable households into poverty include personal insecurity and financial shocks resulting from the marriage of a daughter or sister, dowry payments, and several other types of social events (Begum & Sen, 2004). This segment of the population is referred to as 'tomorrow's poor'. Downward fluctuations in income flows due to crisis events may strip these households of their assets, forcing them to join the ranks of the poor.

Inequality: Bangladeshi poverty is also characterized by long-standing and deeply entrenched social inequalities. Although absolute poverty, as measured by the head-count index, declined at a faster rate in urban areas compared to rural areas over the nineties, this was associated with a rise in inequality. Consumption expenditure inequality over the nineties increased from 30.7 to 36.8 percent in urban areas and from 24.3 to 27.1 percent in rural areas. Overall, the Gini index of inequality increased from 0.259 to 0.306 during this period. Between 1992 and 2000, Gini indices of income inequality for national, rural and urban areas increased by 0.047, 0.028 and 0.061 respectively (*Bangladesh PRSP, 2005*). The inequality of income distribution is increasing, as the chronic poor are not experiencing the benefits of economic growth. Rising income inequality has dampened the potential for economic growth to reduce extreme poverty (Sen & Hulme, 2004).

The Rural Bangladesh Economy: The economy of Bangladesh is primarily dependent on agriculture. Approximately 77 percent of the total population live in rural areas (BBS 2003, *Population Census 2001, National Report*) and are directly or indirectly engaged in a wide range of agricultural activities. In 2004-2005, the combined contribution of all subsectors of agriculture (crop, vegetables, livestock & forestry) to GDP was about 22 percent, with 75 percent of that being contributed by crops and vegetables (GOB, 2005). Agriculture and fishery also employ 51.7 percent of the total labour force of the country (BBS 2003, *Bangladesh Labour Force Survey 2002-2003*). Approximately 1.2 million people are directly employed in the fisheries subsector and another 10 million people indirectly earn their livelihood out of activities related to fisheries (IBC website). In 2003-2004 fish and fish products accounted for about five percent of GDP and 5.71 percent of total export earnings. Fish provide Bangladesh households about 63 percent of the dietary protein requirements. Among other agricultural subsectors livestock is now considered as one of the important sectors for creating jobs and alleviating poverty. The contribution of this sector in 2004-2005 to GDP accounted for 3 percent and the growth rate was about 7 percent (Ministry of Finance 2005, *Bangladesh Economic Review*).

The micro-credit (MC) industry has played an important economic role as an instrument for achieving the objective of poverty alleviation in Bangladesh. The success of micro-credit has been mainly due to its ability to address the credit needs of the poor. Micro-credit Institutions (MCI) in Bangladesh have developed procedures for providing collateral free loans to the poor and asset poor households (Rushidan Islam Rahman, 2003).

Markets and Infrastructure: An analysis of growth patterns of the 1990s reveals that manufacturing, construction, services, non-crop agriculture and rural non-farm activities have been the most dynamic sectors contributing to economic growth. Though each of the three broad economic sectors – agriculture, industry and services – contributed to the economic growth patterns in the 1990s, the highest increase in growth rate, 1.2 percent, was reported for industry. Increase in growth rates for services and agriculture were 0.8 and 0.7 percentage points respectively. At a disaggregated level, several subsectors, particularly fisheries in agriculture and manufacturing and construction in the industrial sector,

experienced the most substantial rapid growth during the 1990s. In the case of the services sector, wholesale and retail trade, hotels and restaurants, and financial intermediaries emerged as the most rapidly expanding sub-sectors. Another important feature of the period is the rise of income inequality measured by the Gini coefficient. (*Bangladesh PRSP, 2005*)

Rural Bangladesh household livelihoods are becoming increasingly involved in the market economy as rural Bangladesh is increasingly integrated into the global economy. In many rural settings multinational and national suppliers have replaced local shops, enhancing linkages between villages and national and international markets (Toufique & Turton, 2003). Similarly, products generated in villages are being sold further away, reaching regional, national and international markets (Jones, 2004).

Infrastructure improvements, including more and improved roads and bridges, have brought rural and urban areas closer to each other in terms of marketing and socio-economic linkages. Improvements in infrastructure, seasonal or long-term migration, and remittances from urban to rural areas have substantially impacted rural livelihoods (Jones, 2004). Villages are now less likely to be physically isolated or remain 'economically discrete' communities (although as we shall see below, some areas of the country, such as the haor basin, parts of the char zone, and the Chittagong Hill Tracts, remain isolated and lag behind the rest of country in terms of infrastructure). Many village households depend on urban areas for their livelihoods and are now sufficiently connected to district headquarters, town or large urban centres (Toufique and Turton 2003).

Accompanying this shift is the increasing importance of market-induced shocks. Bangladesh is transitioning to a scenario of commercial agriculture marked with increasing vulnerability to changing market signals and shocks (Sen & Hulme, 2004). The rural labour market remains oversupplied and unskilled workers continue to experience limited security. Poverty reduction is closely linked to the adequacy of infrastructure services. Research by the World Bank and ADB indicate that improvements in mobility have an important role in reducing poverty. Improvements in transport foster economic growth, increase employment opportunities, reduce the cost of essential commodities, increase the accessibility of social services and reduce the vulnerability of the more isolated and poor communities to shocks resulting from natural disasters such floods and cyclones (DFID, 2004).

3.2 The Demographic Context

The population of Bangladesh has been steadily increasing at a moderate rate of 2.3 per cent, which adds a formidable challenge to improving the quality of life through socio-economic development. Bangladesh remains the most densely populated country in the world, despite the efforts during the past two decades of the government and development partners to reduce fertility, which has resulted in an impressive decline in the total fertility rate from 6.3 in 1975 to three in 2004. An increase in the contraceptive prevalence rate from less than 10% in 1975 to nearly 60% in 2004 has accounted for most of the decline of the fertility level in Bangladesh (BDHS 2004, *Report on Country Fact File on Maternal, Newborn, and Child Health Situation in Bangladesh, 2005*).

3.3 The Political and Social Context

Bangladesh formal and informal institutions are rapidly diversifying. Women are playing increasingly visible roles in community institutions and traditional power structures.

However, despite these shifting roles and the increasing complexity of the institutional landscape, many rural communities have maintained the traditional functions and power structures of formal and informal institutions, including traditional elders, government agencies, and local political bodies (Rahman, 2003).

Most of the policy formation remains centralized in Dhaka and is disconnected to local-level institutions. This disconnect significantly reduces the effectiveness of such policy to support livelihood strategies in the rural context. Without policy decentralization, the poorest communities remain out of reach of all but the most intrepid of NGOs and government policies and relevant institutions remain ineffective (Rahman, 2003). Despite the decentralization and the proliferation of NGOs in the Northwestern region for example, many villagers report that they remain unaware of the policies of service delivery agencies. This is one factor impeding the capacity of rural dwellers to claim their rights (CARE Bangladesh, 2002a).

Bangladesh independence failed to change the nature of government structures, which today largely reflect the British model that linked tax collection with the rule of law. As noted by Thornton (2003), the present district administration represents State authority without local accountability. At multiple levels, the government bureaucracy is pre-occupied with resource allocation and capture, and less with service delivery. Although access to infrastructure and social services has increased in some areas, the supply of these services, such as electricity and the VGD program, is restricted to those who can afford to pay for services or bribes associated with public assistance (CARE Bangladesh 2002a).

Gender Trends: The life of rural women in Bangladesh has substantially changed in recent decades (Rozario, 2003). Women currently play a more visible role in the cash economy. Villagers are more dependent on credit for household subsistence – credit is most often accessed by women through micro-credit schemes. Women are increasingly more mobile and able to migrate for economic opportunities.

Many NGO and other civil society organizations have adopted an empowerment approach to gender issues. However, women continue to face many discriminating issues, dampening potential social and economic gender equality in Bangladesh, including the following:

- ◆ Women and girls face increasing concerns about insecurity in public fora, ranging from verbal harassment to physical violence and abuse.
- ◆ Dowry is a serious and worsening problem for families, yet it remains widely accepted and unchallenged despite the Dowry Act prohibiting the practice in 1980.
- ◆ Women suffer from *health risks* due to high arsenic poisoning, indoor pollution caused by chores such as washing clothes, pots and pans, washing up, and the inhalation of smoke during cooking (Bangladesh PRSP, 2005).
- ◆ Legal measures adopted to protect women's rights remain ineffective, plagued by poor implementation, lack of enforcement, and unchanged attitude throughout the larger society towards women (ADB 2001).

Nevertheless, progress in the reduction of human poverty is clearly visible throughout much of rural Bangladesh. This progress appears to have benefited women to a greater extent than men, undoubtedly largely because women's development lagged so substantially behind men's (an observation supported by aggregate trends). Women have spoken forcefully about

the local manifestation of macro trends: ‘We are less likely to die in childbirth, our children are more likely to survive into adulthood, we have sanitary toilets, clean drinking water, more awareness about hygiene and nutrition, better clothes for women and children, cleaner houses and villages, and smaller families’. Access to primary, secondary, and tertiary education has increased for children, particularly for girls. These improvements in human capital are enjoyed by poor women, though perhaps less so relative to the non poor, but certainly more so relative to their own mothers. Thus, women are more likely to have a ‘healthy pair of hands’ than was the case two decades ago (Gibson et al., 2004).

More women are working for pay – especially poor women. This work is poorly paid, insecure, and often seasonal. Undertaking undesirable jobs may require breaking social norms, making difficult choices about childcare, or compromising health. Their willingness to engage in activities that (initially) contravene social norms and carve a niche in new markets is pioneering. However, this engagement in paid work for mere survival rarely translates into improved social or economic status. The poorest rural women are unable to escape from poverty, remaining mired in a swamp of low pay, low-return, low-skill and often seasonal work.

Shifting social norms are also opening up space for women's work. Purdah is constantly being renegotiated as women pursue new economic opportunities. It is generally the poor and poorest women who are breaking socially constructed rules and norms relating to work outside the home. As economic pressures have increased, the poor have taken up new livelihoods – migration and employment in the garment industry are the most notable examples. Rural employment patterns are changing as well. Poor women, particularly those from female-headed households, tend to be less constrained by social norms of what is acceptable women's work. Hence, they can (and must) participate in the labour force more readily than some better-off married women. They have access to public domains such as construction sites and roadsides. They can take up outside wage work in the village, migrate to urban areas or even penetrate into ‘male’ jobs – shops, construction, low paid agricultural work, and even some transport work (Gibson et al., 2004).

3.4 Livelihood Resources

The Environment & Natural Disasters: Food security, livelihoods, and household vulnerability are frequently closely intertwined with the adverse phenomenon of natural disasters in Bangladesh, which are rooted in the nature of its terrain, the physical geographic features, its long coastline and the tropical climate. The increasing population density exacerbates ecological damage, adding to the misery of annual disasters. The phenomenon of global warming will also aggravate this, affecting the low-lying land of rivers. Much of Bangladesh has adjusted itself to an annual wet season when one-quarter of its land area remains under water. During the period between 1870 and 1990, twelve major floods were reported within what are now the boundaries of Bangladesh. Prior to the floods of 2004, the worst floods in Bangladesh in the recent past occurred in 1998 and 1988 (*Bangladesh PRSP, 2005*). The 2004 floods affected a quarter of the nation's population. Damage was estimated at \$2.2 billion; 876 people perished.

There are two seasonal dimensions to food insecurity. The first is the high exposure to climatic shock at certain times of year. The second dimension arises from the cycle of food production and consequent seasonal variation in food availability and prices. The two lean

seasons occur in March-April and October-November. The second is particularly severe for the rural landless, because it coincides with the pre-harvest period of low employment opportunities in agriculture. However, some rural households have in recent years ameliorated their vulnerability to the shocks of seasonal transitory food insecurity as a result of an expansion in irrigation and hence winter rice production, which has reduced intra-year variation in rice production and therefore prices, reducing the vulnerability of the poor to seasonal price fluctuations for the staple rice paddy crop (Gill, 2003).

Natural Capital: Land ownership, land availability for agriculture and the quality of land per capita is in decline, largely a result of the growing population but also because of land inheritance patterns other land usage patterns. Landlessness and unequal access to land remain intractable problems. Increasing amounts of land are used for housing, roads, and urban development. Bangladesh has experienced a significant reduction in average farm size; most households with land now cultivate less than subsistence agricultural production, forcing household members to diversify their income sources. Very small landholdings are now the norm. This process has accompanied a decline in on-farm labour and a shift in rural livelihoods; the landless and rural poor must increasingly diversify into non-agricultural activities (Saha, 2003).

Physical Capital: Sen's survey findings show a significant compositional shift in the portfolio of assets favouring non-agricultural assets. These include the accumulation of non-land fixed assets, investment in schooling and human capital development, and accessing credit. This portfolio diversification is most pronounced among non-poor categories. The percentage of non-poor households demonstrating diversification increased from eight percent to 78%. The clear preference for non-agricultural assets signals the changing relative profitability between agriculture and non-agriculture. Sen suggests that the accumulation of non-agricultural assets has played an important role in the process of the escape from poverty (Sen, 2003).

Financial Capital: Bangladesh is one of the pioneer countries in the micro-finance revolution, which has witnessed the growing importance of micro-finance NGOs, which have emerged as the major source of small-scale financing for rural household small enterprise development. Many rural households however, continue to borrow money from local moneylenders and local elites at usurious interest rates to meet daily food purchasing needs and to cope with acute food shortages (Hossain 2003). The extreme poor invariably have limited access to institutional credit due to high transaction costs. Weekly repayment schedules generate pressure on credit groups to exclude the very poor who are likely to have difficulties in meeting repayment obligations. The extreme poor experience high opportunity costs in terms of time spent sitting through weekly meetings, precluding their participation. Because they do not have steady income flows to provide weekly repayments or the time to attend meetings, the poorest households often self-exclude themselves from credit programs (Kabeer, 2002).

Human Capital: The government of Bangladesh has dramatically increased the share of resources devoted to education, health, social welfare, and family planning. However, Sen (2003) found that although human capital has improved for all wealth groups, changes in human capital were greatest for 'ascending' and 'never poor' wealth groups. The distribution of and access to social services and human capital opportunities has been quite unequal (TANGO, 2004).

Social Capital: Rural Bangladesh communities are slowly experiencing a gradual disintegration of family networks, especially among the poor, as a result of economic pressures and migration patterns. Social networks vary greatly amongst poverty categories of households. The most extreme poor groups fare worst with regard to social capital. The cyclical and occasional poor are better able to maintain local networks and benefit from NGOs as well as other formal and informal institutions, while the chronic poor are more likely to receive assistance from formal government safety nets such as VGD, VGF, and relief assistance. These types of assistance however, are short-term measures that do not provide sufficient support to move people out of chronic impoverishment (Purvez, 2003).

3.5 Institutions & Organizational Development

Formal and Informal Civil Society: Social change is neither uniform nor comprehensive. Toufique and Turton (2003) identify two major themes defining social change in Bangladesh and elsewhere. Rural Bangladesh has initially observed increasing institutional complexity and sophistication operating in communities. Second, traditional power structures, defined often by patronage, have begun giving way to new power relations mediated by market forces. The poor often lack the skills, financial assets, and the time to engage effectively in these emergent social networks and power structures. These changes are evidenced by the dramatic changes in land tenure arrangements. Sharecropping is giving way to fixed rent tenancy and medium term leasing arrangements (TANGO, 2004)

NGOs have played a significant role in the field of poverty reduction and social protection in Bangladesh. National NGOs are increasingly active and important development institutions in a significant number of villages, often in the same locality. NGOs provide services – social, financial, community organization – but in independent and disconnected ways. Often disconnected to local bureaucratic and political systems, local NGOs are numerous, but invariably poorly developed, with the exception of a few nationally-based NGOs (Thornton, 2003). Although the vast majority of NGOs advertise themselves in terms of social development programs, they are largely recognized for their microfinance programs (Rahman & Razzaque, 2000). However, recent studies have found that NGO programs have a high level of exclusion of the extreme poor, both in microfinance and development (Rahman & Razzaque 2000¹; Matin N.d.).

Civil society structures exist at the district level, sometimes in quite sophisticated forms and usually organized around policy issues (e.g., shrimp industry in the Southwest, land tenure issues nationwide). Below the district level, civil society structures remain dominated by informal institutions and social norms (Thornton, 2003). Organized resistance by the poor against state or power elite seizure of land or resources, for example, remains rare. The means of protest available to the poor has been more subtle, including reducing the level of work ('foot-dragging'), spreading unfavourable rumours about elites, and petty theft from

¹ Rahman and Razzaque's study (2000) revealed that NGO programs are dominated by moderate poor households (51%), with participation of non-poor households nearly equal to that of the extreme poor (23.4% and 25%, respectively). The study attributes this in part to the close linkages between NGO credit and social programs. Because the extreme poor often choose not to participate in microfinance programs, they tend to self-exclude from social programs as well. The study also found that at the field level, NGOs try to ensure 100 percent recovery among microfinance participants, encouraging NGO workers to recruit better-off or moderate poor group members.

agricultural lands, state-controlled natural resources, or the personal property of elites (Bode & Howes, 2004).

The Private Sector: The expansion by infrastructure development and structural adjustment policies has supported the private sector. However, until recently, the private sector has been reticent to invest in rural enterprise. The private sector has only modestly contributed to agricultural growth and employment; rural poverty has remained intractable. Rather, the private sector has concentrated on the creation of self-employment through skill training, credit support, and development of non-farm activities (Mandal, 2003). A recent study of the agribusiness sector found a number of private sector buyers and processors have commercial linkages with NGO and donor-assisted beneficiaries (Black, 2004).

The State: Hulme (2003) identifies the failure of the state to provide public services and regulate the private service providers as central to the 'slide into poverty'. In particular, Hulme cites the failure to regulate the private health sector, which often drains households of assets in order to pay for inadequate or inappropriate health care. In addition, the State has failed to enforce laws that ostensibly protect women and the disadvantaged from discrimination at the local level. Village courts do not protect the extreme poor or women from the machinations of local elites or the power structure (TANGO, 2004).

Safety Nets and Food Security: Targeted food assistance continues to provide rural poor households in Bangladesh with relatively long-term safety nets. Although the aggregate amount allocated is only seven per cent of the total volume of cereals available for consumption in-country, which is modest in relation to need, a diverse spread of activities generally includes most of the major vulnerable groups and links longer term human development goals with medium-term food security. The food-for-education (FFE) programme is one of the most significant of the safety nets programmes operating throughout rural Bangladesh. Safety net programmes attempt to address the food insecurity of households during the lean season, although the seasonal distribution of public food supplies frequently fails to match the occurrence of the two hungry seasons.

Several programmes target the poorest districts. Ration cards are distributed at *upazilla* level and then forwarded on to the Union level. The Union Parishad (UP) Committee then decides which households qualify for a card. Targeting at the UP level is often problematic; illicit behaviour can ensue when the number of available cards is insufficient to cover everyone who meets the criteria. The current Finance Minister is on record as saying that the food distribution system is the biggest source of corruption in the country. He appears to have been referring only to the GoB system, not to those operated by NGOs and the WFP. Some programmes now provide cash for work instead of food, and from next year the government's food for education program will be monetised. The EC has almost completed this process. USAID imports food directly, but monetises most of it by effectively selling it into the government storage facilities and using the proceeds to fund CARE and World Vision International's food security programmes through the Food for Peace Title II Programme. Several programmes continue to provide in-kind assistance, but these increasingly tend to address dietary quality by providing supplements or fortified foods. Other programmes supply micro-nutrients to children and to women of reproductive age, and one initiative aims to control iodine deficiency disorders. Many women occasionally take iron supplement tablets and most children receive a vitamin A capsule every six months, which is frequently a case of too little too late. A more long-term approach is taken by NGOs

such as Helen Keller International, which promote homestead production of nutrient-rich foods (Gill, 2003).

3.6 Livelihood Strategies

Rural livelihood strategies have shifted markedly in recent years. As TANGO International has identified in several recent studies, salient changes include:

- 1) *The transition from away from agriculture into off-farm activities.* Sen's 2003 panel study demonstrates a general shift in income generating strategies in Bangladesh. Agriculture has declined as the primary source of household income from 69% in 1987 to 51% in 2003. Although agriculture remains of paramount importance to most rural households throughout the country, this data suggests a decline in the number of employment opportunities in the agricultural sector (Saha, 2003). A gap between industrial and agricultural wages has emerged; industry pays wages of 1.7 times higher than does agriculture, encouraging off-farm employment and urban migration (Jones, 2004.) The greatest expansion in the non-agricultural sector has been in the services sector, which includes small shops, rickshaws, small-scale construction, carpentry, and petty trade. In order to access these new types of livelihoods, individuals are obliged to draw on additional types of assets – human, social, and financial – in addition to natural assets, which are at the centre of agricultural livelihood strategies (Toufique & Turton, 2003). Poorer community members often lack the human capital required to take advantage of new livelihood opportunities and technologies that have expanded employment in rural areas, leaving poor households even more economically disadvantaged as other community members begin to monopolize employment opportunities or community infrastructure (Toufique and Turton 2003; Mandal 2003).
- 2) *Diversification within the Agricultural Sector.* Even as the subsistence and cash crop production in Bangladesh economy is declining relative to other sectors or livelihood strategies, agricultural production continues to provide households with a most essential livelihood activity. Within the agriculture sector, farm households are allocating more land to high value rice crops (as well as other crops) and increasing cultivation of HYVs in areas devoted to rice paddy production (Sen 2003, Jones, 2004). Production of livestock, poultry and small ruminants is increasing as well. However, this strategy of diversification is predominant among relatively better-off households.
- 3) *Increased reliance on credit.* Borrowing money for a variety of reasons has become a significant household livelihood strategy. However, this spiralling credit dependency has created a “downward debt spiral.” Many poor rural households struggle to meet family consumption needs for a short period of time after which they are forced to seek loans to obtain food and agricultural inputs. Poor households employ a number of strategies to cope with the economic stress of loan repayment, including curtailing daily food consumption by reducing the number of meals or eliminating protein components from the diet. Other strategies include reallocation of household labour to include women and children, the advance sale of crops and labour, the sale of productive assets, and more cross-borrowing in order to meet interest and principal repayments on other loans. Many households are simultaneously in debt to three or four different sources.
- 4) *Increase in Migration and Remittances.* The patterns of migration vary from a daily commute to extended absences in a given season or absence from home for several

years to a permanent or semi-permanent relocation (Toufique and Turton 2003). The practice of ‘multi-locational households’, where household members temporarily reside outside of the village to find more desirable work, has become increasingly common (Musillo 2002). In some communities, remittances have replaced agriculture as the main source of household income, accounting for more than eighty percent of village income. The remittances received from migrants is rarely invested in the agricultural sector but instead used to repay loans or make needed repairs to houses (Toufique and Turton 2003). Although remittances from international migration could potentially redress poverty in Bangladesh on a large scale, the impact has been much less than expected. Remittances are not being invested in productive rural sectors or labour-intensive sectors, which could generate employment for the rural poor, and create demand for luxury goods, which are more likely to be imported than produced nationally. Migration is often arranged through middlemen who pose a risk of exploitation for the household and reduce the returns on investment in migration (Rahman 2003).

- 5) *Aquaculture*. The fisheries sector has exhibited growth despite a decline in access to common property resources as well as fishery resources. However, this growth has not generated significant labour opportunities and has benefited elites able to invest in boats and other fishing inputs as well as control of fishing waters (Toufique and Turton 2003). The rapid emergence of this technological development has led to the exclusion of poor farmers and women.

Women and Livelihood Strategies: Women are participating in the economy in increasing numbers; however, the majority of new livelihood opportunities are still considered to fall under male domain, including work in the private sector, in small-scale businesses, or at the marketplace. The participation of women in the labour force (in part to meet debt burden) is largely associated with a loss of status (*TANGO International, 2004*). Although a significant percentage of middle-class women have entered the labour force, many are still restricted in mobility. Many rural households continue to hold that middle class women’s participation in the workforce or NGO activities breaks socio-cultural norms of honour and *purdah*, an attitude that is nevertheless undergoing substantial change. In rural areas, women today comprise only nineteen percent of the total labour force and their involvement in the wage economy is primarily in low paying, unskilled jobs. For those who are employed, wage and salary disparities between men and women remain high; women earn almost half that of men, due to discrimination and inadequately enforced labour laws (Rozario, 2003).

3.7 Livelihood Outcomes

Health Security: Maternal and infant mortality rates declined slowly throughout the 1990s but remain quite high. The Infant mortality rate has declined from 153 deaths per 1000 live births in the mid-nineteen seventies to 62 in 2000. Over the same period, the under-five mortality rate declined from 250 deaths per 1000 live births to 83. The rural-urban gap on these improvements has also seen a sharp decline: from a gap of 26.8% in the infant mortality rate in 1993/94 to 8.3% in 1999/00 and from a 34% gap in the under-five mortality rate to 16% over the same period. There are, however, considerable differences related to socio-economic status: infant mortality is about 70% higher for the poorest quintile than for the richest quintile (Bangladesh PRSP, 2005). Similarly, levels of malnutrition and micronutrient deficiency among children and women have decreased, although low nutritional status continues to be cause for concern.

Life expectancy has increased from 44 to 62 years in three decades (UNICEF 2004). The maternal mortality rate however remains high at 322 per 100,000 live births (BMHS/MMS 2003). A high proportion of such deaths are attributed to a lack of emergency obstetric services and trained personnel. Doctors, trained nurses, or midwives assist the delivery of only 13% of births in Bangladesh (BDHS 2004). Additionally, trained traditional birth attendants (TBAs) assist only 14% of births. Almost two in three births are assisted by *dais* (untrained birth attendants) and one in eleven deliveries is assisted by relatives or friends. Only one in ten births in Bangladesh is delivered at a health facility. Only 18% of mothers receive post-natal care from a trained provider within six weeks after delivery. The result is a continued high risk of maternal and newborn mortality as well as inadequate maternal nutrition (*Report on Country Fact File on maternal, Newborn, and Child Health Situation in Bangladesh, 2005*).

Table 1: Neonatal, Post-neonatal, Infant, Child and under five Mortality Rates for Five Year Periods Preceding the 2004 BDHS

Data Source	Approximate reference period	Neonatal mortality	Post-neonatal mortality	Infant mortality	Child mortality	Under five mortality
BDHS 2004	1999-2003	41	24	65	24	88
BDHS 2000	1995-1999	42	24	66	30	94
BDHS 1997	1992-1996	48	34	82	37	116
BDHS 1995	1989-1993	52	35	87	50	133

Source: Bangladesh Demographic and Health Survey 2004

Children's survival rates have improved substantially during the past decade. The control and prevention of diseases, such as measles, poliomyelitis and diphtheria, coupled with the widespread use of ORS for diarrhoeal diseases have greatly reduced childhood mortality and morbidity. Bangladesh is on the verge of polio eradication, and has already eliminated leprosy. Nearly three out of every four children aged 12- 23 months can be considered to be fully immunized. Although the level of coverage for BCG and the first two doses of DPT and polio is above or around 90 percent, the proportions who go on to complete the third dose of these two vaccines fall around 81-82 percent, while a much lower percent (76 percent) receive the measles vaccine. Only three percent of children 12-23 months receive no childhood vaccinations (BDHS 2004). Vitamin A deficiency can be avoided by giving children Vitamin A supplements every six months. More than eighty percent of children aged 9-59 months receive vitamin A supplementation (*Fact File on maternal, Newborn, and Child Health Situation in Bangladesh, 2005*).

Dehydration from diarrhoea is an important contributing cause of childhood mortality. The prevalence of diarrhoea has declined very slightly, from eight percent of children under five to six percent a decade later, partially because of the increased use of ORS, from 49% to 61% (BDHS 2001). Only 74% of Bangladesh households have access to clean water, and only 48% of the population are using adequate sanitation facilities. The floods hampered ongoing efforts to improve sanitation and remove arsenic from wells. (*UNICEF website, 2006*).

Although health outcomes have improved, more than 60% of the population have virtually no access to basic healthcare (MOH&FW, 2003). Government health facilities, largely

perceived as offering poor quality services, are not adequately utilized. NGOs and the private sector are providing essential supplemental health services, especially to mothers and children. The challenge has been to broaden the service base, particularly aimed at targeting the ultra poor, who do not access health care services and have largely been bypassed in the health care improvements and health outcomes described above (*Report on Country Fact File on Maternal, Newborn, and Child Health Situation in Bangladesh, 2005*).

Food Security: Although Bangladesh has not experienced widespread famine in recent years, a substantial proportion of Bangladesh households continue to experience extreme forms of chronic as well as transitory food insecurity (Sen & Hulme, 2004). Eight percent of households indicate seasonal distress, reporting consumption of two meals a day for “some months of the year”. Fifteen percent of rural households have adequate rice intake but also protein and nutrient intake deficiencies; and 11% report adequate food intake but at the expense of deficiencies in meeting other basic needs (Sen & Hulme, 2004). Dietary diversity remains generally poor; nutritional surveys consistently highlight a high concentration of rice and relatively little consumption of protein. Food insecurity is marked by a variety of micronutrient deficiencies (Rashid, 2004).

A variety of factors contribute to the food insecurity experienced by the poor in Bangladesh, including:

- ◆ Family characteristics such as large family size, old age (along with isolation from other family members), female household heads, and the disability of a prime income earner;
- ◆ Ill health of a family member (the gap between the poor and non-poor is pronounced for chronic illness). Health-related shocks burden the extreme poor relative than for the non-poor;
- ◆ Work and wage related factors have an important impact on food security, particularly seasonal unemployment and labour exploitation workplace;
- ◆ Key social, institutional, and environmental factors that contribute to increased food insecurity include lack of access to common property, exclusion from social security factors, and the financial strain caused by loan repayment.
- ◆ Natural calamities often disrupt markets causing the poor to lose their sources of income, in addition to damaging assets and resulting in immediate food shortages, forcing poor households to dispose of assets in order to secure food (Hossain, 2003).

The diet of the poor is a direct reflection of their current economic status. Hossain (2003) found that poor households living in remote villages consume fewer meals than those of more central villages. He also found that chronic extreme poor households generally eat two meals a day while the transient poor eat three meals more frequently. The poor also change their eating habits – in terms of quality and quantity of food as well as frequency of meals – to cope with food shortages. In some cases, the poor eat alternative (famine or wild) foods that are not part of their regular diet to supplement their food intake during periods of scarcity (TANGO, 2004).

There is also an important spatial dimension to poverty, vulnerability to shocks and food insecurity in Bangladesh. Shocks and natural or unnatural events have a disproportionate effect on people in marginal, risk-prone, areas. There is also a spatial dimension to chronic food insecurity. The 1996 Basic Needs Survey indicated that although the national average energy intake of 2,158 Kcal was slightly (1.7%) higher than the minimum requirement, there

was wide variation between districts, ranging from a maximum per capita intake of 2,470 kcal in Dinajpur to a minimum of 1,819 in Bagerhat.

‘Very high’ food insecurity has been documented particularly in the northwest and along the major river systems, which are prone to drought and flooding at different times of year. Riparian areas are subject to the additional risk of riverbank erosion. Approximately ten million people live in close proximity to the major rivers in extreme erosion- and flood-prone conditions. At least half of the land surface is subject to inundation. Even in a normal year, thousands of people lose their homes and lands to flooding, affecting approximately 2,400 km² each year. Between 1982 and 1992, Bangladesh suffered a net loss to river erosion of 87,000 ha of mainly agricultural lands. Accreted lands do reappear further downstream as *chars*, but it is impossible to identify where the new land came from, and establishing title is a matter of power and influence, rather than compensation for loss. Informal settlers on *char* lands are among the poorest and most oppressed in the country. Half of all agricultural households are now classified as ‘functionally landless’, and it is estimated that over half of the rural landless in Bangladesh lost their land to riverbank erosion. Coastal communities, where cyclones and tidal waves are a regular threat to lives and livelihood assets, and the low-lying flood-prone *haor* areas of the northeast, are also amongst the most vulnerable regions of the country (Gill, 2003).

Food security is characterized by gender bias – women are more food insecure than men – and by ethnic bias. Poverty and deprivation are substantially higher among the ethnic minority who populate the Chittagong Hill Tracts than among the mainstream population (Sutter, 2000). Perhaps surprisingly, it is also higher among the Muslim majority than among members of minority faiths. The proportion of Muslims living below the upper poverty line is 50.2%, compared with 45.9% for non-Muslims, while the corresponding figures for the lower poverty line are 34.4% and 27.6% respectively (Gill, 2003).

Nutrition: Anthropometric measures for child nutritional status suggest that significant numbers of children in Bangladesh continue to suffer from malnutrition. The stunting rate for children in the age group 6-71 months declined from 68.7% in 1985/86 to 49% in 1999/2000 and 43% by 2004. The proportion of underweight children in the same age group has seen a parallel decline from 72% to 51%. Notwithstanding these improvements, the absolute level of child malnutrition remains a critical developmental challenge. Seventeen percent of children throughout Bangladesh are severely stunted. The prevalence of stunting increases with age from 10% of children less than six months old to 51% of children aged 48-59 months. Thirteen percent of Bangladesh children are considered to be underweight for their height or wasted and one percent is severely wasted. The wasting peaks at age of 12-23 months at 24% and is 10% for children aged 48-59 months. Forty eight percent of children are considered underweight (low weight for age) and 13% are classified as severely underweight (BDHS 2004).

Additionally, there are considerable rural-urban differences: 47% of rural children are stunted compared to 35% of urban children. Approximately half of the population live below the upper poverty line (2,122 kcal per day) and a third below the lower poverty line (1,805 kcal per day). Although food consumption among the poor is increasing, undernutrition indicators remain alarmingly high, and the rich-poor gap is growing. Women and girls are distinctly disadvantaged: the female-male gap for the severely stunted has increased from 10% in 1996/97 to 16% in 1999/00. Intra-household discrimination is one

cause of the nutrition gap. Maternal malnutrition (proxied by body-mass index less than the critical value of 18.5) remains high; 45% of mothers were malnourished in 1999/00 (*Bangladesh PRSP, 2005*).

Education & Human Resources: Bangladesh has made considerable progress in recent years in expanding basic education. The overall adult literacy rate increased from 29% in 1981 to 39% in 1991 then to more than 60% in 1999. Most of this advance has occurred in the last few years. The gender gap in basic education is disappearing over time. In 1994, 35% more men than women were literate, but in 1999 that difference had declined to 26%. Underlying this progress in basic education is the rapid expansion of school enrolment at the primary level, which has increased from 59% of all school age children in 1982 to 96% in 1999. Gender parity has been achieved at both primary and secondary levels (*Bangladesh PRSP, 2005; Bangladesh Human Development Report 2000; Finan et al., 2001*).

IV SOCIOECONOMIC PROFILE FINDINGS

1 LIVELIHOOD CONTEXT & DEMOGRAPHICS

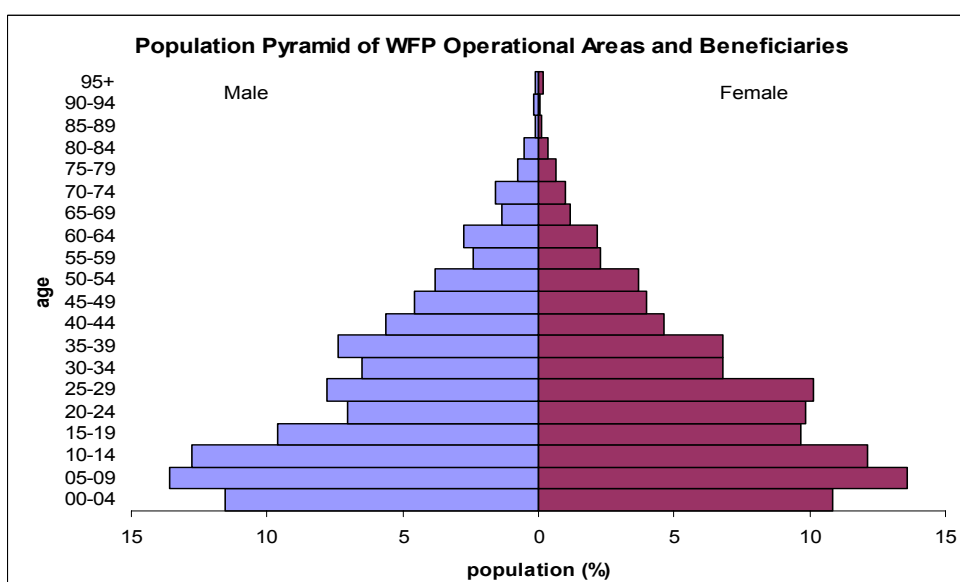
This section presents a detailed description of common demographic indicators of the study area.

1.1 DEMOGRAPHICS

1.1.1 Population

Figure 1 suggests that the age structure of the survey population is growing rapidly, a result of high birth rates. Although the population growth rate in Bangladesh has slowed to approximately 2.3 percent per year (1990-2003), population growth remains a major issue. The median age in the WFP priority regions is 20 years, revealing a relatively young population. More than 11 percent of the population is now less than four years of age and another 14 percent is in the five to nine year age group – the largest cohort among all of the different age groups. As other studies have shown, men outnumber women in Bangladesh; approximately 52 percent of the population is male while 48 percent of population is female. The overall sex ratio is 106.9, meaning there are 107 males per 100 females. The low proportion of males aged 20-29 probably reflect seasonal migration, which has become an important household livelihood strategy throughout much of rural Bangladesh. The age dependency ratio in the study area is also noticeably high. There are 99 persons in the dependent ages (under age 15 and over age 49) for every 100 persons in the working ages.

Figure 1: Population in WFP Operational Areas and Beneficiaries, 2006



1.1.2 Household Heads

The vast majority of households surveyed are headed by males (94 percent). More than 90 percent of household heads are married (Table 2). Female heads of household are more commonly found in the Chittagong Hill Tracts (eight percent) and are most rarely found in the Northwest (four percent).

Table 2: Marital status of Household head

Marital Status of Household head		
	N	%
Not married	94	3.5
Married	2436	91.5
Divorced	9	.3
Widowed	110	4.1
Separated	12	.5
Total	2661	100.0

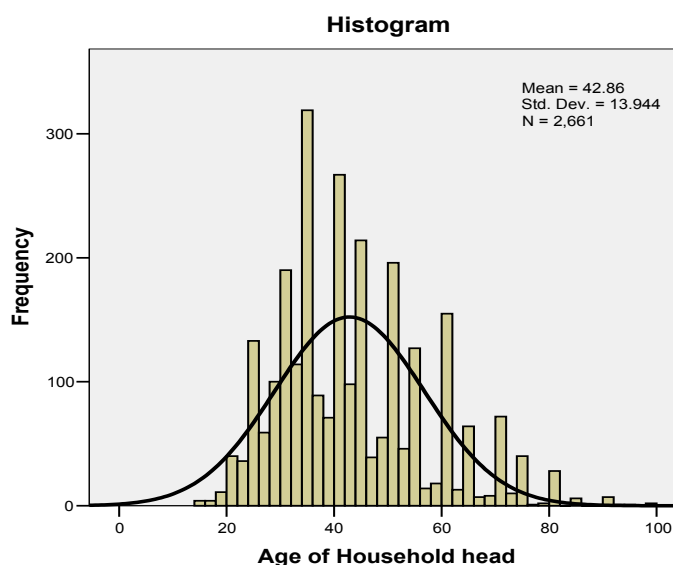
Divorce and separation rates are low in rural Bangladesh and only about 3.5 percent of household heads are single. In the study population, 85 percent of households are Muslim, 5.5 percent are Hindu, nine percent are Buddhist, and one percent is Christian. The high Buddhist percentages reflect their majority status in the Chittagong Hill Tracts (51 percent are Buddhist), although Muslims (41 percent) now make up a significant minority following decades of Bengali in-migration; Muslims are predominant in all other regions, where

Hindus form a minority.

Ethnicity has a distinct regional dimension in Bangladesh. In the Chittagong Hill Tracts, approximately 45 percent of all households are now ethnically Bengali; the largest *Jumma* groups include the Chakma (28 percent), Marma (19.4 percent), Bawm (four percent), Tripura (1.6 percent), and Murang (1.6 percent). The vast majority (more than 99 percent) of the households living in all of the other study regions are ethnically Bengali.

The mean age of household heads is 43 years while the median age is 40 years; the age distribution is skewed toward older heads of household (Figure 2). Almost half (47 percent) of all household heads are forty years of age and above. Female household heads tend to be older (46 years old on average) compared to their male counterparts (43 years old), a difference that is significant at one percent level of significance.

Figure 2: Age distribution of household heads



1.1.3 General Household and Individual Characteristics

Households tend to be larger in the Coastal zone and the Chittagong Hill Tracts. Mean household size varies from 4.2 individuals in the Drought region to 5.4 in the Coastal region while the median household size is five for Coastal region and Chittagong Hill Tracts and four for all other survey regions. Female-headed households are significantly smaller in number than the male-headed households – female-headed households average only three household members in comparison to almost five household members in male-headed

households. Female-headed households are also burdened with a higher dependency ratio; coupled with fewer potential income earning individuals within the household, they face more difficulties in diversifying household income sources and therefore realizing livelihood or food security. Significant differences in literacy rates by sex of household head, discussed in the Education section below, shows a further disadvantage faced by female household heads.

Table 3: Demographic characteristics of Survey Households

WFP Regions	N	HH size	Dependency ratio	Age of HH head	Illiterate
CHT	448	5.13	90.31	44.00	44.0
Coastal	437	5.42	95.97	43.00	51.5
Drought	439	4.21	62.67	42.90	54.7
N/W	438	4.56	76.88	42.47	47.9
Char	440	4.62	76.31	42.92	58.0
Haor	443	4.64	90.61	41.83	56.9
Sex of HH head					
Female	155	3.01	87.61	46.06	74.8
Male	2506	4.88	81.85	42.68	50.7

1.2 SOCIOECONOMIC HOUSEHOLD PROFILES

This section profiles the four socioeconomic categories of households discussed in the report. The process employed to create the socioeconomic categories of households is discussed below. The four groups or socioeconomic classes of households include:

- ◆ ‘Non-vulnerable’ HH;
- ◆ ‘On the Edge’ HH – presented as Group 2 in some of the tables;
- ◆ ‘Vulnerable’ HH – presented as Group 3 in some of the tables; and
- ◆ ‘Invisible poor’ households – presented as Most Vulnerable in the tables.

1.2.1 Constructing the Household Socioeconomic Profiles

TANGO applied a two-step process to create socioeconomic profiles, beginning with the selection of five indicators, which together could explain vulnerability and food security. The five indicators include:

- a) Number of month’s of access to adequate food (food security)
- b) Dietary diversity (number of food groups acquired in week)
- c) Number of meals eaten in 24 hours
- d) Household income (Monthly household expenditure)
- e) Household assets (value of assets in taka)

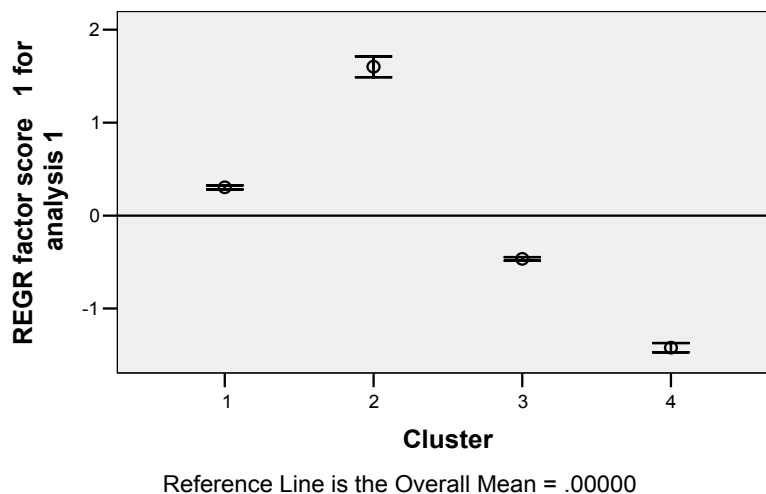
Using Principal Component Analysis, TANGO extracted components from the five variables or indicators to explain the most variation. The analysis resulted in one principal component that explained 46 percent of the variation within the five variables used in the analysis.

The component was then plotted into Cluster Analysis to identify and cluster households characterized by similar patterns, drawing on the similarities or distances between households to form clusters of households. The analysis resulted in four clusters of households.

The relatively small standard deviations of means for group 1 (0.27), 3 (0.22) and 4 (0.39) suggest that the variation within the clusters is minimal. These three clusters are compact. The standard deviation for group number 2, which is characterised by a higher mean factor (a wider range of household variation), is slightly larger than the other three groups (0.90). This group is the non-vulnerable socioeconomic

group, characterised in particular by a wider range of income and assets. Group 3 has the smallest standard deviation, primarily because the variation of food security indicators as well as income and assets indicators was relatively small. It is a relatively homogeneous group of households and represents the other extreme, the socioeconomic group of households known as the ‘invisible poor.’

Figure 3: Cluster analysis results
Variation within Cluster (Simultaneous 95% Confidence Intervals for Means)



1.2.2 Socioeconomic Indicator Medians, Means and Ranges:

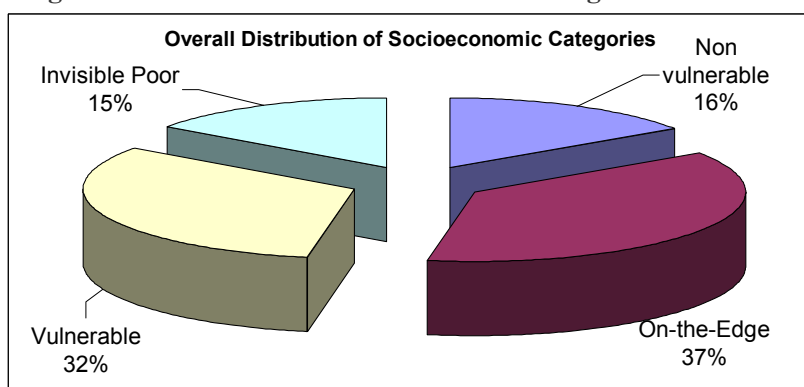
The estimated ranges and medians for the five socioeconomic indicators used to define the four classes or categories of households are outlined in Table 4. One can find substantial variation in household food security, dietary diversity, incomes and asset ownership within each of the socioeconomic groups. Asset ownership values of the sampled invisible poor households, for example, ranged from taka 6000 to 3,538,000. With the exception of outliers however, the value of assets possessed by invisible poor households invariably fall below 700,000 taka. Because TANGO has created the four socioeconomic categories of households from an amalgamation of five variables, the ranges of values distinguishing the socioeconomic groups overlap.

Nevertheless, these variables can be used as fairly precise targeting tools. The five food and livelihood security indicators present a definitive picture of non-vulnerable households, who are food secure throughout the year, consume diverse diets, and possess at least twice the incomes and five times the value of household assets of any other type of household, including on-the-edge households, who are in turn also food secure relative to vulnerable and invisible poor households. The aggregated variables also distinguish the intense chronic food insecurity, poor diets, extremely low incomes and lack of asset base suffered by the invisible poor households, particularly when compared to other rural households.

Table 4: Socioeconomic Indicator Medians, Means & Ranges

Indicator	Food Security (months of food access)	Dietary Diversity (# of food groups)	Food Quantity (# of meals)	Per Capita Income (taka expenditures)	Household assets (value in '000' taka)
HH Class					
Non-Vulnerable HH					
Mean	11 months	12 food groups	3 meals	2157 taka	8,876
Median	12 months	12 food groups	3 meals	1701 taka	4,611
Estimated range	10-12 months	10-14 groups	3 meals	>1600 taka	>2,000
On-the-Edge HH					
Mean	10 months	10 food groups	3 meals	1089 taka	1,759
Median	10 months	10 food groups	3 meals	922 taka	333
Estimated range	8-11 months	8-12 groups	3 meals	900-1500 taka	200-1000
Vulnerable HH					
Mean	8 months	8 food groups	2.8 meals	775 taka	495
Median	8 months	8 food groups	3 meals	691 taka	46
Estimated range	7-10 months	6-9 groups	2-3 meals	600-900 taka	40-500
Invisible Poor HH					
Mean	3 months	7 food groups	2.2 meals	674 taka	91
Median	0 months	7 food groups	2 meals	584 taka	16
Estimated range	0-6 months	4-8 groups	2-3 meals	<700 taka	<100

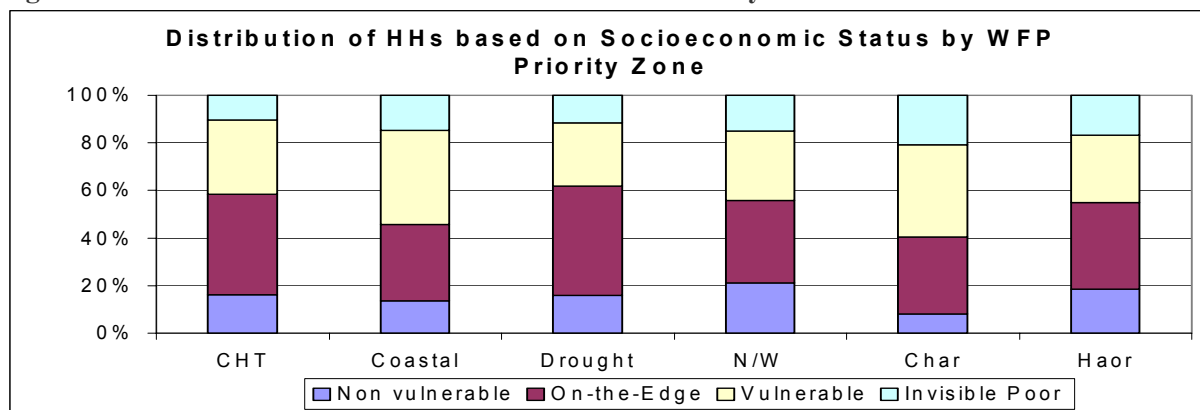
Figure 4: Distribution of Socioeconomic Categories



Vulnerable and invisible poor households comprise just fewer than half (47 percent) of the households in the WFP programme area. Most households (69 percent) belong to the middle categories of vulnerable or on-the-edge. Of the six WFP priority programming regions, Char communities appear to be relatively poorer and food

insecure: Approximately 60 percent of Char households are invisible poor or vulnerable. In contrast, fewer than 40 percent of households living in the Drought zone, the most food secure of the six WFP priority regions, are among the invisible poor or vulnerable. (Refer to Figure 5.)

Figure 5: Distribution of Household Socioeconomic Status by WFP Zone



Each of the four classes of households is profiled below.

Table 5: Socioeconomic Class Profiles

Indicator / Household by Class Category	Non-Vulnerable	On-the-Edge	Vulnerable	Invisible Poor
% of Households	16	37	32	15
% of Female-headed Households in category	11	18	27	43
Dependency Ratio (%)	61	66	76	87
Literacy Rate (%)	78	52	33	25
Functional Landlessness (% of landless HHs)	13	48	75	91
Average land size of households with land	3.5 acres	1.2 acres	69 decimals	56 decimals
% of households with homestead land	97	92	88	73
Average size of homestead land (in decimals)	34	13	7	6
% of households with cattle	60	45	28	14
% of households with poultry	87	78	67	58
% of households with bicycle(s)	55	25	14	3
% of households dependent on manual labour	15	36	57	70
% of households cultivating on own land	80	60	36	14
Per capita expenditures (in taka)	2157	1089	775	674
Household Savings (in taka)	8205	3291	1557	1347
% of expenditures spent on food	30	47	55	57
% of households in organisation(s)	65	49	40	34
% of households living in one-room house	15	38	58	69
% of households with electricity	48	26	11	6
% of households with latrines	92	78	63	44
% of households food secure year-round	93	71	27	3
% of households consuming 3 meals per day	99	97	81	24
% of households with diverse diet (> 8 items)	100	80	31	7
Coping Strategies Index (CSI) score	12	21	21	33

1.2.3 *Invisible Poor* Households

Approximately 15 percent of the surveyed households severely suffer from food and livelihood insecurity and lack access to even minimum levels of physical, human, financial and social capital. The invisible poor have slipped through the targeting of the two major safety net programmes in Bangladesh – the Road Maintenance Program (RMP) and Vulnerable Group Development (VGD) Programme – and are effectively excluded from many NGO activities and even social events such as festivals. Hence we refer to this category of households as the ‘*Invisible Poor*.’ Many studies in Bangladesh refer to these types of households as the ‘Ultra Poor’ or the ‘Hard-core Poor.’

Approximately 43 percent of female-headed households fall under this category. Households tend to have a high age dependency ratio (87). Household heads do not typically read and write (75 percent). The invisible poor appear to be growing poorer: about three-quarters of the households have remained poor at least for the last 10 years and approximately one-fifth of the households slid further into poverty.

The invisible poor are functionally landless. More than nine of 10 households own no agricultural land. Those few households with land are limited to 38 decimals. More than a quarter (27 percent) of the households do not have a homestead, but those households on a homestead are limited to six decimals, not enough to hold a pond. A majority of these households (85 percent) do not own any cattle and approximately half do not even own any poultry. Three of every hundred households have a bicycle.

The invisible poor depend on selling manual labour (70 percent) as their primary livelihood strategy. Their income sources are very narrow. Very few households are involved in trading (10 percent) or agriculture (10 percent), and will also sell manual labour as a secondary income strategy. Per-capita monthly expenditure is less than 700 taka. Seventy-one percent of the households do not have clothes to wear outside of their home.

Invisible poor households have virtually no social capital. Nearly two-thirds of the households are not members of any organization. Grameen Bank and NGO membership is limited to six and 19 percent respectively. Of those households participating in credit programmes, more than one-third (36 percent) are unable to repay loan instalments on a regular basis. A significant proportion – 15 percent – depend on money lenders. More than half (56 percent) of the households do not participate in community festivals and only three percent of the households participate in RMP. The majority of these households live in a one room house (69 percent), do not have electricity (94 percent), and do not use a latrine (56 percent). Of the total invisible poor households who use latrine, 33 percent usually use traditional pit latrine

More than half of invisible poor households (53 percent) suffer from year-round food insecurity and another 21 percent have only one to six months access to adequate food. Most households eat two meals a day and household members typically consume poor quality diets. The Coping Strategy Index score for the invisible poor is significantly higher than all other socioeconomic groups (33).

1.2.4 Vulnerable Households

Similar in many ways to the *Invisible Poor*, ‘*Vulnerable*’ households comprise approximately 32 percent of the sample households. Although the magnitude of food insecurity is not as intense and these households participate more often in community activities and organisations such as NGOs and Grameen, households in this group are quite poor and *vulnerable*.

More than one-quarter (27 percent) of female-headed households in this category are vulnerable. Seven of every 10 female-headed household have been classified as invisible poor or vulnerable. These households have a high age dependency ratio. For every 100 working age people, 76 people are dependents. Sixty-seven percent of household heads do not have any literacy skills.

Approximately three-quarters of vulnerable households are functionally landless and the other one-quarter have agricultural land of less than an acre (63 decimals). Although a majority of the vulnerable households own a homestead (88 percent), the mean homestead size is significantly small – only seven decimals. Less than five percent of the households have a pond.

Asset ownership is meagre. Most vulnerable households (72 percent) do not have any cattle. Those with cattle typically own one to two cattle heads. One-third of households have no poultry and another 23 percent have one to three poultry. Less than 15 percent of the households own a bicycle.

More than half (57 percent) of the households depend on physical labour to make a living. Households involved in agricultural production also sell manual labour as a secondary income strategy to complement primary income. Sharecropping is an important livelihood strategy employed by 41 percent of vulnerable households, only 18 percent of whom cultivate on their own land. Only approximately 15 percent of households have access to *Khash* land.

Average per-capita monthly expenditure of these households is not more than 775 taka. Almost every other household (45 percent) has an outstanding loan. One in three households is a Grameen or NGO member, 68 percent of their total borrowing is generally from these organizations. Borrowing from moneylenders is therefore less common (seven percent). A majority of vulnerable households lack social capital. About 40 percent of households are members of an organization. Approximately one-third of households do not participate in community festivals.

Most vulnerable households appear to be more food secure than are the invisible poor. However, nine percent of households are chronically food insecure throughout the year and more than half of the households have access to adequate food for only seven to nine months. More than 80 percent of households (81 percent) eat three meals a day but tend to consume poor quality diets (69 percent consume two to eight items). The CSI score for this category of households is 21.

1.2.5 Households *On-the-Edge*

A third category of households, representing 37 percent of the sample, tend to be food secure throughout the year with better diets, agricultural lands, livestock, and memberships in organizations. These '*On-the-Edge*' households are not currently vulnerable but a shock to the household could negatively affect their social mobility. About a quarter of the households describe themselves as having escaped poverty during the past 10 years.

Eighteen percent of all female-headed households are on-the-edge. Their age dependency ratio is 66. More than a half (52 percent) of household heads can read and write. Fifty-two percent of the households have agricultural land with a mean area of one acre and more than 90 percent have homestead land. More than three quarters of on-the-edge household farm their own land. About a quarter combine sharecropping to increase their cultivation. Approximately 14 percent of the households have access to *Khash* land¹. Nearly half of the households have cattle and over three-quarters have poultry. A quarter of the households have at least one bicycle.

¹*Khas* lands are huge areas of land, originally belonging to big estates or large chunks of land acquired by the government for railways or other big land-based projects and abandoned properties, later vested in government. These *khas* lands are managed directly by the government through government appointed-managers or trustees (http://banglapedia.search.com.bd/HT/L_0047.htm).

On-the-edge households tend to enjoy a diverse set of income sources: one-third of the households are involved in agriculture, another third sells labour, 16 percent are involved in trading or business, nine percent are skilled workers and five percent are employed either in the Government or in the private sector. Average per-capita monthly expenditure of these households is slightly over 1,000 taka. Nearly half of the households (48 percent) have outstanding loans. Grameen Bank and NGOs provide more than 60 percent of their loans; one in every five household borrows from commercial banks.

On-the-edge households have fairly secure social capital in the community. More than half of the households are members of different organizations. A small number – about eight percent – participate in key village level committees, including school committee, mosque committee, and the village court. Almost all households (87 percent) participate in community festivals.

On-the-edge households are food secure. Close to three-quarters (71 percent) have year-round food security and the rest of the households are food secure for at least seven months. Virtually all households eat three meals a day and consume diverse high quality diets. The CSI score resembles that of the vulnerable households – 21.

1.2.6 Non-Vulnerable Households

Non-vulnerable households constitute 16 percent of all households. The characteristics of this class are quite distinct from the other classes, including a per-capita monthly expenditure 49 percent higher than on-the-edge households and almost triple that of invisible poor households. Almost nine out of 10 non-vulnerable households own agricultural land, averaging 2.7 acres in area, three times the area of land owned by vulnerable households. Almost all households (97 percent) in this class have homestead land, averaging 34 decimals. Close to half of the households have a pond. More than 60 percent of the households have cattle and almost 90 percent have poultry, usually owning more than seven birds. More than half of the households have at least one bicycle.

Agriculture (41 percent) is the most common income strategy for the non vulnerable households, followed by business (22 percent). Households who depend on agriculture for their primary source of income cultivate their own land. Average per-capita monthly expenditure of these households is 2,157 taka. About 40 percent of non-vulnerable households have an outstanding loan, of which 46 percent are often with Grameen Bank and NGOs. Non-vulnerable households also borrow disproportionately from commercial banks (35 percent), resulting in low interest rates for these households relative to other households.

Approximately three quarters of non-vulnerable households are members of different organizations. The key village level committees, including the school committee, mosque committee, and village court, are dominated by non-vulnerable members. In addition, approximately 14 percent of these households receive benefits from the Food for Education Program.

Food security is not a problem. All non-vulnerable households eat three meals a day and consume good quality diets. The CSI score for this type of households is 12, which is substantially lower than all other households.

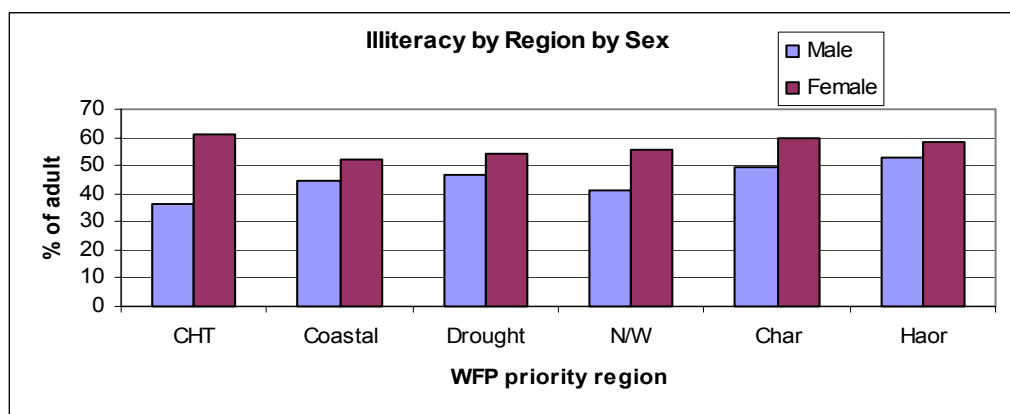
1.3 EDUCATION

Fewer than half of the adults in the entire survey area are literate. Approximately 15 percent of all adults can read and write or have completed preparatory education; another 16 percent have completed their primary education. The study, however, revealed a regional dimension to illiteracy. Literacy rates are lowest in the haor and char zones, where 56 and 55 percent of the adult population respectively are unable to read or write. On the other hand, more than half of the adult population living in the Chittagong Hill Tracts, the Coastal zone and Northwest region have literacy skills. Approximately 57 percent of females and 47 percent of males can neither read nor write -- a difference that is statistically significant. These results are comparable to the national level results reported by UNICEF (2000-2004). Among household heads, the difference is even more significant; approximately three out of every four female household heads are illiterate.

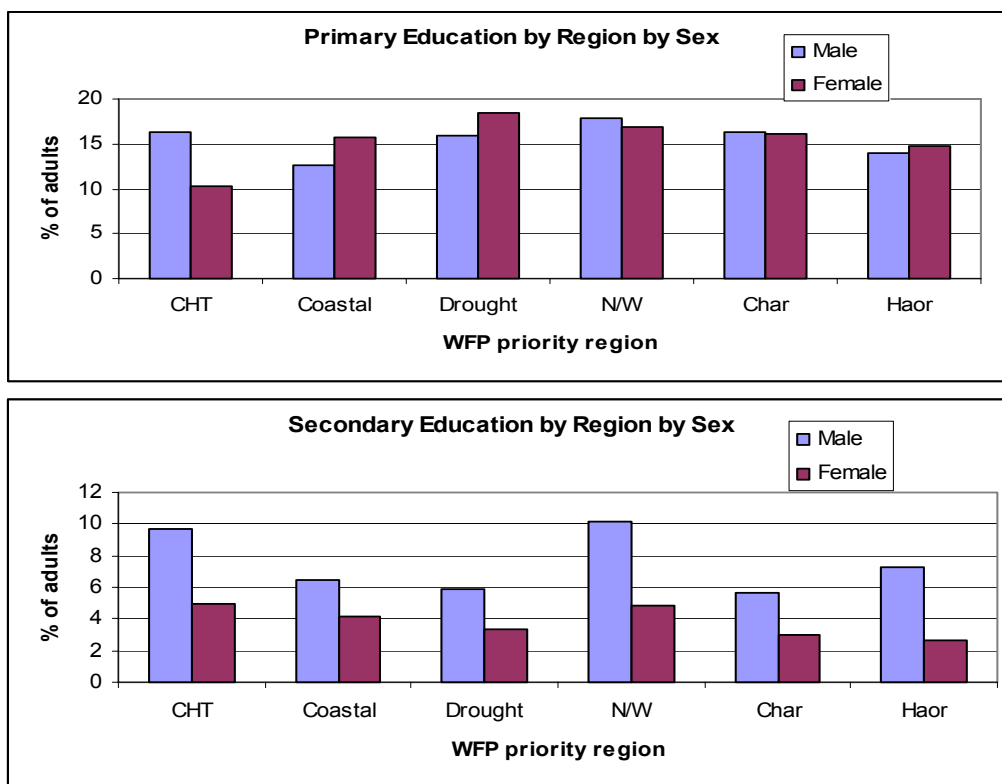
The regional variation in grade achievement is significant. Approximately 17 percent of adults in the Drought and Northwest regions have completed their primary education. More than seven percent of the adults living in the Chittagong Hill Tracts and Northwest region have completed their higher secondary education, compared to four other regions where the completion rate is not more than 5.5 percent. Similarly, approximately six percent of adults in the Northwest region have obtained university degrees while only three percent of adults in the Coastal zone reported the same level of education. Educational achievement appears to be highest in the Northwest.

Figure 6 reveals a significant difference in literacy status and access to primary and secondary education by sex across the six regions. Access to education for girl students is significantly lower in Chittagong Hill Tracts compared to the other five study regions. Although the gender gap in terms of primary school attendance is close to zero in all of the other five regions – attendance rates for girls are in fact higher than boys at the primary school level in three of the regions – the gender gap has been significantly large (more than six percent) in the CHT. Socioeconomic factors as well as prevailing attitudes towards girls’ education discourage girls from attending school. In the CHT, where distances from schools tend to be greater than in other regions of the country, parents do not feel secure sending their girls to a school located away from the village.

Figure 6: Illiteracy, Primary and Secondary Education by Region by Sex



Continue Figure 6



Other regions of the country reported that although students tend to leave school as a result of their poverty, girls are not dropping out of school at the same rate as boys nowadays. This is primarily because of the stipend received from the government encouraging girls to remain in school. On the other hand, boys may feel forced to leave school in order to assist the household in income earning activities.

School drop-out rates accelerate substantially following primary school, especially for girls. Half of the girls have discontinued secondary school across the regions. Among students who have completed primary school, more than twice as many males as females went to secondary school. Socio-cultural attitudes, distances to secondary school, lack of transportation facility or commitment to expending funds for transportation, and early marriage, are the factors mentioned by communities contributing to the underachievement of girls’ post-primary education. Government policy encourages female attendance at the secondary school level through stipends for girls; nevertheless, female attendance in secondary schools in WFP’s priority regions continues to lag behind boys.

The regional variation in grade achievement is significant (Table 6). Approximately 17 percent of adults in the Drought and Northwest regions have completed their primary education. More than 10 percent of the adults living in the Chittagong Hill Tracts and Northwest region have completed their higher secondary education, compared to four other regions where the completion rate is not more than six percent. Similarly, approximately six percent of adults in the Northwest region have obtained university degrees while only three percent of adults in the Coastal zone reported the same level of education. Educational achievement appears to be highest in the Northwest.

Table 6: Educational Achievement of Adult Household members

Educational Achievement of Household members age 19 years and above							
% within WFP priority zone							
	WFP priority zone						Total
	CHT	Coastal	Drought	N/W	Char	Haor	
Illiterate	48.3%	48.2%	50.4%	48.2%	54.7%	55.7%	52.0%
Read/write	12.1%	12.2%	13.9%	3.7%	9.3%	12.7%	9.6%
Preparatory	3.9%	10.9%	4.4%	7.0%	4.5%	2.5%	5.0%
Primary completed	13.4%	14.0%	17.2%	17.3%	16.2%	14.3%	16.1%
Secondary completed	7.4%	5.4%	4.6%	7.6%	4.3%	5.1%	5.5%
Higher secondary completed	10.4%	6.0%	5.0%	10.2%	6.1%	5.3%	6.9%
Bachelor degree	3.2%	1.8%	2.6%	3.7%	2.6%	2.7%	2.9%
Post graduate degree	1.1%	1.1%	1.3%	2.2%	1.9%	1.5%	1.7%
Do not know	.1%	.3%	.5%	.2%	.4%	.2%	.3%
Number of adult members	1173	1225	1121	1147	1133	1067	6866

Table 7 presents data on educational achievement of household heads. The results establish a clear relationship (Chi square 925391.728) between household socioeconomic status and literacy. Almost three out of every four heads of vulnerable households are illiterate, compared to 22 percent of non-vulnerable household heads. There is also a significant regional variation in the literacy skills of household heads. Illiteracy rates of household heads are highest (58 percent) in the Char region and lowest in the Chittagong Hill Tracts (44 percent). A significantly larger proportion of female household heads (75 percent) do not have literacy skills compared to male household heads (53 percent).

Table 7: Educational Achievement of Household Heads

Education of Household Head by Household Socioeconomic Status					
% within HH socio economic status					
	HH socio economic status				Total
	Non Vulnerable	2	3	Most vulnerable	
Illiterate	22.1%	47.5%	66.8%	74.7%	54.0%
Read/write	13.5%	17.9%	14.5%	12.9%	15.3%
Primary completed	23.3%	19.3%	11.6%	7.2%	15.5%
Secondary completed	14.4%	4.5%	2.3%	2.9%	5.1%
Higher secondary & above	26.7%	10.8%	4.8%	2.4%	10.0%
Number of household head	414	993	858	396	2661

Bangladesh has clearly made substantial strides in promoting educational attendance and achievement during the past two decades. Approximately 65 percent of school-aged children (5 to 18 years) are currently enrolled and regularly attend school. Many communities commented on improved educational quality in recent years. Attitudes about the importance of education have clearly shifted during the past decade. Most communities throughout the six zones appear pleased with improvements in the educational system. However these attitudes appear to vary substantially according to community participation in

school management and as well by school location (remote schools are generally poorly attended and tend to face quality-control problems).

Table 8: Educational Achievement of Children 17 years of age and younger

Educational status of the members age 5 to 18 years by WFP Zone							
% within WFP priority zone	WFP priority zone						Total
	CHT	Coastal	Drought	N/W	Char	Haor	
Not enrolled	13.2%	19.4%	13.1%	9.1%	16.3%	22.4%	15.7%
Enrolled & regular	64.5%	61.0%	67.8%	71.0%	62.6%	60.2%	64.7%
Enrolled but irregular	3.3%	2.4%	2.8%	.8%	3.2%	2.6%	2.4%
Waiting to be enrolled	2.0%	.1%	.7%	.8%	.4%	1.5%	.8%
Drop out	17.0%	17.1%	15.7%	18.3%	17.4%	13.3%	16.3%
N	870	904	574	617	688	736	4389

Throughout the six zones, 16 percent of school-aged children are currently not enrolled and another 16 percent of children have dropped out. The results suggest significant regional variations in educational achievement for school-aged children. Drop out rates are highest in the Northwest (18 percent) and lowest in the *Haor* (13 percent) regions. The results also suggest that almost all school-aged children in the Northwest who are currently enrolled regularly attend school while more than three percent of enrolled children in the Chittagong Hill Tracts and in the Char region report irregular attendance.

Table 9 presents a list of reasons on why children do not or only partially attend school. The responses highlight substantial regional variation. The question excluded the young children who have not reached the eligible age of attending school. The most common answers to the question, ‘why is your child not enrolled in school?’ were:

- ◆ ‘We cannot afford to send our children to school;’
- ◆ ‘We aren’t interested in sending our children to school;’
- ◆ ‘Our child must help with the housework;’ and
- ◆ ‘Our child is helping earn income for the family.’

More than 30 percent of the households in Chittagong Hill Tracts and Coastal zone claim that school costs are unaffordable. The opportunity costs for sending a child to school is too high for the poor households in Bangladesh. This was also reflected in the responses related to children staying home to help parents with household chores (10 to 21 percent) or earning additional income for the household (10 to 24 percent). Female drop-out rates or non-attendance tend to be higher in the Coastal and Haor zones, as well as in the CHT, where parents keep their children home to help out with household work.

Lack of interest was also cited as a reason for irregular attendance, ranging from a low of 15 percent to a high of 27 percent. This is most evident in the Chittagong Hill Tracts, where 27 percent of the parents who keep their children home, are unable to comprehend the importance of education. In addition, approximately 15 percent of Chittagong Hill Tracts households reported that distance to school or lack of transportation facility was a factor for non-enrolment or partial attendance in school.

Table 9: Reasons for Non Attendance or Partial Attendance in School by WFP Priority Zone (multiple answers possible)

	WFP priority zone						Total
	CHT	Coastal	Drought	N/W	Char	Haor	
Help in HH chores	16.8%	21.0%	9.7%	16.1%	12.8%	18.8%	261
Help parents to earn	13.9%	9.6%	14.1%	23.9%	14.3%	11.3%	216
Not interested in school	27.1%	15.3%	19.5%	22.2%	22.5%	17.1%	322
Cannot afford	31.9%	30.9%	13.5%	22.2%	22.1%	15.4%	375
Got married	5.2%	9.3%	9.2%	13.3%	13.6%	5.5%	141
Parents negative attitude	10.0%	20.4%	5.4%	7.8%	10.9%	5.8%	172
Too young to go to school	21.3%	15.3%	22.7%	17.8%	22.1%	25.3%	325
Other reasons	21.6%	12.7%	10.8%	10.0%	7.0%	13.0%	206
Total	319	353	185	180	258	293	1579

Percentages and totals are based on respondents.

The Chittagong Hill Tracts presents a unique set of problems faced by parents contemplating the benefits and costs of sending their children to school. In the CHT, the use of Bengali as the medium of communication coupled with poor quality of instruction play an important role in discouraging school age children from continuing school. Teacher turnover rates and irregular attendance rates are high in the CHT, where many teachers assigned to the schools are not from the region. Many schools are located several kilometres from home and even schools located near villages lack proper infrastructure or facilities required for a proper education. Many school buildings are dilapidated, and community schools have scarcity of books, desks, and chairs. Furthermore, some CHT communities reported that teachers sometimes discriminate against *Jumma* children, particularly in mixed schools.

Finally, the qualitative information discussed by communities indicated an important potential correlation between school non-attendance or early drop-out and the degree of community participation in school management. Throughout rural Bangladesh, schools lacking active school management committees with community participation frequently continue to be plagued by poor teacher attendance, low quality of teaching, and dilapidated school structures.

Table 10 provides data on 3,517 school-aged children and the type of school they attend. Approximately 47 percent of children attend government schools and another 35 percent of children go to private schools. A significant majority (82 percent) of children reported attending private secondary school or higher. This is primarily because public secondary schools are rare in many rural areas of Bangladesh, limiting household choice to one of private education. Fewer than 10 percent of children attend NGO-run schools and about 10 percent attend the Madrasha system. A higher proportion (16 percent) of children in Chittagong Hill Tracts attend NGO-managed schools (see the discussion above concerning attitudes about government-operated schools in the CHT), while a large proportion (14 and

12 percent respectively) of children in the Coastal and Haor regions attend the Madrasha system.

Table 10: Type of school by WFP Priority Zone

	Type of school						
	% within WFP priority zone						
	WFP priority zone						Total
CHT	Coastal	Drought	N/W	Char	Haor		
Govt. school	40.2%	57.7%	44.8%	41.6%	46.6%	53.4%	47.1%
Private school	39.9%	22.9%	36.6%	41.4%	37.3%	26.5%	35.0%
NGO run school	16.3%	5.0%	9.1%	8.7%	7.8%	8.2%	8.3%
Madrasha	3.6%	14.4%	9.5%	8.3%	8.2%	11.9%	9.6%
N	694	700	484	551	549	539	3517

1.4 HEALTH

Almost 80 percent of the population aged 15 years and above consider themselves to be in good health. The one zone reporting relatively low health status was the Coastal region, where 64 percent of adults reported good health. On the other hand, in the Drought-prone region almost 90 percent reported being in good health. (This difference is statistically significant.) Approximately seven percent of individuals have reported a long-term illness (defined as being ill for more than three months). Health status is apparently lagging in the Coastal region, which reported the highest rate of long-term illness – 10 percent of the population – as well as the highest proportion of short term illnesses (nearly 15 percent)

Table 11: Health Status of members aged 15 and above by WFP Priority Zone

	Health status of household members						
	% within WFP priority zone						
	WFP priority zone						Total
CHT	Coastal	Drought	N/W	Char	Haor		
Long-term illness	7.8%	10.0%	5.0%	5.4%	8.5%	6.7%	7.3%
Short-term illness	8.8%	14.4%	5.3%	4.6%	11.5%	5.8%	8.6%
Disabled	.1%	.6%	.4%	.6%	.6%	.5%	.5%
Both	.1%	10.7%	.4%	1.7%	4.3%	12.6%	4.9%
Good	83%	64.4%	89.0%	87.7%	75.1%	74.5%	78.7%
N	1391	1443	1268	1303	1318	1213	7936

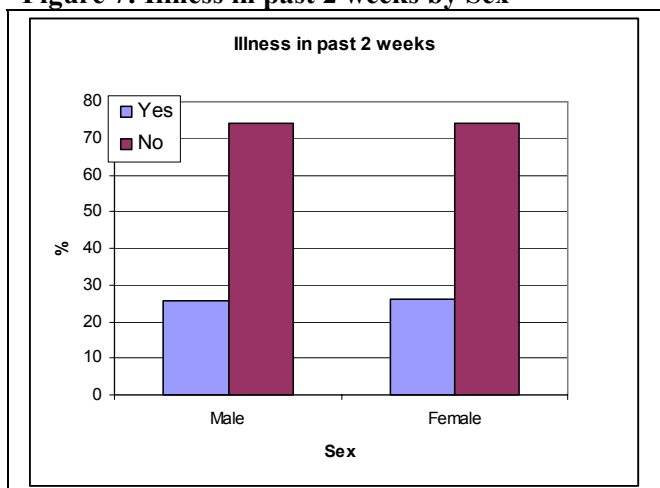
Women reported higher rates of long-term illness than their male counterparts. More than 68 percent of those ill for more than three months are elderly (defined as more than 40 years old).

A larger proportion of invisible poor households (56 percent) suffered from illness within two weeks prior to the survey, compared to relatively non-vulnerable households (48 percent). The Chi-squared value of 60367.43 is statistically significant, indicating a relationship between household vulnerability and illness. This is significant as well, given

the lack of confidence in the quality of health services offered at the village level, a theme that arose in the community focus group discussions.

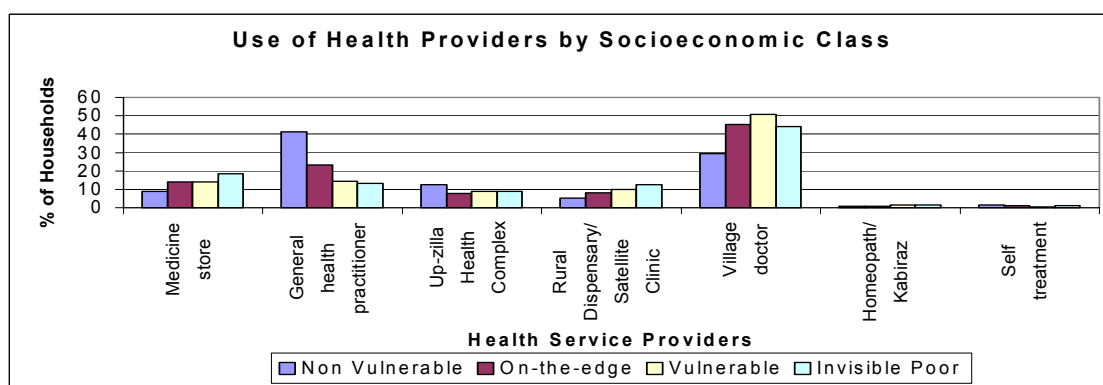
Most communities are served by satellite clinics (*surjer hashi*), which offer vaccination services and birth control facilities for women but virtually no medicines. Most villagers must travel to the upazila headquarters to visit health centres or further to see a MBBS doctor and avail hospital facilities. The quality of health care is quite dependent on socioeconomic status; vulnerable and poor households often cannot afford essential health care.

Figure 7: Illness in past 2 weeks by Sex



Most communities are served by at least one village doctor (who often resides in a nearby village) and as well often by a folk healer and a *kabiraj*². Survey participants ranked village doctors as the most popular health provider (45 percent) followed by general health practitioner or doctor (23 percent), and village pharmacy (13 percent). Only nine percent of people reported going to the *Upazila* Health Complex in the event of a sickness and another nine percent of individuals reported that they sought services from a rural dispensary or satellite clinic. Village doctors or general health practitioners are not necessarily less expensive alternatives (in fact they can be relatively expensive); instead these health practices indicate lack of confidence in the health services provided by the government (as discussed above).

Figure 8: Use of Health Providers by Socioeconomic Class



Confidence in health providers varies significantly across the regions. Char dwellers and Northwest residents tend to seek health services from village doctors (57 and 54 percent respectively) while people in the Chittagong Hill Tracts prefer to visit General Health Practitioners (39 percent) followed by medicine stores (30 percent). Failure to access quality institutionalized health care services has increased the dependence on traditional doctors or folk healers – *baidya* or *kabiraj*.

² Indigenous practitioner on herbal medicines

Table 12: Use of Health Service Providers by WFP Priority Zone

Use of health service providers							
% within WFP priority zone							
	WFP priority zone						Total
	CHT	Coastal	Drought	N/W	Char	Haor	
Medicine store	29.6%	12.8%	16.4%	8.5%	9.5%	17.6%	12.7%
General health practitioner	38.8%	34.8%	30.4%	16.2%	13.4%	32.3%	22.8%
Thana Health Complex	18.8%	8.0%	6.2%	9.9%	6.4%	14.3%	9.3%
Rural Dispensary/ Satellite Clinic	4.3%	12.3%	4.9%	8.4%	10.4%	10.0%	8.8%
Village doctor	6.8%	31.4%	41.1%	53.9%	57.4%	25.2%	44.5%
Homeopath/ Kabiraz	1.2%	.1%	.6%	2.2%	1.4%	.4%	1.2%
Self treatment	.4%	.6%	.3%	.8%	1.5%	.2%	.8%
N	1383	1430	1266	1302	1378	1214	7913

The hilly topography of the CHT renders many places inaccessible, except by foot or country boat. Remoteness is a problem for many households in the *Haor* zone as well, where roads are rare during the dry season and boat transportation is necessary during the flooding season. Health extension services in the remote areas of Bangladesh are unreliable, irregular, or invariably non-existent, and health centres lack sufficient staff to serve the populations. In such a situation, exploitation by the health practitioners is rife. In the *Haor* zone and the CHT for example, doctors have been known to overcharge or demand extra expenses.

On the other hand, vaccination rates appear to be high in the study population. More than 95 percent of children were vaccinated against common preventable diseases (see Table 14 below). Even in the *Haor* zone, where vaccination rates are lower in comparison to the other five zones, 91.5 percent of children had been vaccinated. Community residents are pleased with government vaccination services, reporting that health workers normally visit communities once every month or two to inoculate children and provide services.

Table 13: Antenatal and postnatal practices by WFP Priority Zone

	WFP Priority Zone						
	CHT	Coastal	Drought	N/W	Char	Haor	Total
N	387	456	303	266	400	404	2216
Currently pregnant	5.90%	8.55%	2.64%	6.76%	6.99%	6.18%	6.13%
N	394	473	410	425	445	403	2550
Given birth to a child in 12 months	15.98%	4.65%	6.82%	7.76%	6.96%	9.92%	7.78%
N	63	22	28	33	31	41	218
Regularly visited health clinic during pregnancy	44.44%	36.36%	74.99%	69.69%	48.38%	63.41%	61.62%
N	252	264	169	249	229	260	1423
Whether child is immunized	92.85%	99.24%	98.81%	97.18%	96.06%	91.53%	95.71%

Approximately six percent of currently married women aged between 15 and 49 were pregnant at the time of the survey and another eight percent had given birth to a child during the past one year. A significantly larger proportion (16 percent) of currently married women in the reference age group had given birth in the Chittagong Hill Tracts compared to all other study regions. Not all pregnant women in the study population were regularly visiting a health facility. Only about 62 percent of the pregnant women paid a visit to the health clinic, a statistic that varies significantly across the WFP priority regions. Fewer than half of the women living in the *Char*, Coastal, or CHT zones had regularly visited health facilities during their pregnancy.

Women instead continue to rely on Traditional Birth Attendants (TBA) to deliver babies and provide support. Villages are served by anywhere from one to seven TBAs, of whom no more than one or two have been trained. TBAs in most communities are not trained. Most women are aware of the importance of extra care and extra food during pregnancies but many are not able to partake of proper ante- or post-natal care due to poverty or customary restrictions. Women in some communities continue to believe that consumption of less food during pregnancy is an optimal strategy for delivering smaller babies. Women usually exclusively breast-feed for six months, then begin introducing weaning foods, including cereals, rice, *shuji*, pulses, boiled eggs and some vegetables, until their children are two or three years old.

Birth control devices are widely available and widely used. Knowledge of HIV/AIDS is rudimentary at best. Many community residents have heard about HIV/AIDS over the radio or television, but do not yet consider it a threat or risk to their communities.

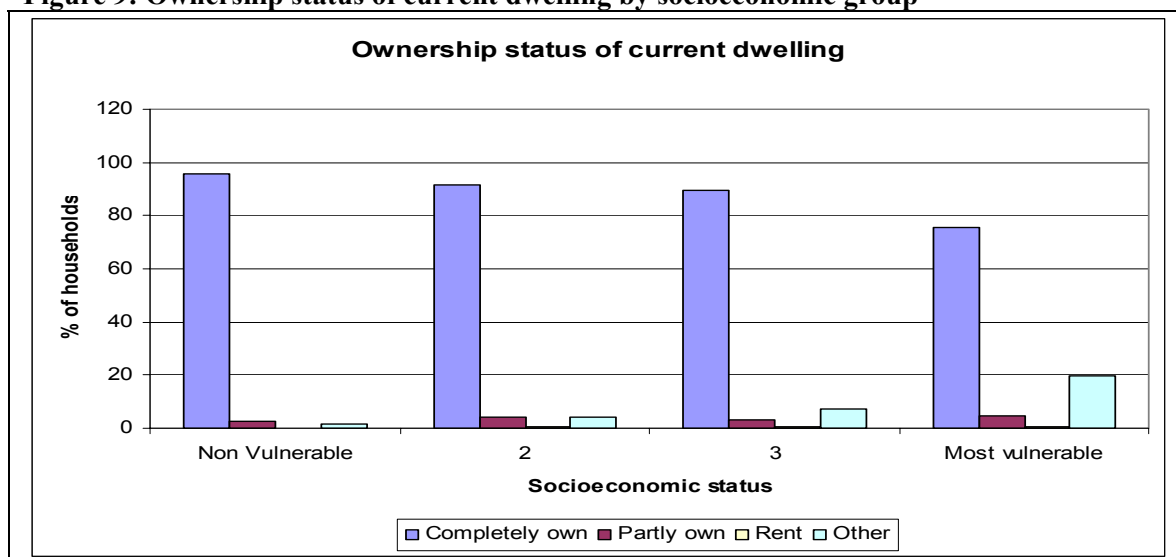
2 PHYSICAL CAPITAL

2.1 HOUSING

Figure 9 indicates, almost 90 percent of the households surveyed own the dwelling that they are currently occupying. Approximately seven percent of households were either living in someone else's house for free or squatting, while approximately four percent of households partially own the dwelling in which they currently live. Renting a house in rural Bangladesh, in contrast to urban Bangladesh, is extremely rare.

Dwelling ownership varies by household socioeconomic status. More than 95 percent of non-vulnerable households own their dwelling while three-quarters of the invisible poor households own their homes and another 20 percent either live for free in houses owned by others or are squatting. More than 90 percent of male-headed households own the current dwelling. By comparison, approximately 75 percent of female-headed households currently own the dwelling in which they live. A significantly larger proportion of female-headed households neither own nor rent their dwelling compared to male-headed households (18 percent compared to 6.5 percent, respectively), but instead live on someone else's land for free or are squatting.

Figure 9: Ownership status of current dwelling by socioeconomic group



Close to half (45 percent) of the households surveyed occupy only one room and another 33 percent of households occupy two rooms. Only 13 percent of households occupy three rooms and another eight percent of households occupy four or more rooms. House size offers a distinct indicator of vulnerability: Nearly 70 percent (68.8 percent) of the invisible poor occupy only one room while more than half of non-vulnerable households (55.5 percent) live in dwellings with three or more rooms.

Table 14: Number of Rooms by Household Socioeconomic Status

% within HH socio economic status	HH socio economic status				
	Non Vulnerable	2	3	Most vulnerable	Total
	1 room	15.3%	37.5%	58.2%	68.8%
2 rooms	29.1%	37.1%	32.6%	27.3%	32.8%
3 rooms	26.8%	17.8%	6.8%	2.7%	13.3%
4 & more rooms	28.8%	7.7%	2.4%	1.2%	8.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

House sizes vary considerably by WFP priority region. The highest proportion of households in the *Haor* region, where space is often a problem during the wet season when most land is under water, occupy only one room. On the other hand, the highest proportion of CHT households (37 percent), who live in the least densely populated region of the country, occupy three or more rooms. A significantly larger proportion (66 percent) of female-headed households occupies one room compared to their male-headed counterpart (44.5 percent).

The majority of the households surveyed currently occupy dwellings with earthen floors (95 percent), corrugated iron roofs (88 percent), and exterior walls made of iron sheet or mud

(58.5 percent). Straw (18 percent) or bamboo (13 percent) is sometimes used for exterior walls, and straw or thatch (11 percent) for roofing.

Table 15: Housing materials by Household Socioeconomic Status

		Household Socioeconomic status				Total
		Non Vulnerable	2	3	Most Vulnerable	
	N	1074	424	601	561	2661
Floor	Dirt	82.01%	96.46%	98.41%	98.32%	95.13%
	Brick/ cement/ tile/ stone	16.10%	2.17%	0.19%	0.67%	3.47%
	Bamboo/ wood plunks	1.60%	1.09%	0.91%	0.98%	1.09%
	Other	0.37%	0.27%	0.50%	0.02%	0.32%
Wall	Straw	1.80%	9.19%	26.51%	34.92%	17.68%
	Earth/Mud	25.19%	33.02%	23.50%	19.24%	26.55%
	Iron Sheet/ Tin	34.79%	36.08%	31.60%	20.54%	31.93%
	Bamboo	7.88%	11.75%	13.60%	19.06%	12.91%
	Others	30.36%	9.96%	4.80%	6.25%	10.92%
Roof	Straw/ thatch	3.30%	9.01%	12.60%	17.60%	10.65%
	Corrugated Iron sheet/ tin	93.41%	90.09%	86.70%	82.42%	88.28%
	Other	3.30%	0.90%	0.70%	0.00%	1.07%

Table 15 presents slight variation in housing materials by socioeconomic status. A slightly greater proportion of invisible poor households (98 percent) live in houses with earthen floors compared to non-vulnerable households (82 percent). A substantially higher percentage of invisible poor households live in houses with straw walls (35 percent) compared to non-vulnerable households (two percent). However in Bangladesh, housing material is frequently more of a function of geographical location than of socioeconomic class. For example, households living in drought prone areas prefer to have earthen walls, whereas, for practical reasons, households living in flood prone areas prefer to use iron sheet for walls regardless of their socioeconomic condition. Approximately 62 percent of drought prone households live in dwellings with earthen walls while 58 percent of coastal households and half of Char households live in dwellings with walls made out of iron sheets. Nearly 90 percent of CHT households live in dwellings with bamboo walls, the material readily available in that environment.

A synopsis of housing differences by WFP priority zone by wealth group (analysed as part of the qualitative Wealth Ranking Exercise) is outlined in Table 16.

Table 16: Housing by Wealth Group by WFP Priority Zone

Wealth Group	Relatively well-to-do	Middle	Poor	Extreme Poor
WFP Zone				
Northwest	Pucca house & floor; tin roof 5-7 rooms pucca latrine	Pucca or earthen floor, tin roof, 2-5 rooms, <i>kacha</i> latrine	Straw & tin roof, Earthen walls & floor, 2-3 rooms, bamboo partition	Earthen floors & wall, straw roof, Straw/jute stick, 1-2 rooms
Drought	Brick house, pucca roof, floor & walls, 5-6 rooms, 1-2 acres homestead with garden & pond	Brick house, tin roof, earthen or pucca walls, 4-5 rooms	Earthen walls, Tin roof, 1-2 rooms	Tin made house, Jute, bamboo, Grass/straw roof, Earthen floor, 1 room
Coastal zone	Concrete floor, Tin roof & walls	Earthen/tin walls, earthen floor	Smaller earthen house, tin roof, bamboo structure	Earthen floor, straw/coconut leaf walls, tin or straw roof
Char zone	' <i>Chowchala</i> ' pucca floor/walls, Tin roof/walls, 3-4 rooms	' <i>Chowchala</i> ' pucca floor, tin roof/walls, 2-3 rooms	' <i>Duchala</i> ' tin roof, bamboo walls, <i>kacha</i> floor, 1 room	Straw hut, Bamboo/straw roof Earthen floor, 1 room
Haor zone	' <i>Chowchala</i> ' pucca, tin, & brick material, Earthen wall, 4 rooms, guest room	' <i>Chowchala</i> ' tin, pucca floor, earthen wall, 2-3 rooms	Tin roof, bamboo, hay & mud wall, thatched, 1 room	Straw hut, Jute stick wall, No kitchen 1 room
CHT	Big wooden platform house, tin roof, concrete floor, latrine attached to house	Platform house, bamboo walls, grass/tin roof, <i>kacha</i> latrine <i>Kacha</i> floor, Several rooms	Stilt house, Bamboo walls, Separate kitchen, <i>Kacha</i> or no latrine, grass roof, 2-3 rooms	Small stilt house, bamboo walls, no latrine or kitchen, thatched roof, 1 room 1 year durability

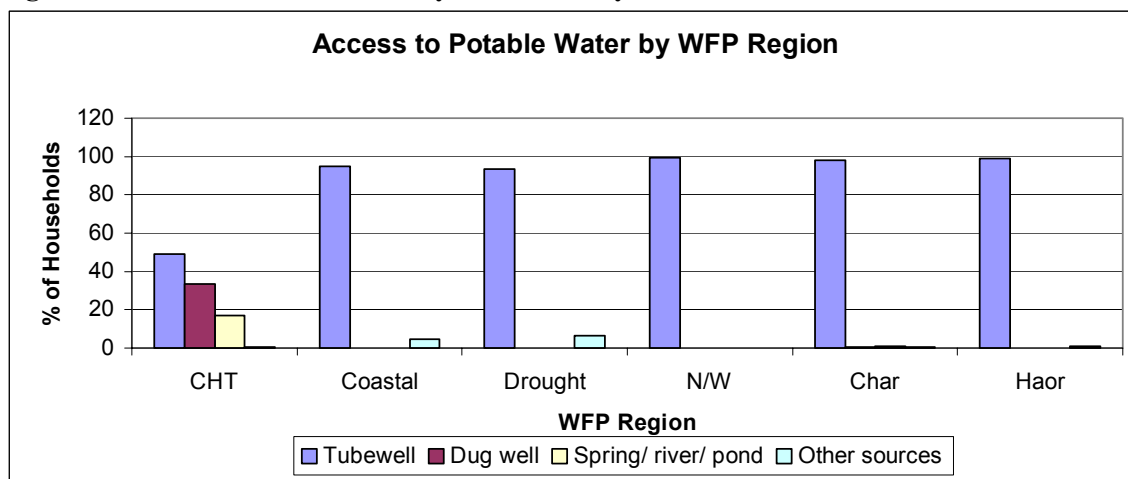
2.2 ACCESS TO WATER

Figure 10 assesses the various primary sources of water utilized by households. Rural Bangladesh households continue to rely overwhelmingly on tubewells as their primary source of drinking water. Approximately 97 percent of households across the six regions regularly drink tubewell water, despite the data from the Chittagong Hill Tracts, where fewer than half of the population have access to tubewell water. Instead, approximately one third of the population in CHT rely on water from wells and 17 percent drink water from springs, rivers or ponds. In the coastal region approximately four percent of households drink piped water outside of the house while in drought prone region about five percent of the households access potable water from public taps.

Unlike the rest of rural Bangladesh, access to clean potable water is problematic in the CHT, where the hard bedrock underlying much of the hilly land renders tubewell installation difficult. As a result, tubewells are very often not drilled deep enough, dry up quickly, and remain out of circulation for years. Many of the tubewells or other water sources installed in CHT communities are poorly maintained, a result of poor extension services on the part of the DPHE combined with lack of community initiative. Women and children, who rely on secondary water sources, can spend up to two hours, two or three times a day collecting

water, placing a huge burden on household activities. Children suffer from diarrhoea, particularly during the rainy season, largely because water sources are unprotected and become easily contaminated. (Poor hygiene and sanitation practices also contribute to the prevalence of diarrhoea in CHT).

Figure 10: Potable Water Source by WFP Priority Zone



Access to potable water does not vary by household socioeconomic status or sex of household head. Although many poor households throughout the other five zones of the country (besides CHT) do not have their own tubewells, most households are able to access clean potable water from neighbours’ tubewells. Tubewells, however, do not necessarily yield water all year round, especially in the Coastal and Haor Zones, where tubewell water dries up during the dry months of the year.

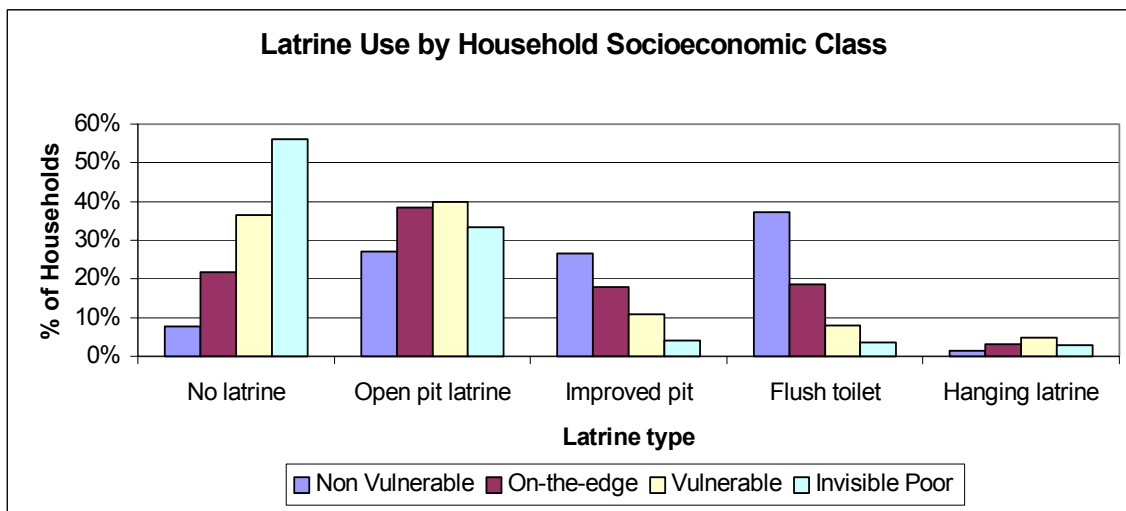
Community focus group discussions did not disclose concern about arsenic from the tubewell water, except in the Char and Haor Zones, where villagers are compelled to drink tubewell water contaminated with arsenic in absence of alternative sources of drinking water. In cases where arsenic has been identified, most communities in the study have been able to shut down the tubewell and shift to other apparently arsenic-free tubewells.

2.3 SANITATION PRACTICE

Figure 11 outlines household sanitation practices disaggregated by socioeconomic status. The results suggest that a large proportion of all households – more than one-third of all households – do not use any latrine or rely on hanging latrines, which represent unsafe sanitary practices. Household sanitation behaviour varies widely by socioeconomic class. Most invisible poor households (56 percent) do not use latrines while non-vulnerable households either rely on a pit latrine (54 percent) or a flush toilet (37 percent).

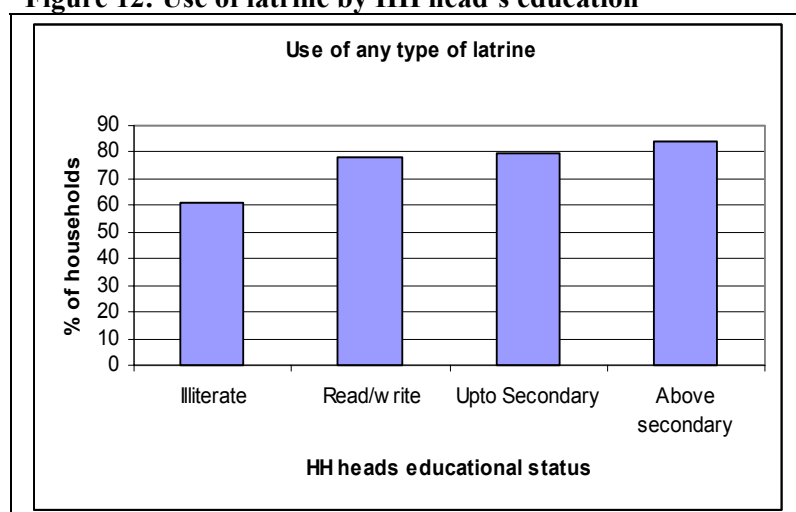
Sanitation practices also offer large regional variations. Latrine use is most prominent in the Coastal zone and the CHT, but significantly more households in the CHT also use hanging latrines. Disaggregated data indicate that in the Chittagong Hill Tracts, substantially more Marma, Bawn, Tripura and Murang households do not use latrines (39 percent) compared to Bengali and Chakma households (six and nine percent respectively). One quarter of Chakma households, however use hanging latrines.

Figure 11: Latrine Use by Household Socioeconomic Status



Relatively larger proportions of households living in the Coastal, Drought and Northwest regions use flush latrines (20, 22 and 24 percent respectively) while use of flush latrines in Chittagong Hill Tracts remains uncommon (3.8 percent).

Figure 12: Use of latrine by HH head's education



Almost half of the female-headed households (49 percent) do not use a latrine, compared to 30 percent of their male-headed counterparts. Latrine use is another indicator of vulnerability. As one would expect, use of a latrine is positively correlated to the level of educational attainment of household heads (Chi square 586143.912).

2.4 ACCESS TO ELECTRICITY

Table 17 indicates that access to electricity remains quite an exclusive privilege, primarily limited to non-vulnerable households. Access to electricity significantly varies by socioeconomic status. Only six percent of invisible poor households have access to electricity whereas 48 percent of non-vulnerable households use electricity to illuminate their dwelling.

Table 17: Source of Household Lighting by Socioeconomic Status

Lighting source					
% within HH socio economic status					
	HH socio economic status				
	Non Vulnerable	2	3	Most vulnerable	Total
Kerosene	51.1%	73.5%	89.3%	94.1%	78.4%
Electricity	48.1%	26.3%	10.7%	5.9%	21.4%
Other sources	.9%	.2%	0.0%	0.0%	.2%
N	414	993	858	396	2661

Access to electricity also varies significantly across the regions; access is highest in the drought prone region (29 percent) and lowest access in CHT (13 percent).

Disaggregated data for Chittagong Hill Tracts show that among the ethnic groups, Bengali households have most access to electricity (73 percent) while only two percent of Chakma households access electricity.

Table 18: Lighting Source by

Lighting source by Ethnicity

% within Ethnicity				
	Ethnicity			Total
	Bengali	Chakma	Others	
Kerosene	73.3%	92.1%	95.8%	84.6%
Electricity	25.2%	2.4%	3.3%	12.9%
Other sources:	1.5%	5.6%	.8%	2.5%
N	202	126	120	448

2.5 SOURCES OF COOKING FUEL

Straw, plant residuals, rice chaff and/or plant twigs are the primary sources of cooking fuel in five of the six study areas. Cooking fuel sources are naturally highly dependent on material availability, which explains why CHT households primarily depend on wood while all other regions depend on straw, plant residuals, rice chaff or plant twigs. Wood is also slightly more common in the *Haor* zone than in other zones. Approximately four percent of households use dung as the primary fuel source. Approximately seven percentage of *Char* households use dung as a fuel source; dung is not used at all in the Coastal region.

Table 19: Sources of cooking fuel by WFP Priority Zone

Source of cooking fuel							
% within WFP priority zone							
	WFP priority zone						
	CHT	Coastal	Drought	N/W	Char	Haor	Total
Wood	77.2%	13.2%	5.0%	11.1%	4.3%	27.0%	12.8%
Straw/ plant residuals/ rice chaff/ twigs	22.1%	86.4%	90.7%	86.9%	88.5%	68.5%	82.8%
Dung	.2%	0.0%	4.1%	1.4%	6.8%	4.3%	3.9%
Other sources	.4%	.5%	.2%	.7%	.5%	.2%	.4%
N	448	441	442	442	444	444	2661

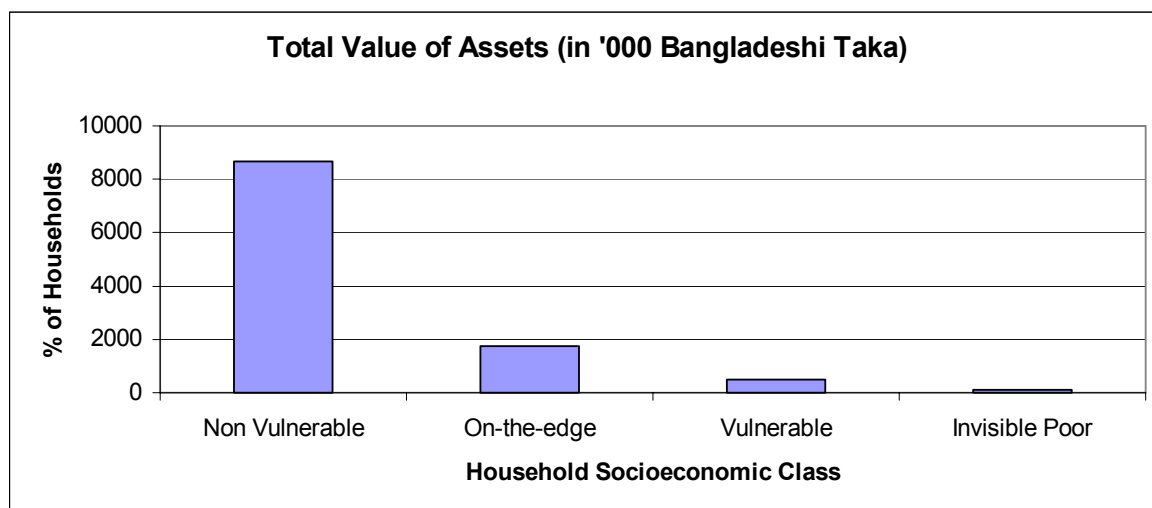
Variations are significant when the data is disaggregated by socioeconomic class. More than a quarter of the non-vulnerable households use wood as the primary source of cooking fuel whereas more than 90 percent of the invisible poor use straw, plant residuals, rice chaff or plant twigs.

2.6 ASSETS

The household asset base is an important component of physical capital and serves as a key indicator in profiling livelihoods. This study found asset ownership to be highly correlated with income and food security indicators. An asset ownership variable was used as one of the key variables in creating socioeconomic groups. The study examined a number of different categories of assets, including livestock, household appliances, land, transportation, as well as other productive and non-productive assets.

Figure 13 and Table 20 present the value of assets owned by survey households. As expected, the number and value of assets owned by the households are functions of their socioeconomic status. The value of non-vulnerable household assets is approximately 95 times more than that of the invisible poor (8,676,000 *Taka* compared to 91,000 *Taka*). Non-vulnerable households own more than 270 decimals of functional land for cultivation, while the mean area of land owned by the invisible poor is only 34 decimals. Similarly, non-vulnerable households own an average of five livestock while the invisible poor on average own only two. In addition to land and livestock, non-vulnerable households also own significantly greater numbers and value of other productive assets (mean value 74 thousand *Taka*, compared to two thousand *Taka* worth of other productive assets owned by invisible poor households).

Figure 13: Total Value of Household Assets



The value of assets owned by female-headed households is approximately two-thirds the value of assets owned by male-headed households (1,486,000 *Taka* vs. 2,210,000 *Taka*). Female-headed households also own smaller areas of land, fewer numbers of livestock and fewer numbers of other productive and unproductive assets compared to male-headed households. As measured by land access and ownership of productive assets, female-headed households across the six zones are amongst the most vulnerable households in rural Bangladesh.

Table 20: Household ownership of Assets by Socioeconomic Status

(values are in '000' Bangladeshi Taka)								
Asset type	HH socioeconomic status							
	Non Vulnerable		2		3		Most Vulnerable	
	Mean	N	Mean	N	Mean	N	Mean	N
Land	832.72 (1080.6)	402	188.73 (240.0)	905	64.27 (122.8)	273	31.68 (51.7)	273
Unproductive assets	18.28 (61.4)	414	2.79 (4.8)	989	1.53 (3.0)	853	0.79 (0.94)	388
Communication assets	6.37 (6.1)	80	3.04 (1.3)	36	2.60 (1.3)	6	0	0
Household appliances	6.16 (8.0)	272	1.87 (2.1)	297	1.0 (1.4)	93	1.04 (1.2)	20
Livestock	17.86 (20.51)	370	9.74 (11.6)	853	5.06 (7.6)	664	2.78 (5.3)	244
Other productive assets	73.89 (258.3)	393	11.76 (44.7)	889	3.79 (11.6)	709	2.17 (4.74)	284
Boat	6.26 (8.5)	30	5.01 (9.0)	47	5.84 (9.3)	26	1.50 (0.5)	6
Transport	8.48 (21.0)	204	2.10 (4.4)	248	2.13 (2.6)	135	4.28 (12.3)	32
Total asset	8675.88 (12635.3)	414	1758.68 (3971.6)	993	494.71 (1665.2)	855	90.53 (348.4)	393

Standard deviation is reported in parenthesis

Table 21 presents livestock, poultry and bicycle ownership by household socioeconomic status. Besides land, livestock, poultry, and bicycles represent the most essential productive assets in rural Bangladesh. More than 85 percent of vulnerable households do not own any cattle, 88 percent do not own small ruminants, and nearly half of the vulnerable households do not own any poultry. In contrast, more than six out of every 10 non-vulnerable households own at least one head of cattle and over half non-vulnerable households own two cattle or more, almost four out of 10 own at least one goat or sheep, and approximately 87 percent of the non vulnerable households own poultry. Livestock provide households with critical hedge against shocks or emergencies. Community groups complained about the lack of grazing land or fodder availability and poor veterinary services, hampering their ability to retain livestock.

Bicycles are important and relatively affordable means of transport in rural Bangladesh, allowing households to market their products. Approximately 86 percent of the vulnerable households do not own a bicycle whereas more than half of the non-vulnerable households own at least one bicycle. Bicycle ownership is most rare in the CHT, which is characterised by hills and relatively few roads, and is rare as well as in the island of Bhola. In contrast, more than one-third of the Northwest households own at least one bicycle.

Table 21: Ownership of Various Assets by Household Socioeconomic Status

Cattle ownership					Goat & Sheep ownership				
% within HH socio economic status					% within HH socio economic status				
	HH socio economic status					HH socio economic status			
	Non vulnerable	2	3	Most vulnerable		Non vulnerable	2	3	Most vulnerable
None	39.5%	54.1%	72.0%	85.6%	None	61.3%	67.3%	76.9%	88.4%
One	7.6%	14.2%	12.2%	7.6%	One	12.4%	12.2%	10.8%	5.4%
Two	16.3%	16.3%	11.3%	5.1%	Two	8.7%	9.1%	6.7%	2.9%
Three	11.9%	6.9%	2.0%	1.6%	Three	7.4%	4.7%	3.9%	2.0%
Four	11.5%	4.4%	1.8%	.0%	Four	5.1%	3.1%	.7%	1.3%
Five and more	13.3%	4.2%	.7%	.0%	Five and more	5.1%	3.6%	1.0%	.0%
N	414	993	858	396					

Bicycle ownership					Poultry ownership				
% within HH socio economic status					% within HH socio economic status				
	HH socio economic status					HH socio economic status			
	Non vulnerable	2	3	Most vulnerable		Non Vulnerable	2	3	Most vulnerable
None	44.8%	74.8%	85.7%	97.0%	None	13.2%	22.2%	33.4%	46.8%
One	48.1%	23.7%	14.1%	3.0%	1 to 3	10.5%	20.8%	23.1%	26.6%
Two	6.8%	1.3%	.2%		4 to 6	15.4%	18.5%	17.6%	14.2%
Three	.4%	.3%			7 to 10	16.7%	15.3%	13.5%	6.2%
					11 to 15	14.8%	11.5%	7.9%	2.5%
					16 to 20	11.0%	5.9%	2.0%	2.5%
					20 and more	18.6%	5.9%	2.6%	1.1%

Land Ownership: The most essential productive asset in rural Bangladesh is land. Only a little more than four of every 10 rural household own agricultural land. Vulnerable and invisible poor households are overwhelmingly functionally landless in the study area. More than nine out of every 10 invisible poor households do not own any agricultural land; more than one-fourth of the households do not even own any homestead land; and virtually no invisible poor household owns any pond or any other types of land. *Khas* land, theoretically accessible to poor households for productive purposes, is inevitably controlled by rural elites, the large landowners or non-vulnerable households who maintain the economic power to influence local policy – this story was repeated in many community focus group discussions.

Land ownership patterns presented in Table 22 and figure 14 suggest, that size of land increases with socioeconomic status of the households. The mean agricultural land holding for invisible poor households is 37 decimals, whereas non-vulnerable households own 265 decimals of agricultural land. Mean homestead area for invisible poor households is approximately six decimals as opposed to 34 decimals of homestead land owned by non-vulnerable households. Land availability for other activities, such as for grazing cattle, is

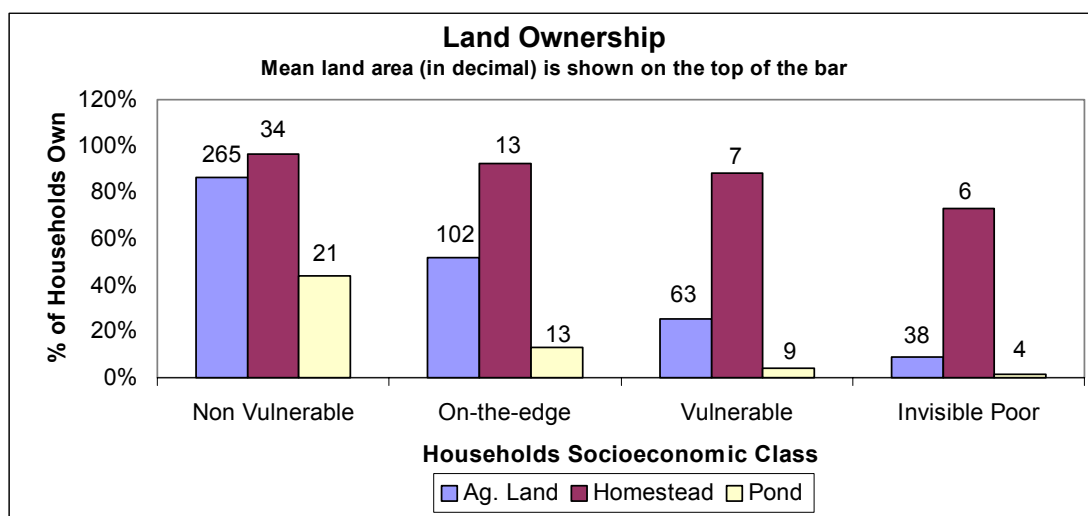
difficult in all of the zones. Community groups complained that land was insufficient to support livestock, which are basically insurance against shocks and hazards.

Table 22: Proportion of Households Owning Land

	Household Socioeconomic Status				
	Non vulnerable	2	3	Most vulnerable	Total
Agricultural land	86.59%	51.71%	25.33%	9.10%	41.89%
Homestead land	96.66%	92.49%	88.43%	73.12%	88.71%
N	414	993	858	396	2661

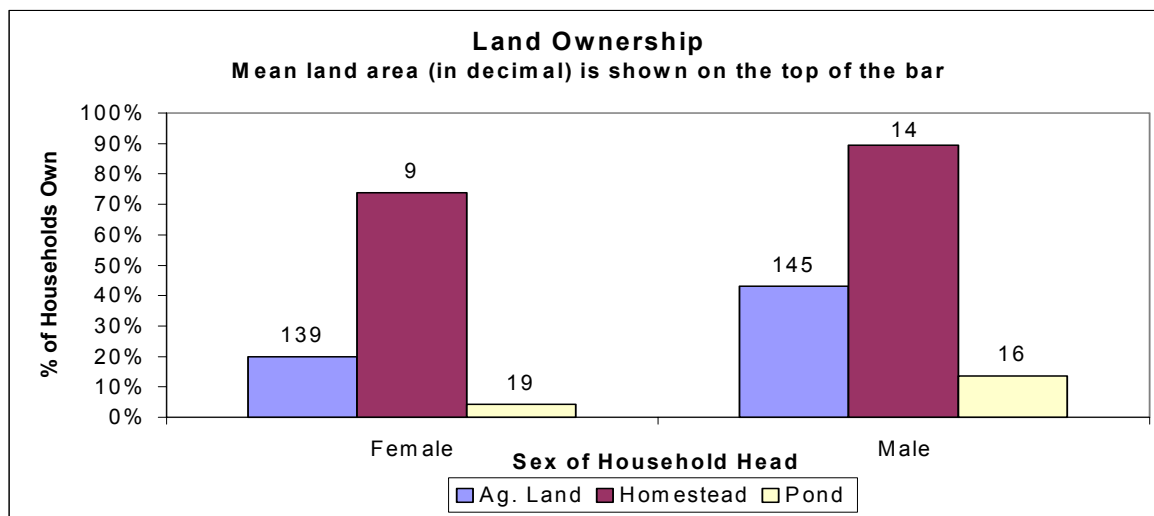
	WFP Priority Zone						
	CHT	Coastal	Drought	N/W	Char	Haor	Total
Agricultural land	53.34%	36.28%	41.40%	47.28%	39.18%	39.86%	41.89%
Homestead land	77.45%	80.72%	89.14%	93.66%	86.71%	87.61%	88.71%
N	448	441	442	442	444	444	2661

Figure 14: Land Ownership by Socioeconomic class



Approximately 80 percent of female-headed households do not own any agricultural land. More than a quarter of female-headed households also do not own any homestead land; in contrast about 10 percent of male-headed households have no homestead land. Female-headed households have much smaller areas of land available for agriculture and homestead activities as well (139 decimal and nine decimals respectively) than have male-headed households (145 decimals and 14 decimals respectively).

Figure 15: Land Ownership by Sex of Household Head



Land ownership patterns also vary by region. Chittagong Hill Tracts and Drought zone households typically own larger areas of land (more than 170 decimals each compared to average land holders between 123 and 154 decimals in the other four zones). CHT and drought-prone households also hold substantially more land for other purposes beyond cultivation. Land is relatively less productive in drought-prone areas, requiring households to have larger areas of land to make a living. Although CHT households own relatively large areas of land, the value of land in CHT is substantially lower compared to all other regions.

In a land hungry country, where rural families depend on agricultural production on cultivable land as the major source of their livelihoods, the CHT represents a magnification of the problem of the struggle over land. Although the scarcity of land is not as acute as elsewhere, land access has been severely exacerbated by the pressures of a growing population compounded by the settlement of plains-lands people from other parts of the country. Thousands of hectares of land historically belonging to the hill peoples have been taken by settlers. In addition, the government has gradually taken up lands traditionally under *jum* cultivation – also known as swidden, shifting, rotational, or ‘slash and burn’ agriculture – to turn into reserve forests. Much of the land classified as ‘agricultural land’ in Table 22 is undoubtedly used in the CHT as *jum* cultivation. The pressures on land during the past two to three decades have forced *jum* farmers to reduce the fallow period, which is crucial in order to maintain land productivity, from the traditional time period of 10 to 12 years to three years on average today, thereby severely affecting the fertility of the soil.

3 FINANCIAL CAPITAL

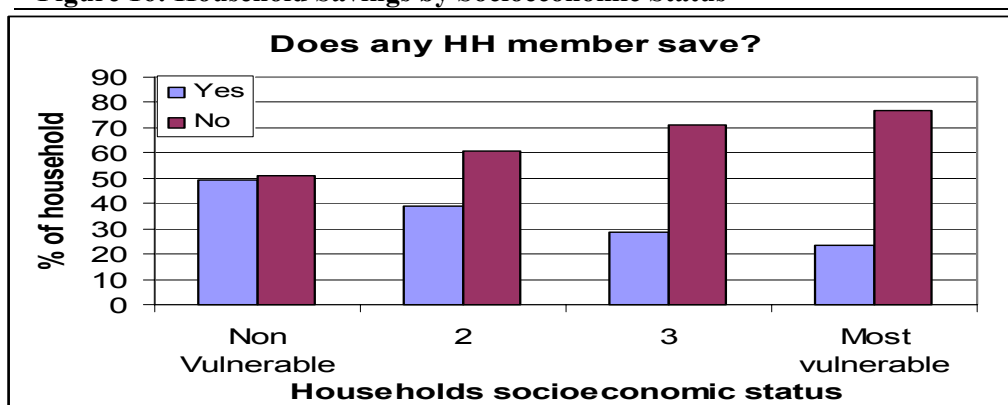
The microfinance "revolution" in Bangladesh has been based upon the premise that household poverty and livelihood vulnerability is, in large part, due to lack of access to financial capital. The recent bestowal of the Nobel Peace Prize to Mohammed Yunus for his pioneering work in promoting microfinance opportunities for poor women and poor households illustrates most profoundly the worldwide recognition that well targeted income generating opportunities can provide an engine toward development and poverty alleviation.

This section will discuss household ability to save and use credit toward building productive livelihoods strategy.

3.1 SAVINGS

Approximately 35 percent of the households in the study population save. Survey results indicate that savings increase according to household socioeconomic status. Approximately half of the non-vulnerable households regularly save, whereas only a quarter of the invisible poor reported regular savings. Saving behaviour varies significantly across regions; households living in the Northwest save most (46 percent) while the lowest proportion of households able to save are located in the Haor region (26 percent). The proportion of female-headed households able to save is significantly lower (21.5 percent) than their male-headed counterparts (36 percent).

Figure 16: Household Savings by Socioeconomic Status



The advent of the Grameen Bank and other microfinance institutions, which stipulate savings as a requirement for membership, has promoted household savings into what is becoming a widespread livelihood strategy in rural Bangladesh. Under this model, a savings account is a prerequisite for micro-credit. There are, in addition, other forms of savings available in villages, such as local formal and informal savings groups (*samities*) and the formal insurance savings programs.

Savings is highly correlated with household membership in NGOs, CBOs or Grameen. Interestingly, more than half of all non-vulnerable households who save are also members of NGOs or the Grameen Bank. Typically member households of NGO or Grameen keep their savings in these organizations. Almost 25 percent of the vulnerable households are able to save and more than 60 percent of the non-vulnerable households reported keeping their savings in an NGO or Grameen, although almost one-third (32 percent) of the non-vulnerable households have some savings in commercial banks.

Table 23: Average Household Savings by WFP Priority Zone

WFP Zone	CHT	Coast	Drought	NW	Char	Haor	Totals
Mean Taka	4433.74	6470.87	4391.70	3520.60	2934.18	3802.50	3709.28
Std Deviation	9121.21	13529.71	9584.14	8036.49	5057.94	9454.91	8328.68

Average household savings vary by WFP Priority Zone. The highest average savings are found in the Coastal area of Bhola, where households have been able to save Taka 6471 on average, but households living in the *Char* zone only save only Taka 2934 on average.

Table 24: Average Household Savings by Vulnerability Categories

Vulnerability	Non-vulnerable	2	3	Most Vulnerable	Totals
Mean Taka	8204.97	3291.09	1557.40	1346.70	3709.28
Std Deviation	13438.69	7074.78	2982.68	1983.38	8328.68

As one would expect, non-vulnerable households save significantly more than do households in the other socioeconomic classes. The figures in Table 24 (as well as Table 23 & 25) do not include 25 households (outliers), the most non-vulnerable households in the sample, who have been able to save between Taka 80,000 and Taka 800,000. Even after excluding these 25 relatively well-to-do households, non-vulnerable households are able to save more than six times the amounts of the vulnerable households in the sample.

Female-headed households have been able to save substantially more than their male-headed counterparts (4626 Taka vs. 3664 Taka). Savings are strongly related to membership in NGOs or Grameen, with which female-headed households are likely to have longer-term memberships, which largely explains the higher savings levels.

Table 25: Average household Savings by Type of Household Head

Household Head	Female HH Head	Male HH Head	Totals
Mean Taka	4626.05	3663.90	3692.16
Std Deviation	10101.10	8200.97	8271.12

Nearly two-thirds of the households (64 percent) reported that they would not be able to access their saving during times of need. Approximately one-third of the households who reported taking a loan from their micro-credit organizations explained that the organization might have used their savings as collateral. Approximately one-quarter of the households mentioned that the MFIs with which they are attached do not allow the households to access savings, even in times of their severe need. More than one-quarter of the households keep their savings in the form of longer-term deposits, which also cannot be accessed. Sixteen percent of households mentioned that withdrawing savings is only allowed at the time of withdrawing membership from the organization. The Pearson correlation results suggest that household membership in NGOs or Grameen in the study area is negatively related to accessibility to saving in times of need. Given the frequent hazards of floods and other natural disasters as well as unnatural shocks that compel poor households to engage in various coping strategies, the inability to access savings in times of need appears to be a highly regressive aspect of NGO savings programmes.

3.2 CREDIT

Less than half of all households in WFP priority regions have at least one outstanding loan. Most of the loans appear to have been taken by middle socioeconomic households. Only a little more than one-third of invisible poor households and 39 percent of non-vulnerable

households are currently indebted with at least one outstanding loan. Indebtedness appears to be higher in the Chittagong Hill Tracts (51 percent) and Coastal region (54 percent) than in other regions. The lowest proportion of indebted households lives in the Drought prone region.

Table 26: Households with outstanding loan by socioeconomic status

Households with outstanding loan							
% within WFP priority zone							
	WFP priority zone						Total
	CHT	Coastal	Drought	N/W	Char	Haor	
Yes	50.9%	54.2%	31.2%	45.2%	47.5%	43.5%	43.4%
No	49.1%	45.8%	68.8%	54.8%	52.5%	56.5%	56.6%
N	448	441	442	442	444	444	2661

Among the borrowers, about 80 percent of the households have one outstanding loan, another 15 percent have two outstanding loans, and approximately five percent have three or more outstanding loans. A large proportion of households (27 percent), particularly invisible poor households (36 percent) 15 percent of Drought-prone households are irregular in repayment of loan instalments.

Why do some households have problems with repayment?

- ◆ A majority of the households (54 percent) who inconsistently repay loan instalments identified the lack of income as the primary cause for irregular instalments. Almost two-thirds of invisible poor households identified this as the primary reason, but almost one-third of non-vulnerable households as well complained of lacking sufficient income for repayments.
- ◆ Approximately 11 percent of households needed loans to pay for food, health care, or other livelihood needs;
- ◆ Only two percent of households had trouble with repayments as a result of a failed Income Generation Project (IGA);
- ◆ Data disaggregated by sex of household head show that almost all female-headed households (96.4 percent) reported lack of income as the main reason for irregular repayments compared to just over half (52 percent) of their male-headed counterparts.

Table 27 presents mean amount borrowed, mean amount repaid, and the mean interest rate by socioeconomic status of household. Non-vulnerable households, who can much more easily access institutional credit, take substantially larger loans (34,560 taka) and enjoy a lower average interest rate (17.6 percent) than households in other socioeconomic groups. The average loan amounts to 9,720 and 9,450 Taka taken by the two most vulnerable types of households are almost one-quarter the amount commanded by non-vulnerable households. Furthermore, the interest rates are substantially higher – 27 and 24 percent, or up to 50 percent more.

Table 27: Different aspects of credit by Household Socioeconomic Status

Various aspects of loan (except interest rate, figures are in '000' Bangladeshi Taka)				
HH socio economic status		Loan amount	Amount repaid	Interest rate
Non Vulnerable	Mean	34.56	9.94	17.58
	Std. Deviation	69.01	15.25	28.10
2	Mean	11.65	4.41	22.17
	Std. Deviation	16.84	5.43	36.48
3	Mean	9.72	3.68	26.79
	Std. Deviation	33.82	3.91	44.89
Most vulnerable	Mean	9.45	3.10	23.60
	Std. Deviation	19.88	3.23	28.88
Total	Mean	13.96	4.68	23.19
	Std. Deviation	35.76	7.22	37.60

The results provide discernible associations between the type of lender and the socioeconomic status of the client. Vulnerable households tend to suffer less due to favourable lending terms, because lenders have a preference for perceived less risky (i.e., less vulnerable) clients. Vulnerable households, who tend to lack collateral, also find it more difficult to establish credentials with formal institutions.

Loan amounts and interest rates also vary significantly by region. Coastal and Drought-prone households tend to take relatively large loans; CHT households take smaller loans (about half the average amount of Coastal households); Char inhabitants are charged very high interest rates (36 percent on average) as are Coastal households (30 percent).

One of the most positive developments in rural Bangladesh over the past two decades has been the large expansion of institutionalised credit operations. They have replaced rural household dependence on moneylenders, who charged usurious interest rates and were notoriously sleazy agents of the rural patron-client system. (As mentioned above, this development revolution was recently recognized by the Nobel Committee, which recognized Mohammed Yunus for his pioneering work in establishing the Grameen Bank to allow rural poor women the opportunity to take loans to invest in small economic enterprises.) Today the most frequent source of loans in the study area is the network of microfinance institutions (MFIs). NGOs and CBOs now provide nearly half (45 percent) of the loans in the study regions. With Grameen as the source of 21 percent of the loans to households and commercial banks or other financial institutions accounting for another 13 percent of the credit needs. Rural households now obtain nearly 80 percent of their loans from institutionalised credit organisations. NGO and CBO microfinance activities have proven to be very important to female-headed households, who depend on these MFIs for 68 percent of their loans, which is far more widespread usage than for male-headed households.

Approximately 13 percent of the sample households borrow from friends and relatives; moneylenders remain quite active in rural communities and continue to account for seven percent of all loans. Households in the CHT and *Haor* zones remain relatively more dependent on moneylenders for their credit needs, taking 10 and 14 percent of their loans

respectively from moneylenders. NGOs and CBOs have been slower to penetrate the relatively remote hinterlands of the *Haors* and CHT.

Table 28: Source of loan by WFP Priority Region

% within WFP priority zone	Source of loan						
	WFP priority zone						
	CHT	Coastal	Drought	NW	Char	Haor	Total
Relative/ friend	12.3%	14.6%	8.0%	11.0%	12.3%	16.6%	12.5%
Bank or financial institution	25.6%	24.2%	8.7%	12.5%	10.9%	16.6%	13.4%
NGO/ CBO/ Samity	42.7%	48.3%	55.1%	46.0%	44.5%	36.3%	44.6%
Grameen	6.2%	8.8%	23.2%	23.5%	25.1%	15.0%	20.8%
Money lender	10.1%	3.8%	1.4%	5.5%	6.6%	13.5%	7.1%
Other (list)	3.1%	.4%	3.6%	1.5%	.5%	2.1%	1.6%
Total	227	240	138	200	211	193	1209

The conventional philosophy of microfinance institutions is that the provisioning of small-scale rural credit breaks a fundamental capital constraint in household economies, thus encouraging investment in income-earning assets and activities.

Table 29 indicates that this premise holds true for non-vulnerable households but is not yet the case for invisible poor households. More than three-quarters of non-vulnerable households invest their loan in some kind of enterprise. Microcredit however does not apparently assist the invisible poor in easing capital constraints; three-quarters of their loans are directed toward household consumption needs. Perhaps as alarmingly, almost one-quarter of the loans taken by invisible poor households are directed toward repayment of previous loans (24 percent). Other less vulnerable households are not nearly as indebted to multiple sources. In only 22 percent of the credit cases were invisible poor household loans invested in business inputs, including poultry and livestock, agricultural inputs, and other small business inputs. Besides non-vulnerable households, the other households in the study invest 16 to 17 percent of their loans toward paying housing-related expenses.

Table 29: Loan use by Household Socioeconomic Status

	Loan use (multiple answers possible)			
	HH socio economic status			
	Non vulnerable	2	3	Most vulnerable
Business input	76.3%	55.3%	43.5%	22.1%
Consumption	22.7%	41.1%	53.6%	75.4%
Loan repayment	4.2%	7.9%	9.1%	23.6%
Housing related expenses	8.5%	17.2%	16.6%	16.0%
Dowry payment	3.7%	2.1%	5.1%	5.7%
Other puposes	8.8%	8.1%	9.8%	6.7%

Percentages and totals are based on respondents.

Use of loans varies significantly by region. CHT households tend to invest most of their loans (72 percent) in business inputs, which include agriculture, poultry and livestock, land purchase or lease, raw materials, or small enterprise inputs. *Haor* zone households primarily use loans to meet consumption needs (64 percent). Households using loans to repay previous loans ranged from a high of 11 percent in *Char* and *Haor* regions to a low of seven percent in the Chittagong Hill Tracts.

It is clear that despite the positive trends in microfinance and IGA opportunities in rural Bangladesh in recent years, the poorest and most vulnerable households, particularly those in the *Char*, *Haor*, and Northwest regions of the country, continue to be plagued by a debt burden that can erode livelihoods. Community groups have described frequent patterns of a downward debt spiral involving loan taking for emergency purposes or for social obligations, such as dowry or marriage. Poor households are usually unable to repay or invest loans in productive activities that may not yield a return anyway. In the latter instance, poor households have described contracting loans for agricultural production inputs only to lose the harvest to flood, drought, or pest infestation. The consequent debt results in a series of cross-borrowings that lead to excessive debt levels. When debt burden increases beyond the capacity of the debt management strategies described above, households are forced to take decisions that have more severe impacts on livelihood systems. The infelicitous combination of high risk and vulnerability, labour seasonality, low incomes, and abundant credit availability favours the debt spiral, especially whenever households are forced to divest assets in order to repay debts. Indebtedness has become a routine livelihood strategy of poor households, not only as productive capital but also to cope with a highly uncertain and risk-laden environment. Such credit becomes for poor families a buffer that provides food, health care, and a means of meeting social obligations.

Heavily indebted households face risk to their livelihood security. Indebted households frequently curtail consumption, health care, or other livelihood needs in order to repay loans, thereby affecting food and livelihood security. In the worse cases, extreme poor households have been forced to sell assets, including land, thereby permanent degrading household livelihoods, in order to repay loans. From a livelihood perspective, multiple and cross borrowing engenders great risk for many of the poorest households.

4 SOCIAL & POLITICAL CAPITAL

Stock of social capital that households can use depends on the strength of the network or connections they build. Access to social capital enables households to secure resources and opportunities.

4.1 MEMBERSHIP IN ORGANISATIONS

To understand the dynamics of social capital in the context of rural Bangladesh, this study inquired about household memberships in the Union Parishad, various committees such as school, market and mosque groups, Grameen Bank groups, NGO and CBO groups, village court, government welfare recipient groups including VGD, RMP and old age pensions, professional associations, village-based governmental organizations such as BRDB and BADC, and other types of organisations that work with the communities.

Household memberships in the organizations mentioned above are generally low. More than half of all households (54 percent) have not pursued membership in any of the organizations

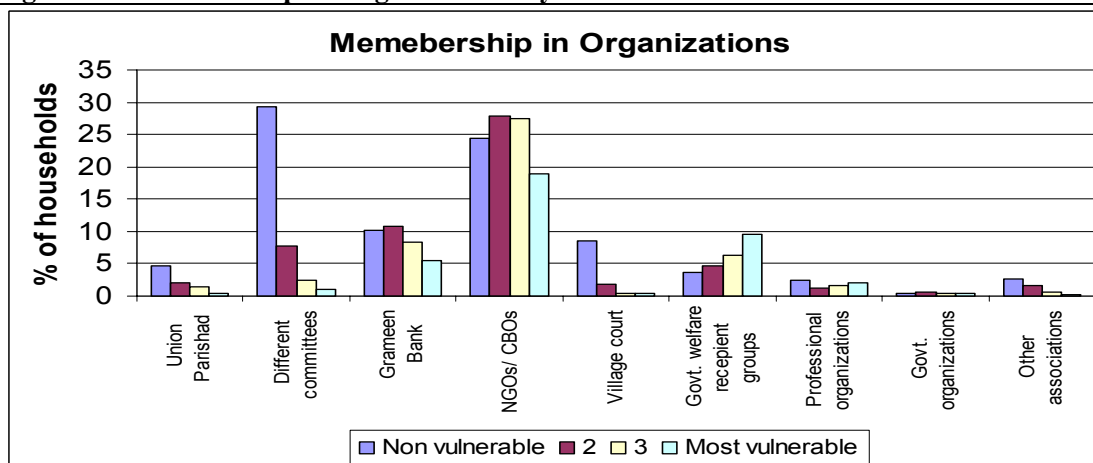
mentioned above. Only 10 percent of the all households have retained membership status in more than one organisation. Not surprisingly, the proportion of vulnerable and invisible poor households with memberships in any organization is substantially lower than the proportion of non-vulnerable households (34 percent of invisible poor households have memberships compared to 65 percent of non-vulnerable households). One-quarter of the non-vulnerable households belong to two or more organizations. The large Chi Square value (202155.834) suggests that organizational membership is strongly correlated to household socioeconomic status. Political and social capital is strongly linked to socioeconomic wellbeing in rural Bangladesh.

Table 30: Membership in Organizations by Socioeconomic Status

Membership in organizations					
% within HH socio economic status	HH socio economic status				
	Non Vulnerable	2	3	Most vulnerable	Total
	No membership	35.3%	51.0%	60.2%	65.9%
Membership in one organization	40.0%	38.2%	32.5%	28.9%	35.2%
Membership in two organizations	17.6%	8.1%	6.1%	4.2%	8.3%
Membership in three and more organizations	7.1%	2.7%	1.2%	1.0%	2.6%
N	414	993	858	396	2661

A larger proportion of male-headed households (46 percent) have memberships in organisations compared to female-headed households (33 percent). Regional variation in organisational membership is minimal.

Figure 17: Membership in Organizations by Socioeconomic Status



As figure 17 indicates, nearly one-fourth of the study households pursue memberships in NGOs and CBOs. Many if not most of the NGO memberships relate to micro-enterprise activities (as discussed in the section above). Few households elicit any interest in joining government organizations (less than one percent), professional organisations (less than two percent), or Union Parishads (also less than two percent). Fewer than 20 percent of the

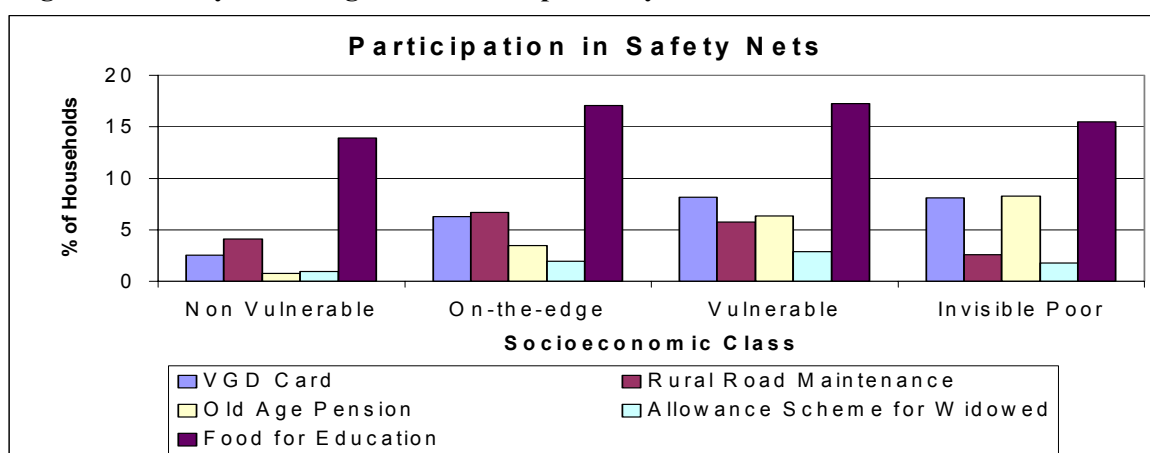
invisible poor have memberships in NGOs and/or CBOs. A higher proportion of households from each of the other three categories, including the least vulnerable households, participate in activities as NGO/CBO members. The Chi square value (26935.911) suggests that membership in NGOs and/or CBOs depends on socioeconomic status of the households; the better off a household is, the greater the chance of participation in NGOs and CBOs.

In recent years, as donor funds have been receding in Bangladesh, NGOs and CBOs are facing increasing pressure to become self-sustained organizations. A majority of the NGOs and CBOs transformed themselves into Micro Finance Institutions (MFI) in an effort to compete more effectively by offering micro-credit services as their primary activity. The most vulnerable households frequently do not qualify for micro-credit loans because of their risk-prone financial conditions, and hence they are effectively excluded from the NGO activities.

NGO and CBO membership patterns vary significantly by region as well. Approximately one-third of CHT households are NGO/CBO members, the highest regional membership rate. The lowest membership rates are found in the *Haor* zone, where only approximately one-fifth of the total sample households have NGO/CBO memberships. Interestingly, in the Chittagong Hill Tracts, approximately 56 percent of NGO/CBO members are Bengalis even though they account for 45 percent of the population in the region.

Households across rural Bangladesh continue to participate in Grameen microfinance groups, as noted above. More than one in every 10 households in the study area is a Grameen member. However, only approximately six percent of invisible poor households are members of Grameen groups compared to approximately 12 percent of the households in the other three combined socioeconomic categories. Like other NGOs and CBOs operating in rural Bangladesh, Grameen is failing to bring the most vulnerable households into group activities. The Grameen Bank has yet to make effective inroads into the CHT, where fewer than five percent of households have joined the Bank’s activities, far fewer than in any other WFP zone.

Figure 18: Safety Nets Programme Participation by Socioeconomic Status



The only organisational membership explored in this study to have (partially) successfully targeted vulnerable households for participation is the Government welfare recipient group. The group includes eight percent of invisible poor households, which can be contrasted with

two percent participation of non-vulnerable households. Government welfare recipient groups include VGD card recipients, old age pensions and the ex-participants of the Road Maintenance Programme (RMP). However, the most vulnerable households account for only 27 percent of all welfare recipient households whereas 40 percent of households in the second lowest (ranked 3rd in the socioeconomic status) socioeconomic category participate in government welfare activities. In the study area the very well known government welfare programmes, including VGD and the now defunct RMP, have failed to adequately target the poorest and most vulnerable households for inclusion in safety nets activities. (VGD participation is explored in more detail below in section 4.2 of this report.)

With the exception of RMP, government-funded welfare programmes have successfully targeted the participation of female-headed households – 14 percent compared to five percent male-headed households.

Figure 19: Safety Nets Programme Participation by Sex of Household Head

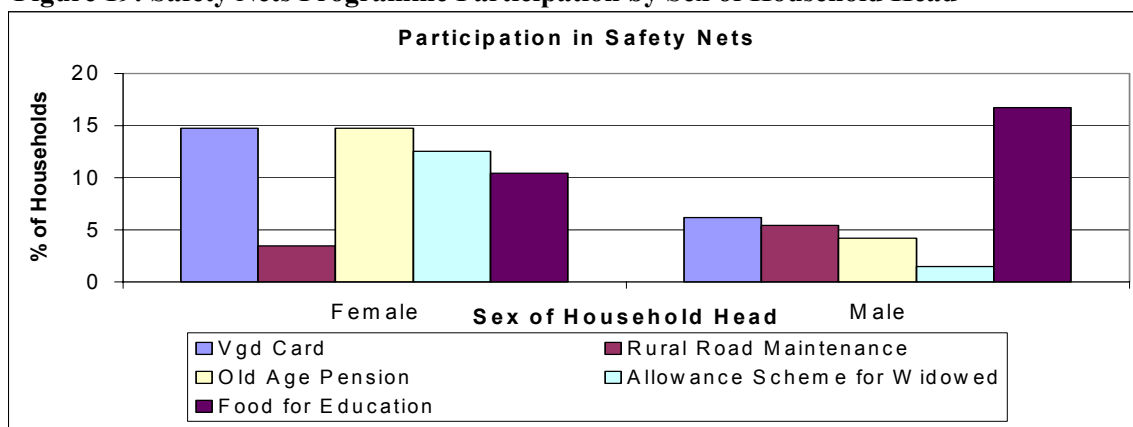
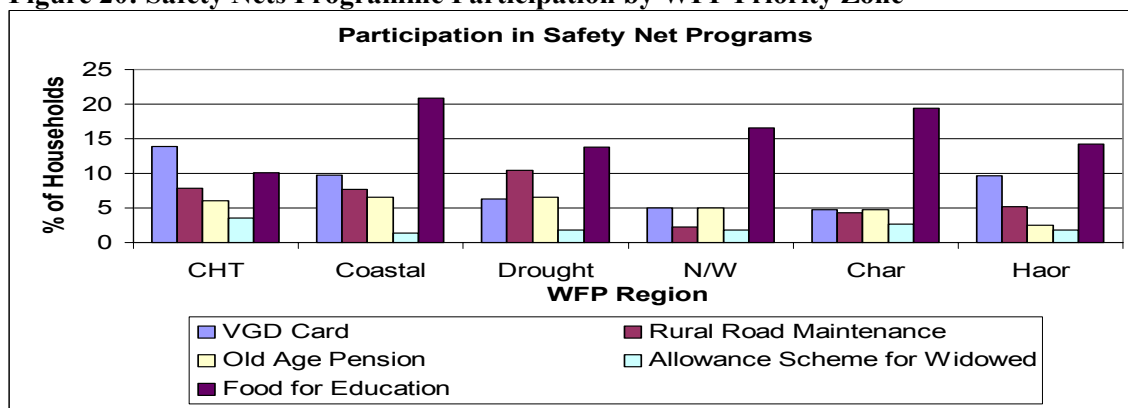


Figure 20: Safety Nets Programme Participation by WFP Priority Zone



Safety nets programme participation varies by WFP priority zones, depending on the programme. CHT, Haor, and Coastal households are more likely to receive VGD cards than elsewhere. FFE activities, however, were downplayed in the CHT and more commonly programmed in the Coastal and Char zones and RMP activities were more prolific in Drought region before those two programmes phased out.

Approximately five percent of all households participated in the Rural Road Maintenance Programme. More than six percent of households in the two middle socioeconomic

categories participated in this safety nets programme; invisible poor participation in RMP was limited to 2.6 percent. A relatively larger proportion of male-headed households participated in RMP (5.4 percent) compared to 3.4 percent of female-headed households.

In response to the question, ‘Why don’t you participate in the Rural Road Maintenance Programme’, more than 40 percent of invisible poor households mentioned that they did not know about the programme and almost half (48 percent) of households reported that they tried but failed to get into the programme. Approximately three-quarters of non-vulnerable households said that they did not need to participate in the programme.

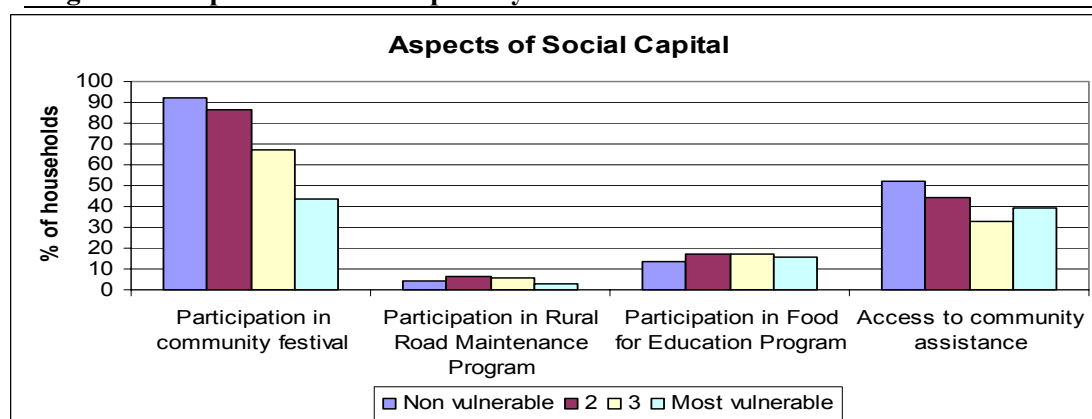
Throughout the study area, 16 percent of all households participated in the GoB’s Food for Education Programme. Analysis by household socioeconomic status reveals the similar pattern of participation outlined above: households in the two mid-level socioeconomic categories participated to a greater extent than did the invisible poor (17 percent each versus 15.5 percent). This is not surprising because FFE participation depended on school attendance. A larger proportion of male-headed households participated in FFE (17 percent) compared to female-headed households (10 percent).

Why weren’t households participating in FFE in larger numbers?

- ◆ Approximately half of vulnerable households said that nobody in their household qualified for the Food for Education Programme;
- ◆ Another 29 percent of households mentioned the absence of the programme in the schools attended by their children,
- ◆ Almost 10 percent of the households did not know about the programme; and
- ◆ Children in nine percent of the households failed to meet the attendance or results qualification standards.

Approximately three-quarters of all households participate in community festivals, which represent important aspects of social capital and social cohesion. However, even community festivals are bypassing the extreme poor in rural Bangladesh, where substantially fewer than half (44 percent) of invisible poor households participate in community festivals, whereas more than nine out of every 10 non-vulnerable households (92 percent) participate in festivals. Among the most common reasons for not participating in community festivals, almost half of vulnerable households mentioned that they are never invited to participate; almost half of the households lack sufficient resources to participate.

Figure 21: Aspects of Social Capital by Household Socioeconomic Status



Participation varies across the regions. Virtually all CHT households (96 percent) participate in community festivals, whereas participation of *Char* dwellers in community festivals is less than two-thirds (65 percent). Disaggregated data indicates that three-quarters (76 percent) of male-headed households participate in community festivals whereas fewer than half of female-headed households participate in the festivals, an indicator of social capital exclusion.

Even access to community assistance favours non-vulnerable households. Despite their relative wellbeing in the rural communities, more than half of all non-vulnerable households are able to access different forms of community assistance against only 40 percent of vulnerable households, indicating the importance of political leverage in accessing assistance. Finally, participation in various community organizations and committees is invariably dominated by non-vulnerable households, nearly one-third (29 percent) of whom participate in school committees, market committees, mosque committees or other similar village committees, within which invisible poor participation is virtually zero (1.4 percent participation).

4.2 VULNERABLE GROUP DEVELOPMENT (VGD) PARTICIPATION

The world's largest development intervention exclusively targeting vulnerable women, VGD provides 750,000 participating households with a monthly food ration of 30 kg of wheat and 25 kg of wheat flour (*atta*), combined with a service package consisting of human skills awareness, income generation training, and a savings and credit component. The goal of the VGD programme is to graduate women following two years of food assistance into NGO development programmes to provide women with enhanced sustainable livelihoods opportunities. WFP implements VGD through partnerships with the Ministry of Women and Children Affairs (MWCA), Ministry of Relief and Disaster Management (MRDM), NGOs and Union Parishads in all Upazilas throughout the country. Participating unions are normally supplied with minimum fifty VGD cards to distribute to households meeting a set of selection criteria.

In an effort to improve VGD targeting and selection, WFP and MWCA amended the VGD targeting and selection process with the purpose of reducing inclusion errors³ by introducing three exclusion criteria and five inclusion criteria.

Participants must be (exclusion criteria):

- ◆ Women in the 18-49 age group;
- ◆ Women not participating in any other food or cash assistance programme;
- ◆ Households not participating in food-assisted programmes anytime during the previous three years.

VGD participants should meet at least four and preferably all five of the following inclusion criteria:

- ◆ Household members consume two or fewer meals per day.
- ◆ Households own less than 0.15 acres of land.
- ◆ Household housing conditions, including sanitation, are very poor.
- ◆ Household income from daily or casual labour is extremely low.

³ Inclusion of non-deserving participants/beneficiaries in a programme is termed as inclusion error.

- ◆ Households are headed by women with no adult male income-earner or other source of income.

The following findings regarding VGD participation should therefore be understood in the context of recent WFP efforts aimed at improving the targeting and selection process.

Table 31: Household VGD Cards by Socioeconomic Class

Do you Have a VGD Card? (weighted data)

	Socioeconomic Categories				Total
	Non Vulnerable	On-the-Edge	Vulnerable	Invisible Poor	
N	13	76	86	44	219
% of HH with VGD card	6.0%	34.9%	39.1%	20.0%	100.0%
% of VGD cards within HH socio economic status	2.5%	6.3%	8.2%	8.1%	6.6%
N	414	993	858	396	2661

The study found that only seven percent (6.6 percent) of all households residing in the WFP priority zones have VGD cards (after weighting the data) and are accessing food assistance through the VGD programme. Because the VGD programme is so wide-ranging, covering virtually every rural *upazila* in the country, VGD cards are only available to an average of 170 households in each participating union. For that reason, many households who may meet the criteria established for participation are, by necessity, excluded from the two-year VGD cycle. Only a little more than eight percent of invisible poor and vulnerable households have VGD cards. However, 6.3 percent of on-the-edge households and 2.5 percent of non-vulnerable households have also managed to possess the cards.

Analysing the data through an alternative lens, six percent of the cards lay in the hands of non-vulnerable households and on-the-edge households possess 35 percent of the cards. Thus approximately 60 percent of the cards have been distributed to the two bottom vulnerable categories of households in the WFP programming regions, resulting in 41 percent inclusion error⁴. Invisible poor and vulnerable households have received 20 and 39 percent of the VGD cards respectively.

This study was not precisely designed for a robust assessment of safety net programmes like VGD, RMP and others. However the important findings that the study has revealed is, despite a VGD targeting strategy that purports to deliver VGD cards to the ‘ultra-poor,’ a substantial proportion of the VGD cards have reached the non-deserving or non-poor households- a concern that has also been complemented by few other recent studies on safety nets.⁵

WFP has recently expended substantial efforts at improving VGD targeting, implementing distinct criteria for household inclusion in the programme and instituting a monitoring system aimed at ensuring that only deserving households are enrolled in the programme.

⁴ Inclusion of non-deserving participants/beneficiaries in a programme has been termed as inclusion error.

⁵ A Recent (2006) study on “Relative Efficacy of Food and Cash Transfers” by IFPRI & WFP showed that 65% of the VGD beneficiary households belong to the lowest 30% expenditure decile/groups. WFP’s 2006 monitoring findings on VGD estimated that 18% of the VGD cardholders do not qualify for the programme.

The major problem is apparently not with the targeting process but continues to be with the selection process. Favouritism and patronage marked the old selection process within the UP structure. MWCA attempted to improve the process by creating Union VGD Committees, comprised of UP chairmen and members, partner NGOs, local government representatives, teachers, and current VGD participants, to be responsible for the selection of VGD women. Although the VGD selection process may have improved, it appears that many non-deserving households continue to be selected. Political, social, and perhaps financial influence may continue to plague the selection process at the union level.

With regard to exclusion error in the programme, one reason, discussed above, is that very few VGD cards are available despite large numbers of extremely poor households who qualify for the VGD programme⁶. Table 32 starkly illustrates this reality: More than 80 percent of invisible poor households and nearly 70 percent of vulnerable households have unsuccessfully attempted to procure VGD cards in the past. The VGD programme is well known: Only 16 percent of all households had no knowledge of VGD cards at the time of the survey. Non-vulnerable households are most knowledgeable about the VGD programme. More than 85 percent of non-vulnerable households and more than 40 percent of on-the-edge households acknowledged that their household income is either too high or they have no need for the card.

Table 32: Why don't Households have a VGD Card?

	Reason for Not Having a VGD Card				
	% within HH socio economic status				
	HH socio economic status				
	Non vulnerable	On-the-Edge	Vulnerable	Invisible Poor	Total
Do not know about the card	5.7%	17.6%	21.2%	15.2%	16.4%
Have tried in the past but did not get one	8.0%	39.1%	69.4%	81.5%	50.3%
Household income is too high to qualify	14.8%	8.6%	1.1%		5.9%
Do not need	71.0%	32.8%	6.8%	1.7%	25.9%
Other reasons	.5%	1.9%	1.5%	1.6%	1.5%
N	397	911	775	359	2442

Table 33: VGD Cards by Sex of Household Head

	% within Sex of household head		
	Sex of household head		
	Female	Male	Total
Yes	14.8%	6.1%	6.6%
No	85.2%	93.9%	93.4%

The VGD programme has been more successful in ensuring that women are the major beneficiaries. A higher proportion of female-headed households (15 percent) possess VGD cards than do male-headed households (six percent), although in absolute numbers, substantially more male-headed households own VGD cards.

⁶ HIES 2005 has estimated 27 million ultra poor or 5.4 million ultra poor households.

Table 34: VGD Card Access by Households with Women aged 18 to 49 Years

		HHs have a VGD card		Total
		Yes	No	
No	N	23	241	264
	% of HH have woman age between 18 and 49 years	8.7%	91.3%	100.0%
	% of HH have a VGD card	10.5%	9.9%	9.9%
Yes	N	196	2201	2397
	% of HH have woman age between 18 and 49 years	8.2%	91.8%	100.0%
	% of HH have a VGD card	89.5%	90.1%	90.1%
Total	N	219	2442	2661
	% of HH have woman age between 18 and 49 years	8.2%	91.8%	100.0%
	% of HH have a VGD card	100.0%	100.0%	100.0%

The relationship between households with women between 18 and 49 years (these households account for 92 percent of the total households) and households possessing VGD cards is highly correlated. Nearly 90 percent of VGD cardholders reside in households with women aged 18 to 49 years, yielding an inclusion error of 11 percent of households that do not include a woman between the ages of 18 and 49. (However, it should be noted that the proportion of VGD is approximately the same for households with or without women aged 18 to 49 – 8.2 and 8.7 percent respectively.)

Finally, disaggregating VGD possession by socioeconomic category by WFP zone reveals some differences in targeting success rates. Overall, a relatively larger proportion of CHT, Coastal, and *Haor* households have secured VGD cards than have households in the *Char*, Northwest, or Drought zones. The *Haor* zone, where 16 percent of invisible poor households and 11 percent of vulnerable households possess VGD cards, appears to have relatively more accurate and fairer targeting and selection outcomes than is the case elsewhere. On the other hand, Coastal zone Union VGD Committees have distributed VGD cards to an alarmingly high proportion of non-vulnerable households – 14 percent, a larger proportion of VGD recipients than any of the other three categories of households.

Table 35: VGD Card Access by Socioeconomic Category by WFP Zone

% within WFP priority zone							
WFP priority zone							
	CHT	Coastal	Drought	N/W	Char	Haor	Total
Yes	13.8%	9.8%	6.3%	5.0%	4.7%	9.7%	6.6%
No	86.2%	90.2%	93.7%	95.0%	95.3%	90.3%	93.4%

Continue Table 35

HH socio economic status		% within Zone Code						Total
		Zone Code						
		CHT	Costal	Drought	N/W	Char	Haor	
Non Vulnerable	Yes	4.1%	13.3%	2.9%		2.8%	3.7%	2.5%
	No	95.9%	86.7%	97.1%	100.0%	97.2%	96.3%	97.5%
	N	73	60	70	93	36	82	414
On-the-Edge	Yes	14.9%	9.2%	6.9%	5.2%	3.5%	8.6%	6.3%
	No	85.1%	90.8%	93.1%	94.8%	96.5%	91.4%	93.7%
	N	188	141	204	154	144	162	993
Vulnerable	Yes	17.1%	8.6%	7.7%	8.5%	5.8%	11.2%	8.2%
	No	82.9%	91.4%	92.3%	91.5%	94.2%	88.8%	91.8%
	N	140	175	117	129	172	125	858
Invisible Poor	Yes	14.9%	10.8%	5.9%	4.5%	5.4%	16.0%	8.1%
	No	85.1%	89.2%	94.1%	95.5%	94.6%	84.0%	91.9%
	N	47	65	51	66	92	75	396

4.3 POLITICAL CAPITAL

Table 36 contains the results of cross tabulation between households' affiliation with political party and household socioeconomic status. Political party membership is extremely low throughout rural Bangladesh – only 4.4 percent of households have become members of a political party. Not surprisingly, it appears that political party membership is quite restricted to non-vulnerable households – 14 percent have pursued political party memberships; invisible poor households are virtually absent (0.1 percent of all vulnerable households have political party membership). Political party interests are invariably structured around the interests of its members.

There are noticeable regional variations in political party membership patterns. Eight percent of all rural CHT households have established political party membership, far more frequently than in other regions of the country. More than half (57 percent) of the Bengali households have political party memberships in the CHT, and 23 percent of *Chakma* households are members of a political party. This indicates, despite being the minority Bengalis dominate the membership of the political parties in CHT.

Table 36: Political Party Affiliation by HH Socioeconomic Status

Affiliation with Political Party					
% within HH socio economic status					
	HH socio economic status				Total
	Non vulnerable	2	3	Most vulnerable	
No	86.3%	95.3%	98.3%	99.9%	95.6%
Yes	13.7%	4.7%	1.7%	.1%	4.4%
N	414	993	858	396	2661

Lack of participation in the political process is not surprising throughout the six rural zones, given the community opinions expressed in the focus groups that people remain poorly represented. Conflicts among the villagers, which may be based on land disputes, access to water rights in the *Haor* or *Char* regions, or committee decisions, are normally resolved by community *shalish*, elderly people, members, chairman, or occasionally by political party leaders in most of rural Bangladesh.

The situation is a bit different in the CHT, where two parallel systems of administration, the Union Parishad administrative unit and the traditional council of *karbaris*, headmen and circle chiefs form the basis of political and local decision-making. Villagers are more familiar and comfortable with and express more confidence in the traditional system. Non-Bengali CHT communities appear not to trust what they perceive as an imposed system of governance by a perceived power structure that supports the interests of outsiders. However, confidence in the traditional administrative system, which is predominantly hereditary and non-democratic in nature, is by no means universal. Villagers expressed dismay with unjust decisions, including land redistribution for influence and cases of bribe taking over land registration.

5. LIVELIHOOD STRATEGIES

5.1 AGRICULTURE

Cropland Sizes & Landlessness: Landlessness increasingly encumbers households in rural Bangladesh. Last year, less than half of the study households (48 percent) cultivated on farmland. Only 14 percent of the invisible poor cultivated on farmland compared to 80 percent of non-vulnerable households. Agricultural cultivation is strongly correlated with socioeconomic class and as well with sex of household head. Approximately half of male-headed households were involved in farmland cultivation compared to 22 percent of female-headed households. Household cultivation also varies by region. Majority of the households in CHT (65 percent) and Northwest (56 percent) last year cultivated farmland. In contrast, only 43 to 44 percent of households in *Char*, *Haor*, and Coastal regions cultivated on farmland. This has to do with the land ownership pattern as stated in Table 22, which indicates that a higher proportion of the study households own agricultural land in CHT and Northwest.

Table 37: Household Cultivation on Farmland

Percent of Households Cultivated Farmland Last Year							
% within Zone Code	Zone Code						Total
	CHT	Costal	Drought	N/W	Char	Haor	
Yes	65.0%	43.1%	48.2%	56.3%	44.1%	44.4%	48.3%
No	35.0%	56.9%	51.8%	43.7%	55.9%	55.6%	51.7%
N	448	441	442	442	444	444	2661

Continue Table 37

Percent of Households Cultivated Farmland Last Year

% within HH socio economic status

	HH socio economic status				
	Non vulnerable	2	3	Most vulnerable	Total
Yes	79.8%	60.4%	36.4%	14.1%	48.3%
No	20.2%	39.6%	63.6%	85.9%	51.7%
N	414	993	858	396	2661

Percent of Households Cultivated Farmland Last Year

% within Sex of household head

	Sex of household head		
	Female	Male	Total
Yes	23.1%	49.8%	48.3%
No	76.9%	50.2%	51.7%
N	155	2506	2661

As expected, farm size increase is highly correlated with socioeconomic status. Land distribution patterns are highly skewed and apparently worsening. Non-vulnerable households cultivate land more than six times larger than that of invisible poor households (352 decimals compared to 56 decimals). In a rural economy dominated by agricultural production and the need for land, non-vulnerable households cultivate holdings averaging five times larger than the farm size of vulnerable households and three times larger than that of on-the-edge households.

Farmers in the Northwest and Drought-prone region cultivate more than two acres, which is substantially larger than any of the other regions. Households in the *Char* and *Haor* regions cultivate only 114 and 126 decimals of farmland respectively. Female-headed households cultivate relatively smaller farm sizes than do their male-headed counterparts (122 decimals of land compared to 164 decimals).

Table 38: Mean Farm Size (in Decimals) Last Year

Mean Farm Size		Mean Farm Size		Mean Farm Size	
Mean		Mean		Mean	
WFP priority zone	Farm size	Socioeconomic status	Farm size	Sex of household head	Farm size
CHT	174.75	Non Vulnerable	351.63	Female	121.79
Coastal	152.76	2	115.44	Male	163.77
Drought	203.15	3	69.39	Total	162.75
N/W	203.19	Most vulnerable	56.09		
Char	114.29	Total	162.52		
Haor	125.73				
Total	162.52				

Land Tenure Patterns: Amongst households that cultivated farmland last year, virtually all non-vulnerable households and more than three-quarters of on-the-edge households pursued

agricultural production on their own land. Smaller landholdings for vulnerable and invisible poor households forced a large proportion of those cultivating households to pursue other means of agricultural production, particularly sharecropping. More than one-third of the invisible poor and more than 40 percent of vulnerable households sharecropped last year. Few non-vulnerable households (nine percent) need to share-in land; many non-vulnerable households share-out land to other farming households with insufficient land.

Table 39 : Land Tenure by Household Socioeconomic Status and WFP Priority Zones

Agricultural Cultivation by Land Tenure Status				
Land Tenure status	Socioeconomic status of the households			
	Non vulnerable	2	3	Most vulnerable
	Percent of households			
Own land	95.50	78.12	62.40	58.99
Lease land	3.39	4.84	2.76	6.55
Mortgage land	6.86	7.86	6.16	2.66
Share land	9.07	22.76	41.20	34.34
<i>Khash</i> land	7.24	13.74	14.99	4.85

Cultivation by Land Tenure Status						
Land Tenure status	WFP Priority Regions					
	CHT	Coastal	Drought	N/W	Char	Haor
	Percent of households					
Own land	67.70	64.21	81.69	79.12	80.61	73.60
Lease land	9.97	16.32	1.88	4.42	3.06	3.55
Mortgage land	1.72	6.84	5.16	10.84	5.61	5.08
Share land	18.21	34.21	18.78	25.70	24.49	24.87
<i>Khash</i> land	11.83	14.74	9.05	14.48	10.81	11.04

Despite small or no landholdings, the invisible poor are unable to access *khash* or government-held land, which is theoretically available to poor households for cultivation; the two middle-income groups of households have significantly greater access to *khash* land. Under the *de facto* control of large landholding local elites, *khash* land is frequently available to households through local systems of favouritism or patronage that bypass the invisible poor.

Sharecropping as well as lease-in land cultivation is pursued most frequently by households in the Coastal zone, where the fewest proportion of farming households are able to cultivate crops on their own land. More than one-third of Coastal households sharecropped last year and 16 percent leased-in land for cultivation. Sharecropping households complained that the practice is quite unprofitable and often exacerbates rather than relieves the debt spiral that plagues many poor rural households. Unfortunately households without land have virtually no recourse but to share-in land or pursue casual labour (usually at low wages) during the planting and harvesting seasons.

Sharecropping, leasing, and mortgage arrangements vary by region and according to the man-land ratio:

- ◆ In most regions of the country, the landowner and sharecropping farmer equally share the cost of inputs and the agricultural product (recorded in at least one community focus group in each of the six WFP zones).
- ◆ Landowners who provide the inputs collect two-thirds of the produce (*Haor*).

- ◆ Sharecroppers who pay for all inputs relinquish one-third of the product to the landowner (CHT and Northwest).
- ◆ The contract system, employed widely in the Northwest, requires sharecroppers to provide all inputs and repay five to six *maunds* of paddy for each *bigha* of land cultivated.
- ◆ Land for cultivation is generally leased for 1500 to 2500 taka (*Char*, Coast) per *bigha* of land cultivated per year but can range as high as 10,000 taka (recorded in the Coastal zone).
- ◆ Seasonal lease contracts require payment of 1000 to 2000 taka for one *done* of land.
- ◆ Landowners generally mortgage one *done* of land for 25,000 to 30,000 taka to a cultivator who can continue to reap the product of the land until all of the money has been received back. Mortgaged land is frequently never completely repaid and is one of the most prominent immediate causes of the widening gap between relatively rich and poor rural households throughout Bangladesh.

Major Agricultural Crops: The major crops grown in order of importance include:

- ◆ Paddy rice – the major crop in every region;
- ◆ Jute – in all regions except the CHT;
- ◆ Vegetables – normally winter crops, depending on the vegetables;
- ◆ Wheat – particularly in the Northwest, Drought, and Coastal zones;
- ◆ Potatoes in the Northwest, *Char*, and *Haor* zones;
- ◆ Mustard – particularly in the *Chars* and CHT;
- ◆ Cotton in the CHT;
- ◆ Sugar cane in the Drought zone; and
- ◆ Chilli, maize, beans and pulses, sesame, tobacco, betel leaf and nut, and sweet potato as secondary crops.

Table 40 indicates that almost all farming households devote a significantly larger area (141 decimals of land) for cereal crop production – primarily rice – compared to all other crops grown. Non-vulnerable households in particular devote a disproportionate amount of their land – almost three acres – to cereal production, which is consumed but also used as a major cash crop. Only invisible poor households devote less of their already small landholdings for cereal production than for cash crop production; the invisible poor have very little land available for vegetables, roots and tubers, or fruit production. Middle income households appear to balance the production of various crops on their landholdings more equally.

Cereal production continues to be the most important crop throughout all regions, but particularly in the Northwest and Drought zones, where farmers devote 173 decimals and 181 decimals of land respectively to cereal production, which is usually paddy. CHT farmers produce a lot of fruits (on 113 decimals of land), vegetables, and cash crops such as cotton and tobacco on their farmlands. *Char* farmers do not grow fruits but devote substantial farmlands (84 decimals) to the production of nuts, beans, pulses and oil. Drought-prone farming households devote relatively more farmland toward the production of roots and tubers (72 decimals), which is virtually not produced at all in the *Haors* (only eight decimals). Northwest and Coastal farming households produce very little vegetables (on 15 and 17 decimals of land respectively).

Table 40: Cultivation Area by Crop type

Area Cultivated for Different Crops						
Mean						
HH socio economic status	Cereal	Cashcrop	Vegetables	Roots & tubers	Nuts, beans, pulses, & oil	Fruits
Non vulnerable	296.85	73.24	34.15	66.03	51.09	57.11
2	101.35	47.68	26.32	23.62	32.94	46.42
3	60.96	31.66	36.77	24.76	31.22	78.87
Most vulnerable	53.04	60.45	15.00	11.26	39.08	17.50
Total	141.17	53.40	31.04	44.54	42.08	54.14

Area Cultivated for Different Crops						
Mean						
WFP priority zone	Cereal	Cashcrop	Vegetables	Roots & tubers	Nuts, beans, pulses, & oil	Fruits
CHT	123.92	84.40	88.61	35.74	41.55	113.20
Coastal	115.78	54.17	17.35	27.88	48.29	21.63
Drought	181.49	63.66	42.88	71.58	51.14	57.00
N/W	172.32	59.29	14.67	45.38	23.00	21.75
Char	96.51	50.84	47.67	21.82	84.40	
Haor	121.38	29.07	25.23	8.00	32.92	41.50
Total	141.17	53.40	31.04	44.54	42.08	54.14

Homestead Gardening: Only a little more than one-third of all households produce vegetables on homestead gardens, which do not appear to be very popular in the study area. While more than half of the non-vulnerable households engage in homestead gardening, only 20 percent of the invisible poor have small home gardens on land averaging a miniscule six decimals. Few Coastal households (18 percent) pursue home gardening, which is much more commonly practiced by CHT, Drought-prone and Northwest households (49 percent, 42 and 41 percent respectively). A larger proportion of male-headed households (35 percent) have home gardens compared to 23 percent of female-headed households. Most households sell the vegetable surplus produced on their homestead gardens.

Table 41: Homestead Gardening by Socioeconomic Status and WFP Priority Zones

Homestead Gardening					
% within HH socio economic status					
	HH socio economic status				
	Non Vulnerable	2	3	Most vulnerable	Total
Yes	52.8%	41.6%	24.4%	19.7%	34.4%
No	47.2%	58.4%	75.6%	80.3%	65.6%
N	414	993	858	396	2661

Continue Table 41

Homestead Gardening							
% within WFP priority zone							
	WFP priority zone						Total
	CHT	Coastal	Drought	N/W	Char	Haor	
Yes	49.1%	17.7%	41.6%	41.4%	26.6%	32.4%	34.4%
No	50.9%	82.3%	58.4%	58.6%	73.4%	67.6%	65.6%
N	448	441	442	442	444	444	2661

Constraints to Agricultural Production: Participating rural households commented in the focus group discussions that new technologies had increased agricultural production during the last decade, although distribution of and access to the new technologies has been highly uneven, benefiting landed farmers with access to assets and resources and bypassing a large group of farmers. Each of the focus groups across the six priority zones prioritised their own set of constraints to agricultural production, which are outlined below:

- ◆ Lack of sufficient land to cultivate and increased landlessness (15 focus groups, covering all of the WFP zones): Land in most communities across rural Bangladesh is controlled by a few landowners. Insufficient land has compelled most rural households to join the agricultural labour force or sharecrop.
- ◆ Lack of capital combined with difficulties in accessing agricultural loans (14 FGs spread throughout all of the WFP zones except the Drought zone): NGOs generally do not provide loans toward agricultural production investments or inputs and vulnerable poor households are unable to access loans from agriculture banks. Several FGs complained that bribes are needed to secure loans. Agricultural loans are available in the CHT, but the lending process is complicated, requiring brokers and bribes.
- ◆ High and increasing prices for agricultural inputs (12 FGs, including all four FGs in the *Char* & Northwest zones but mentioned throughout all WFP zones): Inputs, including chemical fertilizers and pesticides, are available in many markets but access is difficult; inputs are too expensive for many farmers to afford.
- ◆ Unavailability of agricultural inputs (9 FGs from all four WFP zones): In addition to the high price of inputs, they are often not available. *Haor* farmers complained that influence is frequently required to access inputs. Despite agricultural input access and availability difficulties, a few farmers have attempted to apply organic fertilizer, practice composting or engage in Integrated Pest Management (IPM), techniques which are described as ‘too complicated to use.’
- ◆ Flooding and untimely rains (9 FGs, particularly in the Northwest and Drought-prone zones), resulting in drought conditions in some regions.
- ◆ Lack of irrigation (6 FGs, particularly in the Northwest and Drought-prone zones, but also in the *Char* and *Haor* zones, where irrigation costs can average one-quarter the value of total production.
- ◆ Lack of agricultural services (6 FGs spread throughout the regions): Farmers from all zones complain that government extension services only benefit rich farmers and that government agricultural extension workers rarely if ever visit villages to extend advice.
- ◆ Unavailability of labour and high cost of labour expenses (4 FGs, most notably in the *Haor* zone).
- ◆ Poor quality seeds (5 FGs): HYV seeds are generally available but are expensive and difficult to access. Most farmers in several localities continue to rely on local seeds.

- ◆ Poor transportation and marketing facilities (4 FGs in the *Char* and *Haor* zones, where transportation is particularly problematic during the flooding season).
- ◆ Poor storage facilities (3 FGs in the *Char* and *Haor* zones), which, combined with poor transportation and marketing, requires farming households to prematurely sell their produce at low prices. Poor return from agricultural production investments in turn has forced household members to sell their labour during key phases of the production cycle.
- ◆ Pest attacks (3 FGs), which is related to the high cost of pesticides as well as the low propensity to engage in IPM.
- ◆ Declining land fertility (3 FGs, particularly in the CHT): *Jumma* communities in the CHT have gradually been deprived of thousands acres of land, a result of several events and factors. The development of the Kaptai Dam more than three decades ago dislocated thousands of households and destroyed some of the most fertile agricultural land in the CHT. Since then, thousands of acres of land historically belonging to *Jumma* peoples have been taken by settlers, often with the collusion of the State. Many settlers have been able to register lands that were in effect stolen from *Jumma* communities lacking the recourse or knowledge of the land registration system. In addition, the government has gradually taken up lands traditionally under *jum* cultivation for conversion into reserve forests, invariably failing to seek alternative livelihood options for affected *Jumma* communities. The land tenure system has severely affected the livelihoods of CHT inhabitants, who have been compelled to cultivate smaller and less fertile areas of land more intensively, exacerbating soil infertility. The key to successful *jum* or ‘slash and burn’ agriculture is to rotate production on a seasonal and annual basis. *Jum* cultivation requires farmers to maintain fallow lands for 10 to 12 years; however, the fallow period has been reduced to three years or less. Slashing vegetation on the ground and burning the ground every three years is severely affecting the fertility of the soil and causing soil erosion. Fertiliser use is invariably absent. In addition, *jum* cultivators have little access to other potentially useful inputs, such as appropriate HYV seeds, institutional credit, training or other extension services, which are available to a set of very few relatively influential plain-land farmers.

5.2 PRIMARY INCOME & LIVELIHOOD STRATEGIES

Approximately half (49 percent) of the working age population – adults 15 years and older – are currently working for remuneration of some kind; another one-third of the adults describe themselves as housewives. Ninety-four percent of the working age population residing in male-headed households work and only 68 percent residing in female-headed households work for remuneration, confirming the dependency ratio data presented earlier of the disadvantageous position of female-headed households in engaging in income-earning activities and ultimately realising sustainable livelihood security.

Manual labour, including agricultural labour, non agricultural labour and pulling rickshaw or rickshaw-van, is the most important primary rural income strategy, involving nearly 40 percent of all adults and 45 percent of household heads. Households lacking occupational skills or education adopt selling labour as the primary income strategy. This can be viewed as both a cause and consequence of vulnerability. Low educational level of household head is strongly correlated with manual labour as the primary income strategy of the household. During the high season, manual labourers can reap 2000 to 3000 Taka per month; rickshaw pullers can make from 3000 to 4000 Taka per month. Daily wages may be as high as 80 taka for manual labour or 100 taka for rickshaw pulling. However, because the nature of the

demand for labour is highly seasonal, wage rates drop precipitously in the off-season. Many individuals involved in casual manual labour then migrate to nearby cities for several months of the year. Households lacking alternative forms of income other than migration face tremendous food security crises during the slack periods resulting in high levels of structural vulnerability.

The largest proportion (one-quarter) of households dependent on manual labour are engaged in agricultural labour during key phases of the agricultural production cycle. Agriculture, including farming one’s own land, sharecropping, and horticulture nurseries constitutes the second most important primary income strategy, involving 26 percent of household heads and 30 percent of all adults. Fifty-five percent of working age individuals therefore depend on agriculture as their primary income strategy through agricultural production activities and agricultural labour.

Figure 22: Primary Income Strategy by Socioeconomic Class

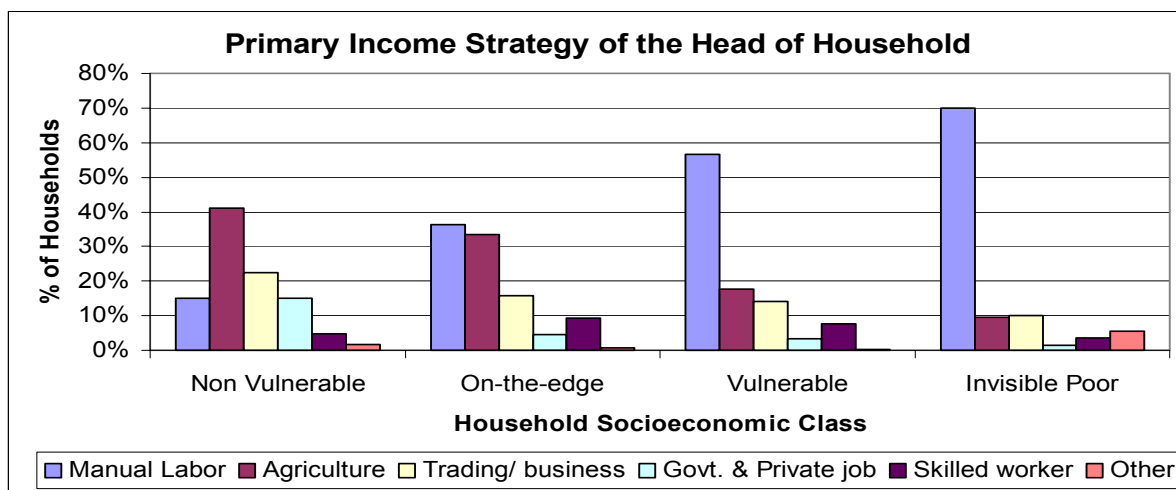


Figure 22 starkly illustrates the limited livelihood or income earning opportunities facing the invisible poor relative to other socioeconomic category households. The invisible poor are particularly dependent on manual labour. Seven of every 10 household heads must engage in manual or casual labour as their primary income strategy; no more than 10 percent depend on any other livelihood strategy. Most vulnerable households (57 percent) also depend on manual labour but appear to have a wider spectrum of livelihood options on which to rely; 18 and 14 percent of vulnerable households respectively consider agriculture and business or trading to be their primary income-earning strategy. On-the-edge households have a balanced livelihood strategy portfolio as do non-vulnerable households. Both types of households, particularly the non-vulnerable (41 percent), rely on agricultural production on their own land. More than the poorer households, non-vulnerable households continue to remain far more dependent on agricultural production activities as their primary livelihood strategy. Almost one-quarter of the non-vulnerable also consider business earnings to provide the primary income source for their households; another 15 percent are employed by the government or private sector, far more frequently than other socioeconomic groups. The middle-income households are engaged in skilled labour, including work in the garment or textile industries, to an extent that is not found amongst the non-vulnerable or invisible poor.

Remittances are important for female-headed households, unlike male-headed households; 15 percent of female-headed households depend on remittances as the primary income earning strategy. Working-age individuals residing in male-headed households on the other hand have a more diverse livelihood portfolio. Forty-five percent sell their labour as the primary income strategy; another 26 percent engage in agricultural production on their own land or through sharecropping or other arrangements, and 16 percent are involved in business ventures, which normally translate into small business enterprises, trading, or small shops. Male manual labourers tend to receive 50 to 100 percent higher wages than do female manual labourers.

Table 42: Household Members' Primary Income Strategy by WFP Priority Zone

Household members (age >15 years) primary income strategy							
% within WFP priority zone							
	WFP priority zone						Total
	CHT	Coastal	Drought	N/W	Char	Haor	
Manual Labor	24.3%	36.0%	39.2%	39.6%	43.8%	30.6%	38.2%
Agriculture	54.0%	23.1%	35.9%	30.5%	21.6%	34.3%	30.3%
Govt. or private job	7.4%	6.1%	3.3%	7.8%	7.6%	7.8%	6.7%
Remittances	.2%	.5%	.9%	.2%	.3%	.8%	.5%
Trading/ Business	10.0%	25.3%	10.8%	16.1%	15.2%	15.8%	15.0%
Skilled labor	3.2%	7.6%	8.5%	5.9%	10.9%	9.8%	8.6%
Other	.9%	1.4%	1.3%		.5%	.8%	.7%
N	783	535	656	559	510	545	3588

Data disaggregated by WFP priority zone indicate the importance of manual labour and agricultural production across the six programming zones. Nearly half of the *Char* population (44 percent) depend on manual labour, which is the most important livelihood strategy in Coastal, Drought, and Northwest zones as well. On the other hand, less than a quarter of the CHT population (24 percent) sell labour. A significantly larger proportion of CHT population (54 percent) continue to depend on agriculture, which has declined in importance in other regions, particularly in the Char and Coastal zones, where landownership inequalities have increased most dramatically in recent decades. Trading and business opportunities are prominent in the Coastal zone, where more than a quarter of working age individuals depend on fry trading (12 percent of the working age population) and another seven percent are involved in other small business initiatives. In contrast, only 10 percent of CHT income earners and 11 percent of Drought adult household members are involved in business activities. Small business activities elsewhere are usually related to agricultural post-production, such as rice milling or husking, but also include weaving and marketing bamboo products, depending on the region of the country. In the CHT, some businesses revolve around the processing and marketing of forest products; local beer is produced for sale as well. Less than one percent of individuals across the six regions depend on remittances, although remittances figure prominently in female-headed household livelihood strategies (as noted above).

Throughout the six rural regions, 87 percent of individuals describe having stable permanent incomes. Disaggregated data indicate that the lowest proportion of stable permanent income earners live in the CHT and *Char* areas (73 and 75 percent respectively); employment patterns appear most stable in the most livelihood secure Drought zone, where almost all (98

percent) of the working age population have what they describe as permanent income earning work. As one would expect, a larger proportion of CHT, *Haor*, and *Char* dwellers are dependent on seasonal income, including agricultural labour, other manual labour and rickshaw pulling, than are labour force members from the other regions (19, 11 and 11 percent respectively). Temporary income strategies are also relatively important to *Char* dwellers. Migration patterns are expanding as well. Many households with multiple income earners send one or two members elsewhere searching for seasonal employment opportunities.

Table 43: Employment stability by WFP Priority Region

Employment stability of members age 15 years and above							
% within WFP priority zone							
	WFP priority zone						Total
	CHT	Coastal	Drought	N/W	Char	Haor	
Permanent	72.9%	91.7%	98.4%	91.8%	75.2%	85.2%	87.1%
Temporary	4.8%	3.2%	.4%	1.9%	8.3%	.8%	3.1%
Seasonal	18.6%	1.8%	.7%	4.5%	10.8%	10.8%	6.9%
Occasional	3.8%	3.3%	.4%	1.7%	5.7%	3.1%	2.9%
N	873	600	702	638	592	610	4015

5.3 INCOME & EXPENDITURE PATTERNS

Table 44 presents household per-capita monthly expenditures by socioeconomic class. Per-capita monthly expenditure is a proxy measure of income that has proven to be a more reliable measure than income itself. Income data collected in this and other surveys understate actual income, which is often difficult to capture as well because rural households typically employ a diverse range of income strategies involving several members of the household. Households everywhere tend to underreport income. The per-capita expenditure data collected in the six WFP priority zones is slightly higher than stated per-capita income and the standard deviation for per-capita expenditure is smaller than per-capita income standard deviation. Per-capita income and per-capita expenditure data however, is highly correlated at 0.01 percent level of significance.

The monthly proxy income figures may appear at first glance to be low. One should be cautious about directly converting the taka amount to dollar equivalency without accounting for purchasing power parity. For example, other surveys (WIKIPEDIA in particular) presenting Bangladesh economy or socioeconomic data have converted taka to US dollars using the exchange rate 1 USD = 13 Taka as recently as 2005, even though the market exchange rate in 2005 was 1 USD = 64 Taka. Presented in this light, the expenditure or proxy income figures do not appear low. Assuming average household size to be five members, monthly household expenditures range from an average of 3365 Taka for the invisible poor to an average of 10,785 for non-vulnerable households.

Results presented in table 44 confirm that income and per capita expenditure increases with socioeconomic status. Non-vulnerable household proxy income, represented as per-capita monthly expenditures, is more than three times higher than the per-capita monthly income

for invisible poor households and even approximately twice as high as on-the-edge household income, a difference which is highly significant.

Table 44: Per-capita Monthly Income/Expenditure by Household Socioeconomic Status

Per capita expenditure on	Non vulnerable		2		3		Most vulnerable	
Health	154.4	7.2%	109.8	10.1%	96.8	12.5%	88.9	13.2%
Education	78.2	3.6%	21.3	2.0%	8.5	1.1%	5.8	0.9%
Food	656.4	30.4%	513.5	47.2%	427.9	55.3%	381.4	56.6%
Cloth	82.2	3.8%	39.2	3.6%	25.6	3.3%	20.1	3.0%
Transport & fuel	142.4	6.6%	39.5	3.6%	31.3	4.0%	27.7	4.1%
Rent & utilities	42.6	2.0%	15.5	1.4%	12.7	1.6%	9.7	1.4%
Agricultural input	245.6	11.4%	73.2	6.7%	20.3	2.6%	7.9	1.2%
Investing on land	32.1	1.5%	11.1	1.0%	1.9	0.2%	1.0	0.1%
Legal fees	5.4	0.3%	4.1	0.4%	0.7	0.1%	2.6	0.4%
Social & religious occasions	113.1	5.2%	40.5	3.7%	22.7	2.9%	16.8	2.5%
Wage payment to labourers	67.5	3.1%	5.5	0.5%	0.4	0.0%	0.0	0.0%
Personal care products	98.6	4.6%	53.1	4.9%	40.2	5.2%	30.9	4.6%
Repair	42.4	2.0%	3.2	0.3%	0.7	0.1%	0.3	0.0%
Household goods	46.9	2.2%	6.8	0.6%	4.0	0.5%	1.8	0.3%
Savings	104.8	4.9%	45.0	4.1%	7.7	1.0%	6.8	1.0%
Dowry payment	13.9	0.6%	11.3	1.0%	6.9	0.9%	14.3	2.1%
Business inputs	163.7	7.6%	24.5	2.2%	8.1	1.0%	4.2	0.6%
Loan repayment	67.1	3.1%	71.7	6.6%	58.1	7.5%	54.1	8.0%
Other expenditure	3.0	0.1%	0.4	0.0%	1.0	0.1%	0.0	0.0%
Total	2157.3		1088.6		774.5		673.9	

Per-capita income varies significantly by region. Coastal and *Char* households have the lowest per-capita income; Northwest and Drought-prone households enjoy the highest income and expenditure figures. Monthly income for female-headed households is significantly lower than their male-headed counterparts.

Almost all (96 percent of) households reported that men are the only income earners in the household. Relatively more women from the invisible poor are engaged in income earning activities out of necessity. Income earning division of labour patterns within the Chittagong Hill Tracts differ markedly from that of all of the other regions. Women in the CHT have more income earning opportunities and labour force involvement than elsewhere in the country. More than seven percent of CHT households reported that the woman is the only income earner in the household. By contrast, only two percent of Northwest households rely entirely on women's income. Apart from the CHT, where nearly half (44 percent) of households are supported by both men and women earnings, the proportion of households represented by both male and female income earning activities ranges from a high of five percent in the Northwest and a low of less than one percent in the *Char* zone. This scenario is quite different however, in female-headed households, where women are the sole income earners in more than one-third of the cases. Female-headed households have far fewer

income earning options or labour force participants to contribute to household livelihood strategies.

In addition to offering a proxy for income, the expenditure data presented in Table 44 above also illustrate household priorities and needs. Common monthly expenditures include food, health, education, clothing, agricultural and business inputs, loan repayments, personal products and tobacco, transport and fuel, and savings. The percent of expenditures spent on food offers a good indicator of relative food insecurity. As expected, food is the major per-capita expenditure across the socioeconomic categories. Although less vulnerable households can afford to spend more each month on food for their households, the percentage of their incomes devoted to food expenditures is significantly lower than is the case for the poorest households. Invisible poor and vulnerable households spend substantially more than half – 57 percent (381 taka) and 55 percent (428 taka) respectively – of their budgets on food; on-the-edge households spend just under half (47 percent or 514 taka) of their incomes on food and non-vulnerable households only need to spend 30 percent of their budgets on food (although they spend an average of 656 taka a month on food, substantially more in absolute value).

One of the major reasons why food expenditures account for somewhat more than half of overall expenditures for most households and not 70 percent of overall expenditures (which has been reported in some previous surveys) is that health care expenditures appear to have increased across all socioeconomic classes but are particularly onerous burdens for the poorest households. Invisible poor and vulnerable households spend approximately 13 percent of their monthly budgets – 89 taka and 97 taka respectively – on health care. Non-vulnerable households spend considerably more in absolute amounts – 154 taka – but only seven percent of their overall monthly budget on health care expenses.

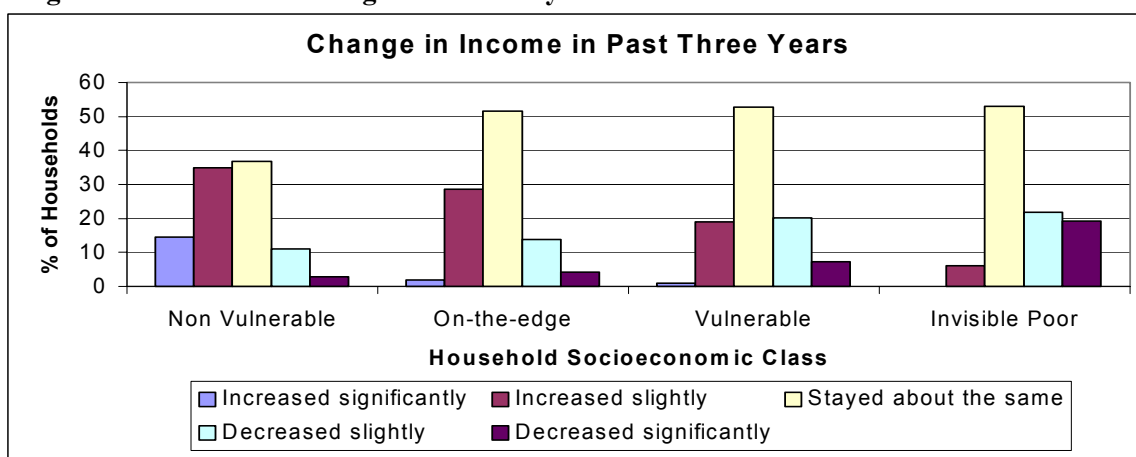
A second significant item in the monthly household budgets is that of loan repayments. Vulnerable and invisible poor households spend approximately eight percent of their monthly expenditures on repaying loans. As discussed above (in the Savings and Loan section), many rural poor households have entered into a spiralling debt trap, at times taking loans to repay other loans and paying higher interest rates than do non-vulnerable households, who are able to access banks and institutionalised credit. Loan repayments combined with health care costs account for more than 20 percent of all monthly expenditures for invisible poor and vulnerable households. One result – as we shall see below in the Food Security & Food Consumption section – is that the poorest households in rural Bangladesh are far more food insecure than are non-vulnerable or on-the-edge households.

Non- and less vulnerable households on the other hand spend a relatively high proportion of their monthly incomes on investments. Non-vulnerable households spend 11 percent of their monthly budgets on agricultural inputs and another eight percent on business inputs; on-the-edge households spend seven percent of their monthly expenditures on agricultural inputs. They are also able to invest more intensively in education for their children as well as on social and religious occasions. Savings figure prominently in the non-vulnerable expenditure portfolio as well.

5.4 INCOME & POVERTY TRENDS

The assessment team inquired about household perceptions of income changes during the last three years and perceived changes in household poverty over the past 10 years. Figure 23 presents perceived changes in household income by socioeconomic class during the past three years.

Figure 23: Perceived Change in Income by Socioeconomic Class



In the aggregate, perceived social mobility appears to be very evenly split: Half of the households have seen their incomes remain unchanged; 26 percent have increased their incomes either slightly or significantly, and 24 percent have experienced slight or significant declines in their incomes. However it appears that improved incomes have been experienced overwhelmingly by non-vulnerable households and rarely by vulnerable or invisible poor households, who have disproportionately experienced declining incomes.

The income gaps between the poorest and relatively wealthy households are increasing in rural Bangladesh. Only three percent of all households have observed a significant increase in their income in last three years and virtually all of that increase has been experienced by non-vulnerable households. More than half of the non-vulnerable households have experienced increased incomes, including 15 percent who have seen their incomes increase significantly and another 35 percent who have seen their incomes increase slightly. In contrast, only six percent of the invisible poor have slightly increased their incomes and not a single invisible poor household reported a significant income increase. Instead, more than four out of every 10 invisible poor household have experienced declining incomes; in contrast only three percent of non-vulnerable households have observed a significant decline in their incomes.

Why have different types of households seen their incomes decline over the past three years? (See Table 45.) The reasons vary by socioeconomic class:

- ◆ Most of the poorest households who experienced declining incomes suffered prolonged illness of some kind – 68 percent of invisible poor and half of the vulnerable households. Health problems prevent poor household members, heavily dependent on manual and casual labour, from participating in employment opportunities, which can devastate the poorest households, who tend to have unfavourable dependency ratios anyway. Prolonged illnesses also require households to spend on health care, thereby depleting household resources that could be used for other purposes.

- ◆ Invisible poor and vulnerable households also cite loss of employment – 37 and 39 percent respectively – as a key reason for declining incomes.
- ◆ One-third of the two middle-income classes of households also cited loss of assets as a significant reason for declining incomes. Asset losses may be related to exposure to shocks, which also figure prominently for middle-income households, as reported by 31 percent of on-the-edge and 28 percent of vulnerable households. The invisible poor already lack an asset base.
- ◆ The few non-vulnerable households to experience a decline in their incomes cited market failure as the predominant reason – more than three-quarters of the non-vulnerable households mentioned market failure. In contrast to the poorest households, non-vulnerable household livelihoods are much more dependent on market forces than on employment disruptions or illness in the family.

Table 45: Reasons for Declining Incomes by Socioeconomic Class

	Reasons for Decrease in Income Over the Three Years (multiple answers)			
	HH socio economic status			
	Non vulnerable	2	3	Most vulnerable
Loss of employment	24.7%	19.7%	38.5%	36.9%
Loss of crop/animal	14.8%	11.8%	14.1%	5.4%
Prolonged illness	31.3%	37.9%	50.2%	68.4%
Death of income earner	4.7%	3.6%	15.2%	27.1%
Decrease in income from remittances	.0%	4.1%	.8%	.8%
Loss of asset	27.2%	32.8%	33.4%	25.1%
Exposure to shocks	16.1%	31.4%	27.8%	15.6%
Market failure	75.7%	44.1%	44.8%	27.8%
Other	32.9%	44.2%	18.4%	29.0%

Percentages and totals are based on respondents.

Household variation explaining improved incomes is even more pronounced (See Table 46):

- ◆ Non-vulnerable household livelihood improvements are strongly related to agricultural improvements. Forty-four percent of non-vulnerable households have seen their incomes increase largely as a result of the use of better crop varieties; another one-third (32 percent) increased their area cultivated. Not a single invisible poor household could point to these two variables to explain improved income status (which has been a rare occurrence anyway for the invisible poor). As discussed earlier, the relatively well-to-do households benefit disproportionately from agricultural production improvements in Bangladesh.
- ◆ The most vulnerable households, particularly the invisible poor, are heavily dependent on labour opportunities for their income earning opportunities. Almost six out of 10 invisible poor households – 58 and 57 percent respectively – cited an increase in income earners and an increase in the number of income sources as the explanations for increased incomes. These two variables are important for all socioeconomic categories of households, but particularly for the invisible poor and vulnerable households, of whom 48 percent cited increased numbers of income sources and 39 percent mentioned

increased numbers of income earners as the most important reason for increased incomes.

- ◆ On-the-edge households reported a wide variety of reasons for improved incomes, including increased income sources (39 percent), increased area cultivated (23 percent), better crop varieties (23 percent), increased income earners (20 percent), better crop management (15 percent), and new or improved employment (11 percent). This data confirms that on-the-edge households rely on a wide variety of livelihood options.

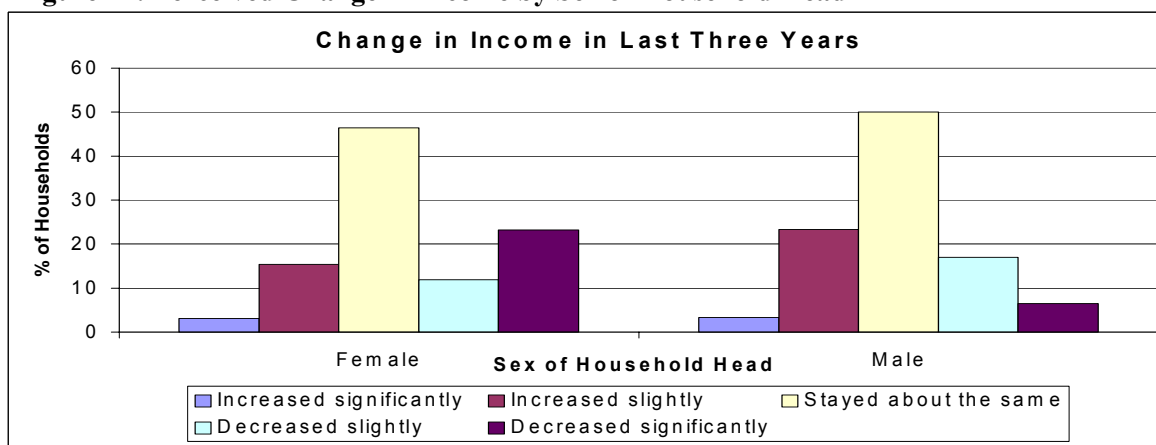
Table 46: Reasons for Increasing Incomes by Socioeconomic Class

	HH socio economic status			
	Non vulnerable	2	3	Most vulnerable
Better crop varieties	43.6%	22.9%	10.9%	.0%
Increase in area cultivated	31.8%	23.1%	6.7%	.0%
Less pest attack	.9%	.9%	.0%	.0%
Better crop management	7.0%	15.4%	.1%	.0%
Decrease in incidence of natural disasters	3.4%	2.0%	.2%	12.4%
Better disaster management	.2%	.0%	.4%	.0%
Got a new/better job	12.7%	11.2%	12.2%	12.4%
Increase in no. of income sources	24.8%	38.6%	48.3%	56.9%
Increase in no. income earners	32.3%	20.0%	39.0%	57.9%

Percentages and totals are based on respondents.

More than one third (35 percent) of the female-headed households reported declining incomes; most of the female-headed households reporting declining incomes perceive their incomes to be decreasing significantly. In contrast 23 percent of the male-headed households report their incomes to be in decline, almost none (six percent) of them reporting significant income decrease.

Figure 24: Perceived Change in Income by Sex of Household Head



The explanations for declining incomes vary wildly depending on the sex of the household head. Table 47 demonstrates that almost all (93 percent) female-headed households experienced declining incomes following the death of an income earner in the household; 42 percent saw their incomes decline in conjunction with prolonged illness of someone within

the household. In contrast, male-headed households blamed income losses on a variety of factors, including market failure (45 percent), loss of employment (33 percent), asset losses (31 percent), and exposure to shocks (26 percent), in addition to prolonged illness within the household (51 percent). Female-headed households tend to lack sufficient sources of income or income earners, severely limiting livelihood options and income earning opportunities.

Table 47: Reasons for Declining Incomes by Sex of Household Head

	Sex of household head	
	Female	Male
	Loss of employment	14.4%
Loss of crop/animal	8.9%	11.3%
Prolonged illness	41.7%	50.9%
Death of income earner	93.1%	7.6%
Decrease in income from remittances	8.1%	1.1%
Loss of asset	18.0%	31.4%
Exposure to shocks	3.4%	26.2%
Market failure	22.3%	44.5%
Other	23.0%	30.3%

Percentages and totals are based on respondents.

Table 48: Changing Incomes by WFP Priority Zones

% within Zone Code	Change in Income Over the Last Three Years						
	Zone Code						
	CHT	Costal	Drought	N/W	Char	Haor	Total
Increased significantly	2.0%	1.1%	3.8%	6.1%	1.6%	2.0%	3.2%
Increased slightly	19.9%	17.9%	29.0%	21.7%	24.3%	18.7%	22.9%
Stayed about the same	52.0%	60.3%	50.5%	48.4%	40.5%	59.7%	49.8%
Decreased slightly	15.8%	12.2%	12.2%	14.5%	24.8%	14.2%	16.7%
Decreased significantly	10.3%	8.4%	4.5%	9.3%	8.8%	5.4%	7.4%
N	448	441	442	442	444	444	2661

In addition to inquiring about perceived household income trends, the assessment team asked households to analyse their perceived current poverty status relative to 10 years ago. Table 49 indicates that approximately two-thirds (65 percent) of the households perceive themselves to be poor today, including 46 percent of the sample households who perceive no change in their poverty status over the past decade and about one-fifth (19 percent) of the households who believe that they have descended into poverty during the course of the past decade. On the other hand, nearly one-quarter (23 percent) of all households think that they have successfully escaped from poverty during the last 10 years. Most households remain unconvinced that poverty has eluded them; it is somewhat encouraging however, that slightly more households (23 percent as opposed to 19 percent) perceive improved trends in recent years.

Table 49: Household Poverty Trends

<i>At present</i>	<i>10 years ago</i>	
	Poor	Not Poor
Poor	46.2%	18.9%
	Remained Poor	Became Poor
Not Poor	23.3%	11.6%
	Escaped Poverty	Remained Non-Poor

Not surprisingly, perceived trends in poverty status differ markedly by socioeconomic class. As illustrated in Figure 25, only one of the socioeconomic household categories, the non-vulnerable, have achieved a clear positive trend toward livelihood security and out of poverty over the past decade. A majority of the other three socioeconomic classes consider themselves to be poor today, including 55 percent of on-the-edge households, 85 percent of vulnerable households, and virtually all (95 percent) of the invisible poor. More than one-third (36 percent) of non-vulnerable households have escaped from poverty during the past decade and almost half (47 percent) have remained livelihood secure. Although a majority of on-the-edge households consider themselves to be poor, more than one-third (34 percent) believe that they have escaped from poverty during the last decade. In contrast, more than one-fifth of the poorest households, including 23 percent of vulnerable households and 21 percent of the invisible poor, perceive a descent into poverty during the past decade.

Figure 25: Perceived Household Poverty Trends by Socioeconomic Class

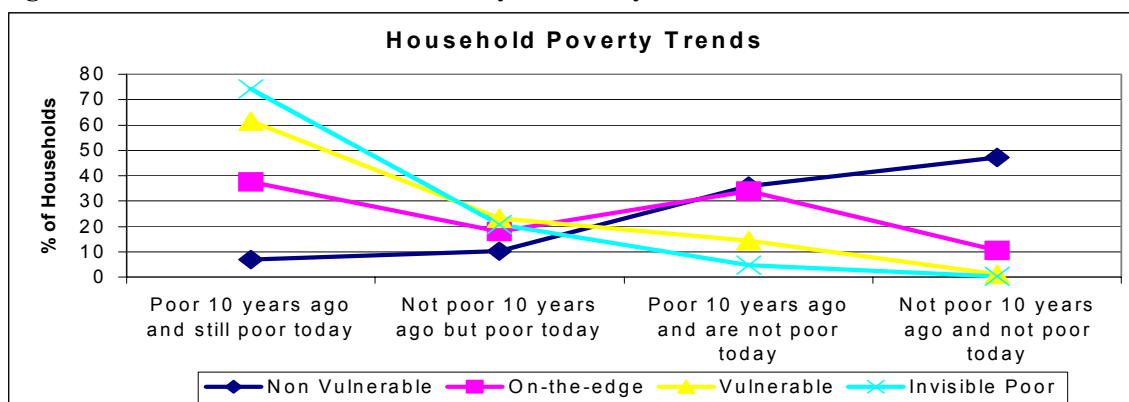
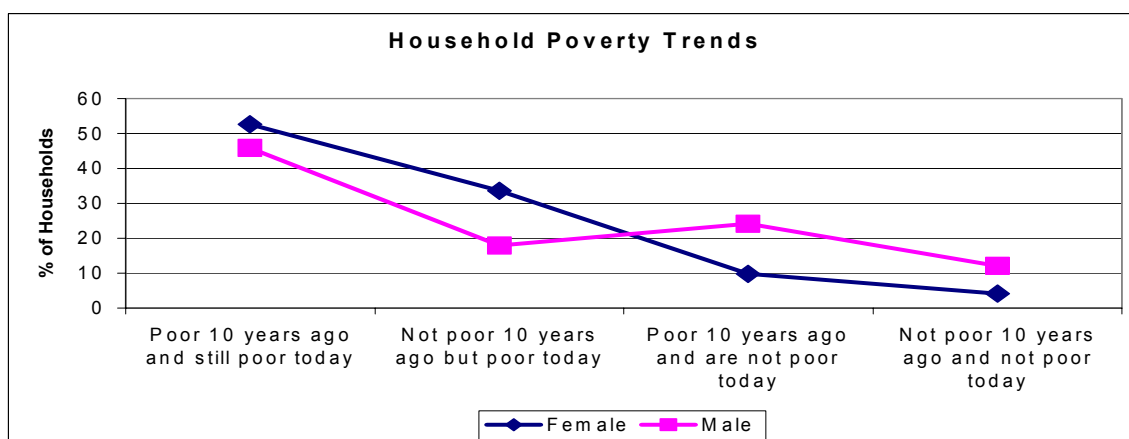


Figure 26: Household Poverty Trends by Sex of Household Head



Finally, as we noted above in observing income trends – see Figure 24 as well as Figure 26 – perceived poverty trends differ substantially according to the status of household head. Approximately 86 percent of female-headed households live in poverty; more than half (53 percent) have remained poor and another one-third (34 percent) have descended into self-described poverty during the last 10 years. In contrast, although 45 percent of male-headed households remain poor, nearly one-quarter of the others have managed to climb out of poverty. Female-headed households, as noted throughout this report, face many more structural, socioeconomic, and cultural barriers to achieving livelihood security than do male-headed households throughout rural Bangladesh.

6. FOOD CONSUMPTION & FOOD SECURITY

6.1 FOOD CONSUMPTION PATTERNS

Table 50 presents results from the cross-tabulation of weekly consumption of 14 food groups by household socioeconomic status, specifically indicating the proportion of households consuming each food group as well as the number of occasions items from each food group were consumed during a one-week period. The results suggest that diet diversity, as measured by household consumption of the food groups, increases with household socioeconomic status:

Table 50: Weekly Consumption of Food Groups by Household Socioeconomic Status

Food Groups	HH Socioeconomic Status							
	Non vulnerable		2		3		Most vulnerable	
	% of HHs consumed	Number of times (Median)	% of HHs consumed	Number of times (Median)	% of HHs consumed	Number of times (Median)	% of HHs consumed	Number of times (Median)
Staples/ grain	100%	21	100%	21	100%	21	100%	14
Tubers	93.1%	10	89.7%	8	84.2%	7	75.3%	6
Green leafy vegetables	98.4%	7	96.8%	6	94.4%	6	91.6%	6
Other vegetables	74.7%	12	69.2%	8	55.9%	7	57.6%	6
Lentils	94.2%	6	83.8%	4	69.6%	4	53.2%	3
Fruits	90.3%	5	64.8%	3	27.8%	2	19.6%	2
Meat	77.5%	3	40.2%	2	11.7%	1	5.6%	1
Fish	98.2%	7	90.3%	5	80.9%	4	61.2%	4
Egg	81.6%	4	55.5%	2	32.4%	2	16.6%	2
Milk & dairy products	80.7%	7	47.0%	7	21.8%	7	10.7%	2
Oils and fats	100%	20	99.8%	20	99.8%	18	99.5%	14
Sugar	74.5%	7	39.2%	5	10.6%	4	3.8%	3
Beverages	56.0%	7	23.1%	7	8.4%	7	2.7%	7
Spices	99.4%	20	96.8%	20	95.1%	17	92.9%	14

- ◆ Staples, invariably rice but occasionally wheat, are consumed by all households throughout the WFP priority zones.

- ◆ Oil and fat products, spices, and green leafy vegetables are also consumed regularly by virtually all households, although green vegetables are normally consumed no more than as part of one meal a day.
- ◆ Unlike other households, half of invisible poor households consumed staples 14 or fewer times in seven days, suggesting that they only ate two meals a day (which will be confirmed below in analysing meal frequency).
- ◆ Almost four of every 10 invisible poor households (39 percent) do not consume fish and almost half (47 percent) do not consume lentils, the two most common and essential sources of protein in rural Bangladesh. Half of the invisible poor consume fish four or fewer times in seven days. In contrast, 94 and 98 percent of non-vulnerable households and 84 and 90 percent of on-the-edge households consume lentils and fish regularly. The vast majority of non-vulnerable households eat fish every day, at least during the time of the survey in late June-early July.
- ◆ Increased availability of fruits in the market does not translate into increased consumption of fruits by the poor. More than 80 percent of the invisible poor and 72 percent of vulnerable households had consumed no fruits during the survey week even though the survey was conducted during the peak fruit season of the country when a wide variety of fruit is plentiful and the cost is low. Half of the vulnerable and invisible poor households consumed fruits only twice during the course of the week. In contrast, more than nine of every 10 non-vulnerable household had consumed fruits.
- ◆ Meat consumption is extremely unusual for the invisible poor (only six percent) and vulnerable households (12 percent); more than three-quarters of non vulnerable households consumed meat in the previous seven days.
- ◆ Although a large proportion of vulnerable and invisible poor households consume green leafy vegetables (as noted above), consumption of all other types of vegetables was limited to only 56 and 58 percent respectively and is consumed with only half the frequency found in non-vulnerable households.
- ◆ Non-vulnerable households can readily afford milk and dairy products (81 percent) and eggs (82 percent); in contrast few invisible poor and vulnerable households consumed these food groups in the previous seven days – 11 and 17 percent of the invisible poor consumed milk & dairy products and eggs respectively.

Dietary Diversity: An essential aspect of food security, dietary diversity is clearly problematic for the poorest households in the WFP programming zones and should constitute a targeting indicator for food security programming. Dietary diversity refers to nutrient adequacy, defined here as a diet that meets the minimum requirements for energy and all essential nutrients. The rationale for using dietary diversity as an indicator for dietary quality stems primarily from a concern related to nutrient deficiency and the recognition of the importance of increasing food and food group variety to ensure nutrient adequacy. Lack of dietary diversity is clearly a particularly severe problem afflicting the poorest households in Bangladesh, whose diets are predominantly based on starchy staples and rarely include animal products and few fresh fruits and vegetables, as we noted above.

Table 51 presents dietary diversity results by household socioeconomic status, encapsulating the food group analysis presented in table 51. All of the non-vulnerable households and more than eight of every 10 on-the-edge household consume more than eight food group items. In contrast only seven percent of the invisible poor consume more than eight items and more than two-thirds of the invisible poor consume two to seven food group items. More than two-thirds of vulnerable households consume fewer than nine items. The average

number of food items consumed by the invisible poor is less than seven. Non-vulnerable households on the other hand consume more than 12 different food group items a week on average. Diet diversity differences amongst households are profound in rural Bangladesh and offer a powerful targeting indicator.

Table 51: Dietary Diversity by Household Socioeconomic Status

Number of Food Groups Acquired in a Week					
% within HH socio economic status					
	HH socio economic status				Total
	Non vulnerable	2	3	Most vulnerable	
Two to seven items	.0%	3.6%	40.1%	67.8%	25.0%
Eight items	.0%	16.2%	29.1%	24.8%	19.2%
Nine items and more	100.0%	80.2%	30.8%	7.4%	55.8%
N	414	993	858	396	2661

Number of Food Groups Acquired in a Week							
% within WFP priority zone							
	WFP priority zone						Total
	CHT	Coastal	Drought	N/W	Char	Haor	
Two to seven items	17.9%	35.6%	24.7%	18.1%	30.9%	24.3%	25.0%
Eight items	17.4%	20.6%	17.0%	15.2%	22.7%	20.9%	19.2%
Nine items and more	64.7%	43.8%	58.4%	66.7%	46.4%	54.7%	55.8%
N	448	441	442	442	444	444	2661

Disaggregated data also suggest substantial regional variation in food consumption patterns. More than 80 percent of *Haor* and CHT households had consumed vegetables during the previous seven days while less than one-third of Coastal households had consumed vegetables. Fruit consumption is also much less frequent in the Coastal zone – only 28 percent, compared to 61 and 57 percent respectively in the Northwest and CHT. Coastal households tend to consume more lentils however (91 percent). Almost half of the CHT households (49 percent) had consumed meat in the previous seven days. Meat consumption is far rarer in the Coastal zone, where less than a quarter (23 percent) of had consumed meat. An important component of the rural Bangladesh diet, fish consumption is common across the regions, particularly in the *Haor* (95 percent) and Northwest (84 percent).

Dietary diversity patterns vary only slightly across the region. *Char* and Coastal diet diversity lags behind the other zones. In addition, disaggregated data indicates that male-headed households consume a substantially more diverse diet than do female-headed households. Approximately half of female-headed households eat only two to seven food group items while more than three-quarters of male-headed households consume at least eight items. Male-headed households eat an average of 9.2 food group items, compared to 8.1 items consumed on average by female-headed households.

Table 52: Mean Number of Food Groups Acquired in a Week

Mean Number of Food Groups Acquired in a Week			Mean Number of Food Groups Acquired in a Week		
Number of food groups acquired in a week			Number of food groups acquired in a week		
WFP priority zone	Mean	Std. Deviation	HH socio economic status	Mean	Std. Deviation
CHT	9.48	2.182	Non vulnerable	12.19	1.378
Coastal	8.71	2.459	2	9.96	1.558
Drought	9.14	2.222	3	7.93	1.388
N/W	9.81	2.291	Most vulnerable	6.90	1.334
Char	8.62	2.083	Total	9.17	2.248
Haor	9.21	2.172			
Total	9.17	2.248			

With the exception of non-vulnerable households, most households tend to purchase most of their food items. However, more than three-quarters (78 percent) of non-vulnerable households produce their staples. In contrast, the invisible poor, few of whom control the agricultural production process, are compelled to purchase staples (94 percent). One-third of the households across socioeconomic categories produce leafy vegetables, although more than 11 percent of the invisible poor obtain their leafy vegetables from friends, relatives and neighbours for free. Forty-four percent of non-vulnerable households produce fruits; this is the case for only 18 percent of the invisible poor, one-fifth of whom obtain fruits from relatives, friends and neighbours. More than half of non-vulnerable households produce eggs, while a quarter of the invisible poor demand for eggs is met by their own production. Similarly, more than 40 percent of non-vulnerable households consume milk from their own source while only 13 percent of vulnerable households, who rarely own cows, depend on their own production.

Meal Frequency: Another essential aspect of food security, meal frequency in rural Bangladesh separates the invisible poor from other socioeconomic classes. Approximately three-quarters of the invisible poor consume only two meals a day while virtually all non-vulnerable and on-the-edge households and even 81 percent of vulnerable households consume at least three meals. Not only are the diets of the invisible poor meagre, they are also insufficient to attain household food security.

Figure 27: Meal Frequency by Socioeconomic Class

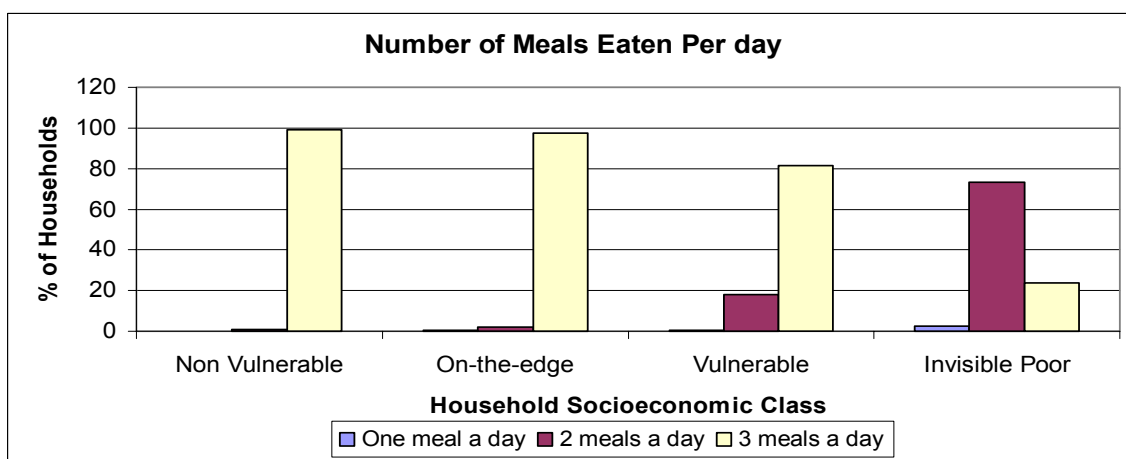
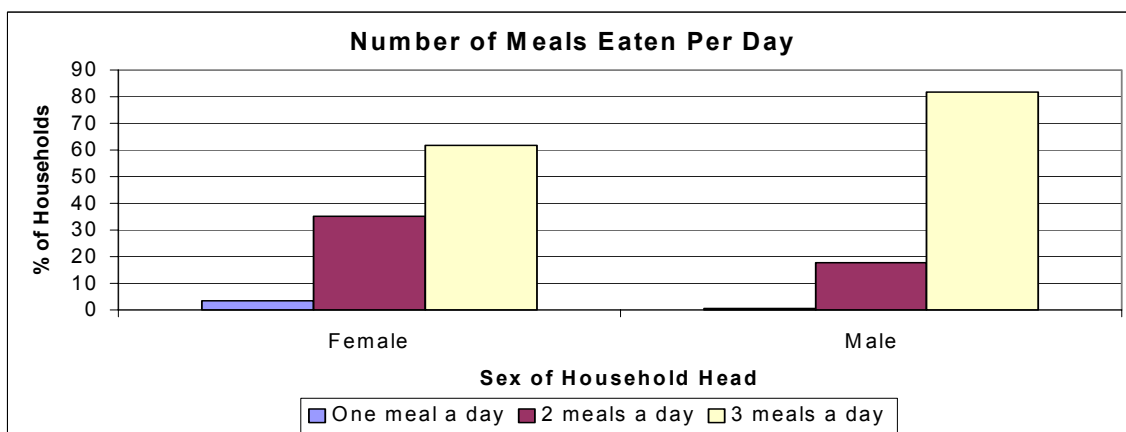


Figure 28: Meal Frequency by Sex of Household Head



Female-headed households take their meals less frequently than do male-headed households. More than one-third (35 percent) of female-headed households consume two meals a day, compared to 18 percent of male-headed counterparts. Meal frequency varies across regions as well. Approximately one-quarter of *Haor* and CHT households apparently average two meals while only 11 percent of Drought-prone households and 14 percent of Coastal household had two meals in the 24 hours prior to the household interview.

6.2 FOOD SECURITY & FOOD INSECURITY

One of the most widely used and accurate proxy indicators for food security is the number of months of access to adequate food for all household members. Half of all households appear to be food secure throughout the year, or at least for 10 to 12 months. Another one-third (31 percent) of households are food secure for seven to nine months and the other 20 percent are food secure for less than half the year, including 12 percent unable to access adequate food anytime during the year.

Figure 29: Household Food Security by Socioeconomic Class

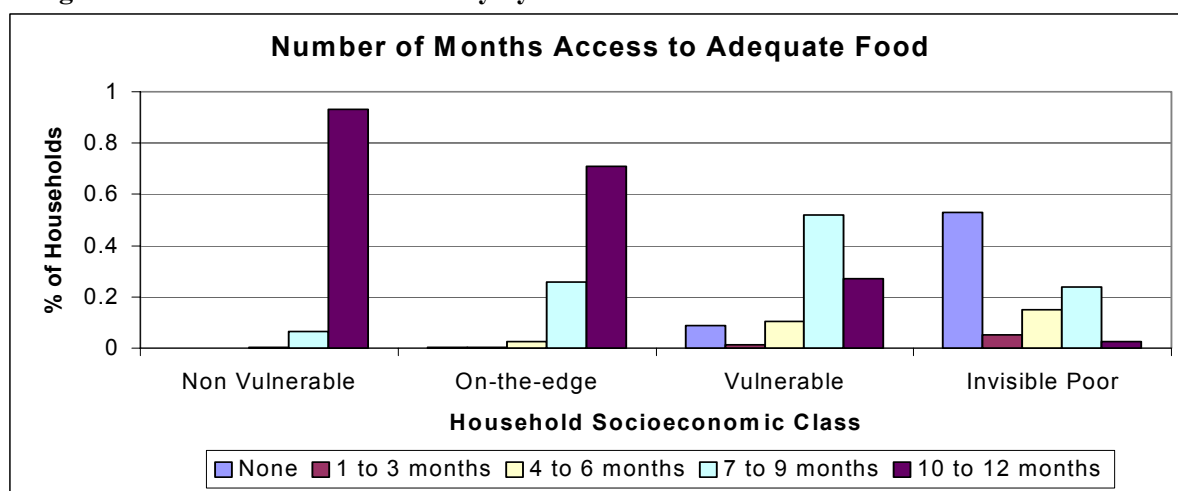
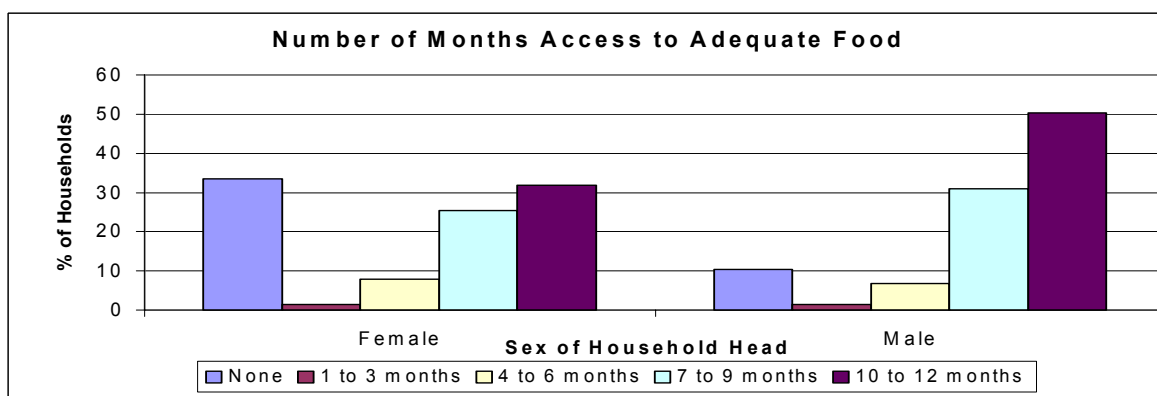


Figure 29 graphically illustrates the great disparity in household food security by socioeconomic status. More than half of the invisible poor suffer from food insecurity throughout the year and another 21 percent can access adequate food for only one to six

months. In contrast, the vast majority of non-vulnerable and on-the-edge households – 93 and 71 percent respectively – appear to be food secure for virtually the entire year, from 10 to 12 months. Even 79 percent of vulnerable households are able to access adequate food for seven months or more. This is a powerful indicator for accurately targeting invisible poor households.

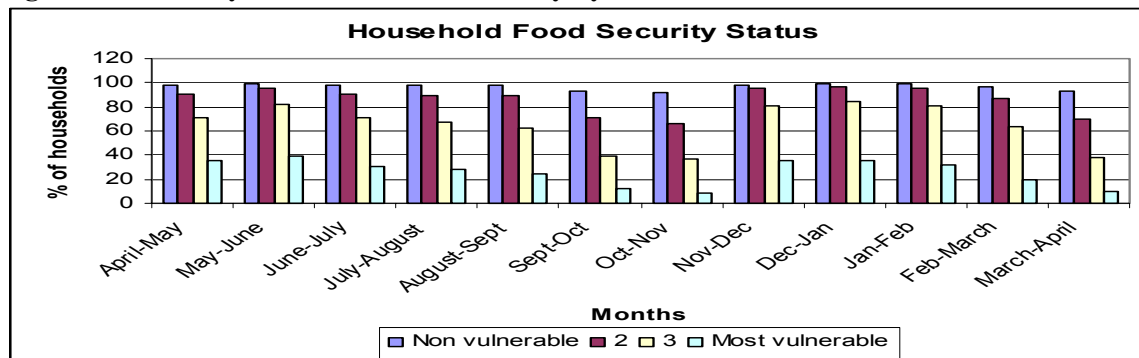
Female-headed households are substantially more food insecure than are their male-headed counterparts. One-third of female-headed households remain food insecure throughout the year, in contrast to approximately 10 percent of all male-headed households. More than 80 percent of male-headed households are food secure for seven to 12 months compared to 57 percent of female-headed households.

Figure 30: Household Food Security by Sex of Household Head



Seasonal food insecurity is most intense for many rural Bangladesh households during the Bengali month of *Kartik*, which corresponds to October and November at the end of the *amon* season just prior to harvest, and *Chaitra*, which corresponds to March and April right before the *boro* harvest. Although more than 91 percent of non-vulnerable households are food secure during the two lean months (*Kartik* and *Chaitra*), more than 90 percent of the invisible poor suffer from food insecurity during those seasons.

Figure 31: Monthly Household Food Security by Socioeconomic Status



More the 60 percent of the invisible poor remain food insecure during all 12 months of the year. *Jaistthay* – May to June following the *boro* harvest – is the best month when nearly 40 percent of the invisible poor finally have access to adequate food and virtually all of the on-the-edge and non-vulnerable households are food secure.

7 COPING STRATEGIES

Households in rural Bangladesh employ a variety of strategies to cope with shocks, including economic and social-political shocks as well as natural disasters such as flooding and cyclones. Households were asked if they had been negatively affected by any kind of shock during the course of the previous year and based on that response then outlined the frequency of a variety of strategies employed to cope with the shock. Table 53 provides information on the various coping strategies households employed.

Table 53: Household Coping Strategy Frequency

Coping strategies	Never	Less than a day per week	1 - 2 days per week	3 or more days per week	Daily
Limit portion size at mealtimes	25.37%	23.53%	24.28%	9.60%	17.19%
Reduce number of meals	32.33%	21.45%	22.65%	9.05%	14.49%
Borrow food or rely on others	41.1608	31.66%	18.52%	6.63%	2.02%
Rely on cheap or less preferred foods	42.17%	15.37%	21.65%	8.79%	11.99%
Purchase food on credit	45.25%	17.10%	24.03%	8.08%	5.51%
Gather wild food	96.59%	1.81%	1.54%	0.04%	0.00%
Send hh members to eat elsewhere	82.94%	8.32%	5.78%	2.14%	0.80%
Reduce adult consumption	61.54%	13.20%	14.22%	6.10%	4.91%
Rely on casual labour for food	79.49%	9.61%	5.07%	4.02%	1.78%
Abnormal migration for work	74.42%	8.38%	10.12%	6.23%	0.82%
Skip entire day without eating	74.27%	15.77%	8.19%	1.68%	0.07%
Consume seed stalk	90.67%	5.47%	2.21%	0.91%	0.72%
Borrow from NGO/ Grameen	79.44%	15.63%	2.30%	1.01%	1.59%
Borrow from money lenders	84.06%	9.42%	4.41%	1.48%	0.61%
Borrow from friends & relatives	51.15%	33.02%	11.75%	3.25%	0.81%
Borrow from bank	97.37%	1.93%	0.38%	0.09%	0.21%
Farmland mortgage out	95.77%	1.49%	1.18%	0.78%	0.76%
Farmland lease out	98.82%	0.36%	0.40%	0.38%	0.02%
Sold small animals	83.61%	13.74%	2.50%	0.13%	0.00%
Sold large animals	94.99%	4.19%	0.81%	0.00%	0.00%
Sold household assets	98.09%	1.88%	0.02%	0.00%	0.00%
Sold land	98.20%	1.79%	0%	0.00%	0.00%
Sold other productive assets	97.68%	2.08%	0.16%	0.07%	0.00%
Begging/ gleaning rice from paddy field	95.38%	2.40%	1.14%	0.38%	0.67%
Pledging labor	89.94%	6.09%	2.36%	0.62%	0.96%

Fortunately, last year was an unusually good year in that relatively few natural disasters encumbered the country and households were only compelled to cope with normal regional flooding cycles and seasonal transitory food insecurity. For that reason, less than five hundred households reported employing any unusual coping strategies last year. Nevertheless, some trends emerged, as presented in Table 54.

The most commonly employed coping strategies include:

- ◆ Limiting portion sizes at mealtime (75 percent of households);
- ◆ Reducing the number of meals (67 percent);

- ◆ Borrowing food or relying on others (59 percent);
- ◆ Relying on cheaper or less preferred foods (58 percent);
- ◆ Purchasing food on credit (55 percent);
- ◆ Borrowing from friends or neighbours (49 percent); and
- ◆ Reducing adult consumption to provide for children (38 percent).

Table 54: Coping Strategies Employed by Socioeconomic Class

Coping strategies	Household Socioeconomic Category			
	Non vulnerable	2	3	Most vulnerable
Limit portion size at mealtimes	42.04%	67.05%	79.44%	84.14%
Reduce number of meals	36.53%	67.38%	63.21%	82.57%
Borrow food or rely on others	50.14%	58.92%	58.17%	62.01%
Rely on cheap or less preferred foods	23.16%	57.68%	53.40%	73.49%
Purchase food on credit	36.22%	47.36%	52.74%	69.92%
Gather wild food		0.16%	3.33%	7.67%
Send hh members to eat elsewhere	6.50%	17.53%	13.89%	23.86%
Reduce adult consumption	16.64%	40.00%	39.11%	41.83%
Rely on casual labour for food	10.13%	18.89%	19.35%	26.52%
Abnormal migration for work	4.62%	19.71%	30.56%	30.05%
Skip entire day without eating	9.85%	12.40%	16.92%	55.75%
Consume seed stalk	22.85%	17.76%	4.73%	3.69%

The coping strategies cited above and commonly employed by rural Bangladesh households are adaptive strategies that do not tend to affect future livelihood security, with the possible exception of purchasing food on credit that may be difficult to repay. Adaptive strategies do not entail asset divestment, which erodes livelihood security. Not surprisingly, the poorest households tend to employ adaptive coping strategies far more frequently than do non-vulnerable households. Unlike all of the other types of households, less than half of the non-vulnerable households are ever compelled to limit meal portions, reduce the number of meals, rely on less preferred foods, or borrow food from others. The most severe coping strategies appear to only be utilized with any frequency by the invisible poor. For example, over half (56 percent) of the invisible poor skipped entire days without eating last year; only 17 percent or fewer of all other types of households have felt compelled to skip a day of eating during the last year.

Community focus group participants ranked the severity of coping strategies, which range from common adaptive strategies to highly uncommon disruptive and even destructive strategies. The ranked list of coping strategies is presented in Table 55, which averages the focus group severity scores for each coping strategy. Very severe coping strategies received a score of ‘4’; coping strategies not considered severe received a score of ‘1’.

Table 55: Coping Strategy Severity as Ranked by Community Focus Groups

Coping Strategy	Severity Score
Rely on casual labour for food	1.8
Restrict adult consumption so children can eat	1.9
Limit portion sizes at mealtimes	2.0
Migration in search of work	2.2
Rely on less preferred and less expensive foods	2.5
Borrow food or rely on help from friends or relatives	2.6

Continu: Table 55

Reduce the number of meals eaten in a day	2.7
Household members eat meals at relatives' or friends' houses	3.0
Purchase or borrow food on credit	3.1
Sell cooking utensils, jewellery, or furniture	3.1
Sell livestock or poultry	3.3
Lease or mortgage land	3.4
Consume seed stocks held for the next season	3.4
Gather wild foods or unusual foods	3.5
Skip entire days without eating anything	3.8
Sell land (invariably at a low price)	3.8
Sell house or house materials such as tin roof	3.9
Beg or steal	3.9

7.1 COPING STRATEGIES INDEX

Table 56: CSI by WFP Zone, Socioeconomic Group, & Sex of Head of Household

WFP Priority Zone		
	Mean	Std. Dev
CHT	22.25	15.82
Coastal	17.09	7.63
Drought	20.38	16.92
N/W	21.86	18.57
Char	27.25	16.64
Haor	21.28	15.78
Total	23.59	16.85
Socioeconomic Status		
Non-vulnerable	11.56	11.74
On-the-edge	20.95	16.06
Vulnerable	21.18	14.73
Invisible		
Poor	32.84	17.44
Total	23.59	16.85
Sex of Household Head		
Female	35.65	20.27
Male	22.89	16.42
Total	23.56	16.89

The Coping Strategies Index (CSI) is a relatively simple and efficient indicator of household food security that corresponds well with other more complex measures of food insecurity. The CSI tool has been used primarily for early warning and food security assessments in Africa, but is certainly relevant in the rural Bangladesh context as a potentially powerful food insecurity measurement technique, particularly as a tool to monitor changing household food security status and transitory food insecurity resulting from an intense shock such as unusual flooding or a cyclone. The CSI can also be used as a targeting mechanism.

The basic premise in implementing the CSI is to measure the *frequency* and *severity* of consumption or adaptation coping behaviours in order to monitor coping trends and discover a potential problem before households ever begin to engage in more severe forms of divestment coping strategies. The CSI monitors the frequency of a particular coping strategy – how often does the household engage in

that coping behaviour – as well as the severity of undertaking that strategy for the household. The CSI is a quantitative score measuring the coping level – which can be understood as a proxy for transitory food insecurity – based on the product of severity x frequency of a set of coping behaviours. A higher CSI score suggests a higher level of food insecurity.

Table 56 presents the CSI values for surveyed households. The CSI value for the invisible poor is a much larger CSI value (almost three times larger than non-vulnerable households) compared to all other socioeconomic categories. Female-headed households have a much larger CSI value than the male-headed households, indicating the intense vulnerability of many rural households headed by women. *Char* households have the highest CSI value,

which is substantially higher than that of any other WFP zone, confirming the relative vulnerability facing households in the *Char* region.

Table 57 contains the CSI correlation coefficients with three food security proxy variables – dietary diversity, which is a proxy measure of dietary quality; number of meals eaten in 24 hours, a proxy measure of food quantity; and number of months of access to adequate food for all household members from all sources, a proxy measure of food security. The CSI is highly correlated with each of the three food security measures (significant at one percent level). This result confirms that the CSI is an excellent forecaster of food insecurity and can be used as a proxy indicator to measure food insecurity in the WFP priority programming regions.

Table 57: Correlation between CSI and Food Security Proxy Indicators

Correlation between CSI & Dietary Diversity			
		Coping Strategy Index	Dietary Diversity
Coping Strategy Index	Pearson Correlation	1	-.196**
	Sig. (2-tailed)		.000
	N	468	468
Dietary Diversity	Pearson Correlation	-.196**	1
	Sig. (2-tailed)	.000	
	N	468	2661

** . Correlation is significant at the 0.01 level (2-tailed).

Correlation between CSI and Number of Meals Eaten in 24 Hours			
		Coping Strategy Index	Number of meals eaten in 24 hours
Coping Strategy Index	Pearson Correlation	1	-.188**
	Sig. (2-tailed)		.000
	N	468	468
Number of meals eaten in 24 hours	Pearson Correlation	-.188**	1
	Sig. (2-tailed)	.000	
	N	468	2661

** . Correlation is significant at the 0.01 level (2-tailed).

Correlation between CSI and Number of Months Households Have Access to Adequate Food from All Sources			
		Coping Strategy Index	Number of months food secured
Coping Strategy Index	Pearson Correlation	1	-.354**
	Sig. (2-tailed)		.000
	N	468	468
Number of months food secured	Pearson Correlation	-.354**	1
	Sig. (2-tailed)	.000	
	N	468	2661

** . Correlation is significant at the 0.01 level (2-tailed).

V. RECOMMENDATIONS

The following recommendations are derived from the findings:

1. Targeting

WFP should work with its partners to implement an improved targeting strategy to ensure the inclusion of the poorest and most food insecure households. Although WFP's geographic targeting identifies appropriate and accurate targeting at the regional level, the findings of the study indicate that at local and household levels, there remains considerable room for improvements. Safety net programmes currently reach a disproportionate number of 'vulnerable' and 'on the edge' households – the two middle class categories of households identified in this study. The 'invisible poor' have frequently been bypassed. Household targeting deficiencies are hurting many poor families with limited skills, limited livelihood resources, and poor social capital.

2. VGD Selection & Targeting

WFP should convene a series of workshops involving stakeholders (union and upazila officials and committee members, MWCA and NGO staff) to discuss various measures to improve the selection process. One measure that WFP has recently taken up is specific rewards and/or punishments to unions that have performed well or poorly respectively.

WFP has partnered with the Ministry of Women and Children Affairs (MWCA) to implement improvements to the VGD beneficiary selection process with the purpose of reducing inclusion errors. The selection process however apparently remains problematic, particularly at the Union Parishad level.

3. Tracking Vulnerability

Vulnerability monitoring systems need to be established to track changes in the population's food security status. Information generated from such systems would then be available to inform resource allocation through safety net programs, and whether resources should be scaled up or scaled down.

A number of macro-economic factors, exacerbated by changes in the agricultural sector at the micro- and meso- levels, are impacting the vulnerability of the poorest households, particularly the invisible poor. Informal and formal safety nets are currently smoothing consumption, but some disturbing coping responses indicate that shocks could easily push poor households into destructive practices. For example, three-quarters of the poorest households are relying on loans to manage income shortfalls, producing a cyclic pattern of debt for many households. 'Invisible Poor' and 'vulnerable' households without access to micro-credit, are paying higher interest rates than other households. In the near term, social protection measures are needed to prevent more vulnerable households from sliding further behind at the same time that longer-term measures are implemented to strengthen the economy.

4. Coping Strategies Index

The CSI is a monitoring tool designed to measure the frequency and severity of food security related consumption or adaptation coping behaviours. The CSI monitors the frequency of a particular coping strategy – how often does the household engage in that coping behaviour – as well as the severity of the behaviour. Multiplying severity scores by frequency scores leads to a CSI index value. The measure includes only those strategies that are most important in a particular local context. WFP VAM and its partners should consider employing the CSI as a surveillance system in sentinel sites to monitor food security.

5. Food Security and Vulnerability Indicators

The following variables emerged from this study as important indicators of household food insecurity and vulnerability:

- Number of months of household access to adequate food for all household members from all sources;
- Meal frequency – number of meals eaten per day;
- Dietary diversity – number of unique food groups consumed over seven days;
- Asset ownership, particularly agricultural land, cattle, poultry, bicycle, and the number of rooms occupied;
- Number of income sources;
- Household dependency ratio; and
- Type of household – female-headed households are usually vulnerable and food insecure.

WFP has already incorporated criteria related to food security, asset ownership, women headed households in its beneficiary selection for VGD programme. WFP should also consider other criteria like dependency ratio and income sources, which are equally important in identification of the ultra poor.

6. Diversifying Incomes

Enhancing livelihood resilience and reducing the vulnerability of households will require greater diversification of household income sources. The Invisible Poor cited income diversity as the most crucial variable of potential income increase. WFP's development package already contains trainings on small-scale income generating activities, health and nutrition. In the new country programme WFP has diversified the package by appending trainings on homestead gardening, civil and legal rights, literacy and numeracy, HIV-AIDS awareness and prevention measures, budget management and disaster risk reduction. WFP should consider supporting targeted vocational training in communities identified through a participatory appraisal process. The support should also include entrepreneurial and micro-business financial management training. WFP has already commenced the process of complementing training activities by facilitating linkages with appropriate financial partners to enable vulnerable groups and individuals to access small-scale micro-finance and business loans.

7. Food for Education

WFP's long established global and Bangladesh expertise in targeted food for education programmes can be used to improve the quality of primary education.

8. Nutrition Programming

WFP already plays a critical role in battling malnutrition in Bangladesh through its interventions in school feeding and the VGD programme. WFP is now planning on using food aid and other resources to support nutrition programming at the community and national levels as well as in conjunction with the FFE programme. This strategy might include supplementation for high-risk groups, micronutrient fortification of basic foods, education and raising awareness of communities on the importance of nutrition, and encouraging diversification of food consumption.

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Annex A

Conceptual Framework and Analysis Plan for Socioeconomic Profile of the WFP Priority Areas and Beneficiaries in Bangladesh

**Prepared by TANGO International, Inc.
June 2006**

1.0 Introduction

WFP Country Office in Bangladesh is underway to initiate the planning process for the new Country Programme 2007-10. To prioritize activities and resources in areas of highest needs the Government of Bangladesh in collaboration with World Food Programme (WFP) undertook a geographical targeting analysis¹ applying a variant of the small area estimation technique. The analysis resulted in estimates of the proportion of population below the lower poverty line, at Upazila level. The lower poverty line is associated with a food calorie consumption level below 1805 kcal/person/day.

Mapping the data revealed six geographical areas and concentrations of highly food insecure Upazilas. An attempt was taken to identify some major causes of food insecurity in these priority areas through an area profiling study. Rapid appraisals were carried out in the severely food insecure unions within the six geographical regions.

Although the main geographic patterns of food insecurity have been captured, an in-depth and more robust analysis of the available indicators remains necessary to more precisely confirm the geographic targeting as well as the community and household level targeting in the new Country Programme.

TANGO International, Inc. has been contracted to carry out a socio-economic profiling study for the WFP priority target populations and regions. The study will address issues like, livelihood strategies, income & expenditure pattern, food consumption pattern/dietary intake, access to services like water, sanitation, education & health, hazards faced by the community, child-care practices, nutritional status and social dynamics which all together affect food security and nutritional status of the ultra poor.

Based on a logical framework of the linkages between food security and nutritional status, the study is expected to develop a socio-economic profile of the priority areas, and will serve as a key input for both the planned Country Programme Activity Plan (CPAP) and for the planned RBM baseline surveys. The additional in-depth VAM analysis will i) characterize the main issues and causes of food security ii) provide first-hand information on the characteristics of the poorest and most food insecure communities and households and iii) inform the community and beneficiary selection criteria for the next Country Programme.

It is expected that the information generated from the study would: a) support the advocacy events related to food security b) strengthen WFP's and partners knowledge-base on food insecurity, the ultra poor, and their chronic condition and c) contribute to emergency preparedness and response capacity, through the generation of baseline/background data.

The study will be undertaken within the broader framework of WFP Community Food Security Profiling (CFSP) strategy and guidelines. The CFSP is usually applied in the most vulnerable areas or

¹ Local Estimation of Poverty and Malnutrition in Bangladesh, May 2004. GoB BBS and UN WFP. The small area estimates technique was pioneered by the World Bank, and has been used successfully to target development assistance in many countries around the world, including Thailand, Cambodia, South Africa, and Brazil.

WFP priority areas to develop detailed, programmatically-oriented insights on how to establish the most effective beneficiary and sectoral targeting of WFP food aid resources in any given country. The Conceptual Framework for the study is based on a particular understanding of food insecurity and vulnerability.

2.0 Understanding Vulnerability to Food Insecurity

2.1 Food Security

The definition of food security adopted at the 1996 World Food Summit² is:

Food security, at the individual, household, national, regional and global levels [is achieved] when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.

The food security status of any household or individual is typically determined by the interaction of a broad range of agro-environmental, socioeconomic, and biological factors. Like the concepts of health or social welfare, there is no single, direct measure of food insecurity. However, the complexity of the food insecurity problem can be simplified by focusing on three distinct, but interrelated dimensions of the concept: aggregate food availability, household food access, and individual food utilization (WFP: VAM 2002).

Achieving food security requires addressing all three of these separate dimensions, ensuring that:

- the aggregate *availability* of physical supplies of food from domestic production, commercial imports, food aid, and national stocks is sufficient;
- household livelihoods provide adequate *access* for all members of the household to those food supplies through home production, through market purchases, or through transfers from other sources; and
- the *utilization* of those food supplies is appropriate to meet the specific dietary and health needs of all individuals within the household.

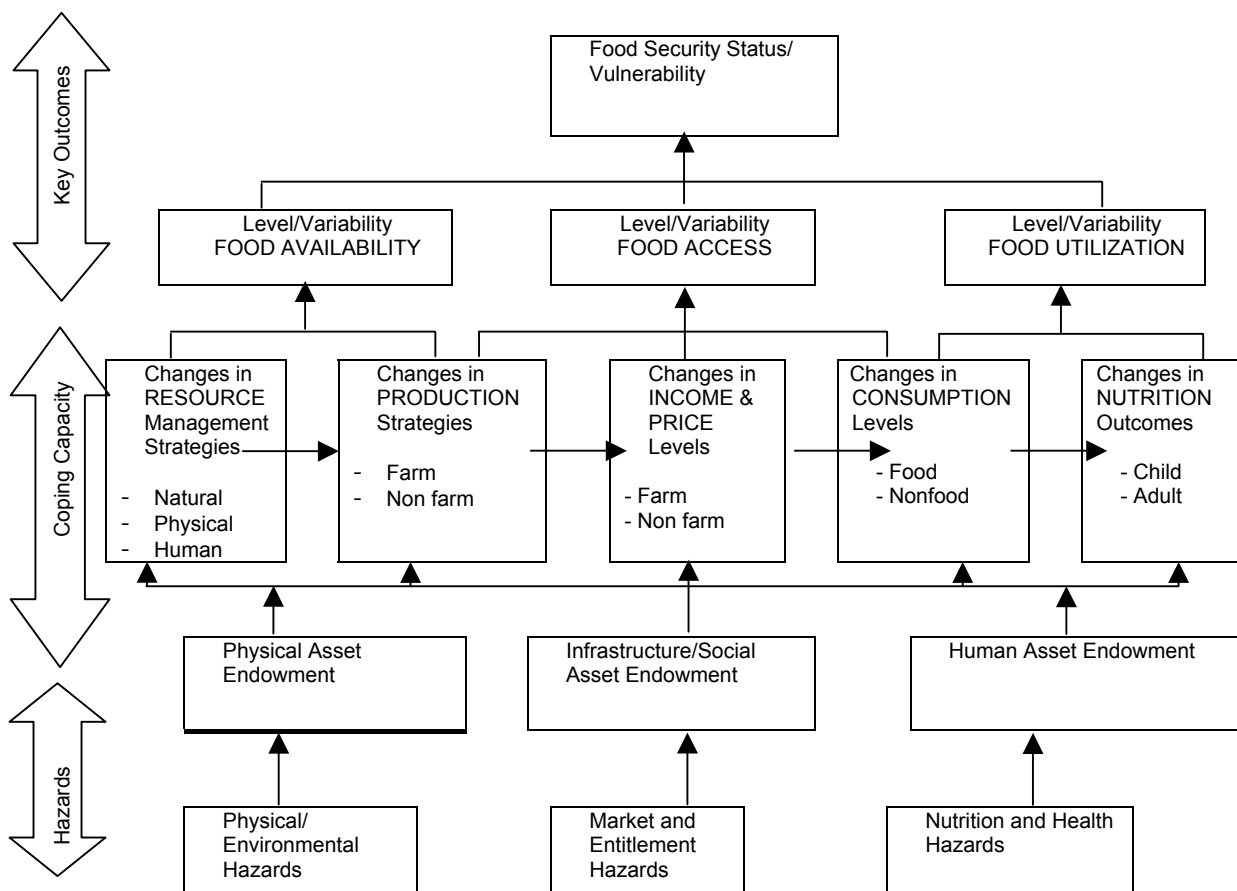
2.2 The Concept of Vulnerability

Vulnerability is a forward looking concept aimed at assessing community and household exposure and sensitivity to future shocks. With respect to food insecurity, vulnerability is a function of how a particular population or group's options for obtaining access to food are affected by different shocks to which they are exposed and the characteristics of those shocks regarding magnitude, frequency and duration. The shocks themselves come in many different forms including droughts, floods, crop blight or infestation, government policies, and conflict. Drought-related shocks may include agricultural production loss, off-farm income loss, or lack of drinking water. A conflict may result in a large number of shocks such as changes in market access, displacement of populations, and subsequent loss of assets (TANGO 2004a).

According to Robert Chambers, vulnerability is a result not only of exposure to hazards—such as drought, conflict, extreme price fluctuations, and others—but also of underlying socioeconomic processes which serve to reduce the capacity of populations to cope with those hazards.

² Rome Declaration on World Food Security., World Food Summit, 13-17 November, 1996, Rome Italy.

Figure 1: Vulnerability and Food Security Framework



From WFP (2002), derived from Webb, et. al (1993)

Ultimately, the vulnerability of a household or community is determined by their ability to cope with their exposure to the risk posed by such shocks. All individuals, households, and communities, or even nations, face multiple hazards/risks from different sources. Risks often cannot be prevented and if they materialize they negatively impact individuals, households, and communities in an unpredictable manner. The ability to manage the risks associated with shocks is determined largely on household and community characteristics, most notably their asset base and the livelihood and food security strategies they pursue. Access to assets (natural, economic, social, human and political) is particularly important in determining which populations or groups are vulnerable to potential shocks (Heitzmann et al. 2002, TANGO 2004a, 2004b).

Often, coping behavior involves activities such as the sale of land or other productive assets, the cutting of trees for sale as firewood or, in an extreme example, the sale of girls into prostitution. These practices undermine, not only the long-term productive potential of vulnerable households, but may also undermine important social institutions and relationships. The extent of reliance on these more destructive practices is a further indicator of levels of vulnerability during a crisis (WFP: VAM 2002).

Two additional concepts that need to be taken into account in an analysis of risk and vulnerability are sensitivity and resilience. Sensitivity relates to the magnitude of the individual, household or community response to the external risky event. For example, those households with limited assets are more likely to be greatly impacted by a given shock as compared to those households with more assets. Resilience refers to the ability of a livelihood system to bounce back from stress or shocks.

For example, some households have difficulty recovering once they have been exposed to a particular risk (TANGO 2004a).

2.3 Managing Risk

Households can respond to or manage risk in a variety of ways. For most vulnerable households, risk management involves both pre-shock (*ex ante*) and post-shock (*ex post*) actions. Pre-shock actions are preventative measures taken to reduce risk (e.g., drought tolerant crops, diversified livestock production, flood proofing barriers) or lower exposure to risk (e.g., livelihood diversification to off-farm employment). Households can also reduce risk through investment in insurance strategies such as precautionary savings or association with supportive social networks (TANGO 2004a).

Post-shock risk management refers to actions taken in response to the occurrence of shocks. Such actions are often referred to as *coping strategies* in that they are undertaken in an effort to manage the negative impacts and limit potential losses of food security posed by shocks that have already occurred. Common examples include selling assets, removing children from school, migration of selected family members, reducing the number of meals consumed and the variety of foods consumed, and reliance on families for loans. The various types of post-shock support offered by family or community members in response to a shock are often referred to as informal safety nets, while those implemented by governments and NGOs are referred to as formal safety nets. Formal safety nets include activities such as public works programs and direct food aid intended to assist households in coping with risk of food and livelihood insecurity (Heitzmann et. al. 2002, TANGO 2004a).

Risk combined with household responses leads to a food security outcome. The magnitude, timing and history of risk, and risk responses determine the nature of the outcome. For example, a household might be able to mitigate or cope with risk in the short-term while other households facing frequent or long-term risks may find it unable to manage risk in subsequent periods, particularly when assets are degraded. The outcomes (proxies for food insecurity, increased malnutrition, and increased poverty) are often captured in static snapshots. Vulnerability, however, is a continuous process of exposure to risk and responses and is forward looking in terms of expectance of outcomes (TANGO 2004a).

A vulnerability analysis uses a livelihood framework to examine the various components of risk encountered by a given household or community. A thorough assessment of vulnerability starts with careful analysis of each component sequentially arranged in a risk chain (Figure 2). The process begins with consideration of the political, social, economic, and environmental context that characterize both the given locale and the history of risk events it has been exposed to. Second, it takes into consideration the various *ex ante* risk management strategies that have been developed by individuals, households and communities living in this context. For any given context, the vulnerability of households will be determined largely by the varying status of assets as well as the combination of livelihood strategies pursued. The third step in a vulnerability analysis examines the magnitude, frequency and duration of past and potential shocks. Fourth, it examines the *ex post* risk coping strategies used by households, communities and governments to respond to such shocks. This includes household coping strategies, informal safety supported by communities, and formal safety nets implemented by governments and NGOs. Finally, the outcomes that result from a shock and the risk response are taken into account to enable social support to be temporally and spatially targeted (TANGO 2004a).

Figure 2: Livelihood Risk Chain

Context	Risk Management	Shocks	Risk Coping	Outcomes
Economic Social Political Environmental Institutional	Risk reduction Risk mitigation	Economic Natural Political	Coping strategies Informal safety nets Formal safety nets	Food security Nutrition Poverty

2.4 Livelihood Approach to Assessing Food Insecurity

The level of food insecurity for any given community or household, is largely determined by the assets they hold, the strategies they employ to cope with a range of shocks, and the food security outcomes they are able to achieve. The following concepts are important for understanding livelihood security and are critical to enhancing food security.

2.4.1 Context, Conditions and Trends

A holistic analysis of livelihood security begins with an understanding of the context, conditions, and trends encountered by a particular population. This is because the macro-level social, economic, political, environmental, demographic, historical and infrastructural factors each influence the range of possibilities for community and household livelihood systems. Furthermore, the underlying causes of poverty, as well as the current and future status of livelihood security, are often determined by long-term cultural, social, economic and political trends. While development projects are not likely to be able to change entrenched cultural, social and political practices, they may be able to target interventions to key leverage points in support of positive trends or to counteract negative social, economic, and political trends (TANGO 2002).

2.4.2 Livelihood Resources

Households have access to both tangible and intangible assets that allow them to meet their needs. It is important to note that livelihood security is dependent on a sustainable combination of each of these resources and that some are prerequisite to others. In all cases, the most vulnerable households are those that lack these resources and therefore have limited access to services and systems that sustain livelihoods (TANGO 2002).

Figure 3: Forms of Capital that Influence Livelihood Security

Natural Assets	Natural resource stocks from which resource flows useful for livelihoods are derived (e.g. land, water, wildlife, biodiversity, and environmental resources).
Financial Assets	Cash and other liquid resources, (e.g. savings, credit, remittances, pensions, etc).
Physical Assets	Includes basic infrastructure (e.g. transport, shelter, energy, communications, and water systems), production equipment, and other material means that enable people to maintain and enhance their relative level of wealth.
Human Assets	Consists of the skills, knowledge, ability to labor and good health, which are important to the pursuit of livelihood strategies.
Social Assets	The quantity and quality of social resources (e.g. networks, membership in groups, social relations, and access to wider institutions in society)

	upon which people draw in pursuit of livelihoods. The quality of the networks is determined by the level of trust and shared norms that exist between network members.
Political Assets	Consists of relationships of power and access to and influence on the political system and governmental processes at the local and higher levels.

2.4.3 Institutional Process and Organizational Structures

Typically, a range of institutions may operate within a community, have jurisdiction over certain community functions, and/or directly influence the livelihood outcomes of the population. Common examples include national, regional, and local governments, non-government organizations (NGOs) and community-based organizations (CBOs), religious institutions, and trade associations. It is important to acknowledge that each of these institutions maintain different organizational structures that can have positive or negative effects on local livelihood systems. As such, it is essential that an analysis of food and livelihood security take these differences into account during the formulation of future interventions (TANGO 2002).

2.4.4 Livelihood Strategies

Households combine their livelihood resources within the limits of their context and utilize their institutional connections to pursue a number of different livelihood strategies. Strategies can include various types of production and income-generating activities (e.g. agricultural production, off-farm employment, informal sector employment, etc.) or, often, a complex combination of multiple activities. A comprehensive analysis of food security should seek to determine the livelihood strategy portfolios that different households or groups pursue and the food security outcomes that result. Although some of the information on livelihood strategies will be derived from secondary sources, more detailed information will be obtained from the primary data collection during the assessment (TANGO 2002).

In order to correctly identify groups that are most vulnerable to food and livelihood insecurity, it is important to disaggregate data according to ethnic groups, gender, economic status, social strata, age, etc. These can be traced to historic patterns of discrimination, exploitation and limited access to social, financial, judicial and information services – for example, education, credit, land tenure, and market data respectively. Political affiliations also may determine who has access to jobs and services (TANGO 2002).

In the analysis of livelihood strategies, it is also important to capture the types of coping strategies vulnerable populations use when normal livelihood options are not adequate to meet household needs. At the same time, it is important to distinguish between unsustainable coping strategies (i.e. divestment strategies) from those capable of supporting livelihoods over the long term (i.e. crop diversification).

2.4.5 Livelihood Outcomes

A number of outcome measures provide information on the extent to which households are successfully pursuing their livelihood strategies. In addition to food security, livelihood outcomes include the level of access to education, health, habitat, social network participation, physical safety, environmental protection, and life skills capacities. Ultimately, an analysis of food and livelihood security should determine the synergistic relationships between various outcome measures, including those identified in collaboration with community members.

2.5 The Food Insecure and Vulnerable Groups

In assessing a given population or group's vulnerability, it is also important to understand the distinction between chronic vulnerability and transitory vulnerability to food insecurity. **Chronic vulnerability to food insecurity** is a situation in which people and households are persistently at risk of being unable to meet their food consumption needs. Food insecurity can be seasonal or can affect households for a period of several years. Chronic food insecurity is closely linked with the structural disadvantages that contribute to chronic poverty – typified by lack of access to land or other productive assets, high dependency ratios, chronic sickness and/or social barriers (McKay and Lawson 2002, TANGO 2004b).

Typically, the landless, female-headed households, elderly, sick and disabled and other disadvantaged groups with low levels of asset holdings, limited household labor, and insufficient means of support from family members, are the most food insecure and vulnerable. People living in areas prone to disasters or conflict may also be chronically food insecure, as well as those living in areas of conflict. In a given context, the chronically food insecure may be very heterogeneous. In other words, their demographic characteristics and the causal factors that led to destitution may vary (TANGO 2004a).

In areas characterized by **transitory vulnerability to food insecurity**, households and communities impacted by shock are temporarily unable to meet their food intake needs without sacrificing productive assets or undermining human capital. Transitory food insecurity may result from seasonal income fluctuations, adverse price movements or temporary shocks. In other words, transitory food insecurity is associated with an inability of households to maintain their consumption levels in the face of fluctuations or shocks affecting their incomes or circumstances (McKay and Lawson 2002, TANGO 2004A).

The transitory food insecure often represents a larger proportion of the rural or urban population who experience food insecurity either cyclically, during lean periods of the year, or suddenly as a result of a shock or emergency. Transitory vulnerable households are often able to rely on their social capital as well as their access to assets to cope with shortfalls in the near term. The major problem these types of households face is consumption smoothing (TANGO 2004b).

2.6 Risk and Vulnerability Framework

Figure 4 presents an analytical framework for integrating an analysis of risk and vulnerability into an assessment of food insecurity. It corresponds to the earlier discussion of a livelihood approach to assessing food insecurity and serves as the basis for the assessment process guidelines, analytical methods and implementation strategies presented later in this document.

The first column on the left identifies types of contextual and livelihood information critical to understanding the risk environment and potential resources, activities, household characteristics and institutions that enable individuals, households and communities to manage risk. The next column identifies information needs critical for determining the types of risks communities and households are exposed to and how they manage and cope with these risks. This section also identifies food security and nutrition outcomes resulting from risk exposure and risk management strategies. The third column specifies the trends that are important to track, the different levels of vulnerability that can be found (vulnerable individuals, vulnerable household types, vulnerable groups, and vulnerable populations), and the opportunities that can be built upon for reducing vulnerability in the future.

Figure 4: Risk and Vulnerability Analytical Framework

Information needs	Level I analysis	Level II analysis
<p>Contextual/External Physical and environmental information Key features and trends • Political - Policy reforms (e.g. land tenure) • Social - Population dynamics, potential for conflict • Economic • Ecological • Infrastructure • Institutions</p> <p>Community Level Social differentiation Socio-political considerations Institutional types Spatial considerations Livelihood systems</p> <p>Household Level Livelihood resources (capital) • Physical • Natural • Social • Economic • Human • Political Household characteristics Economic activities/livelihood strategies Norms</p> <p>Intra household Level Gender Generational Dependency ratios HIV/AIDS</p>	<p>Hazard/Risk Inventory Hazard/risk sources • Health • Environment • Conflict • Social • Economic • Natural</p> <p>For all hazards/risks Frequency Severity Trends • Correlation (covariate, idiosyncratic) • Temporal/spatial attributes • Exposure level</p> <p>Risk Management (Ex Ante) Risk reduction Risk mitigation</p> <p>Risk Coping(Ex Post) Household coping Strategies Community Informal safety nets Formal Safety nets</p> <p>Outcomes Food security proxies Human capital indicators (food consumption, health status, education) Poverty indicators (income, assets, social exclusion)</p>	<p>Sensitivity Dynamic perspectives • Trends in household dynamics • Trends in livelihood strategies • Institutional trends</p> <p>Current vulnerability (snapshot) • Individuals that are vulnerable • Household vulnerability • Vulnerable groups ▪ Chronic ▪ Transitory • Vulnerable populations</p> <p>Opportunities/Resilience Capabilities/capacities • Households • Communities - Informal safety nets</p> <p>Stakeholders (local and external)</p> <p>Policy</p>

Adapted from TANGO (2004)

3.0 Analysis Plan

3.1 Guiding questions

The Food Insecurity and Vulnerability analysis will seek answers to the following four questions (WFP: VAM 2005b).

- a) Who is vulnerable to food insecurity and hunger?
- b) Where do they live?
- c) How many are they?
- d) Why are they food insecure?

The quantitative survey and qualitative study will try to answer the above four questions. Indicators to be used in the quantitative survey and qualitative study were derived from the Vulnerability and Food Security Framework and Risk and Vulnerability Analytical Framework.

3.1.1 Variables for quantitative survey:

- **Physical resources**
 - housing
 - productive assets
 - household appliances
 - transport assets
- **Natural assets**
 - land
 - livestock
- **Social capital**
 - dependency ratio
 - participation in social occasions
 - membership in community organizations
- **Economic capital**
 - income
 - savings
 - credit
- **Human capital**
 - food consumption
 - health status
 - education
 - water and sanitation
- **Household characteristics**
 - household composition
- **Economic activities/livelihood strategies**
 - income sources
 - income diversity
 - production strategies
 - migration
 - remittances
- **Household coping strategies**
 - Adjustment strategies
 - Borrowing strategies
 - Divestment strategies
- **Community formal and informal safety nets**
 - membership in VGD cards; old age pensions; food for education; food for work

- access to *zakat*³
- patron-client relationship
- **Poverty indicators**
 - income
 - food and non food expenditure
 - share of expenditure on food
 - assets
 - social exclusion
 - indebtedness
 - loan repayment status
 - ability to buy foods
 - sending children to school
 - possessing clothes to wear outside the house
 - poverty trajectory
- **Food security proxies**
 - number of months food secure
 - number of meals
 - food group diversity and frequency

3.1.2 Variables for qualitative study:

- **Contextual information**
 - Physical and environmental information
- **Key features and trends**
 - Political
 - Social
 - Population dynamics
 - Economic
 - Ecological
 - Infrastructure
 - Institutions
- Trends in livelihood strategies
- Trends in access to resources and assets
- Trends in wealth differentiation
- Hazard risk inventory and trends
- Trends in exposure to risks
- Trends in risk management (ex ante and ex post strategies)
- Capabilities and household capacities to manage risks
- Community's perception about vulnerability
- Poverty trajectory
- Social capital
 - Patron client relationship (s)

3.2 Constructing socio-economic profiles

Two different approaches will be followed to create the socio-economic profiles. The first approach has two steps. First, the indicators selected for inclusion in the food insecurity and vulnerability analysis will be processed using principal component analysis (PCA) techniques. Second, cluster

³ *Zakat* is an Islamic system of social welfare which includes an alms tax on wealth held more than one year.

analysis will be used to translate this information into clusters or groups of households that share key characteristics and outcomes related to food insecurity and vulnerability.

The second approach also has two steps. In the first step, a vulnerability index will be developed based on household assets, income, dietary quality, coping strategy, and livelihood strategies. Z-scores will be calculated to standardize the variables to develop the vulnerability index. The second step would be to group the households into different socio-economic categories based on the z-score values of the vulnerability index.

Descriptive results disaggregated by zones will help to better understand the zonal variations of the key indicators. Moreover, these results will help to understand the overall food security and vulnerability status of different socio economic groups in WFP priority areas. Once the socio-economic groups are identified using the above mentioned strategies, descriptive information will help in creating the socio-economic profiles.

Information generated through the qualitative study will help to interpret the quantitative results and will answer the following questions:

- a) Are certain groups of people vulnerable to food insecurity?
- b) What factors contribute most to sliding down to a food insecure state?
- c) What factors prevent the groups from escaping food insecurity? Why do certain households remain food insecure and vulnerable for a prolonged period of time?
- d) What are the trends of vulnerable households in exposure to risks and shocks and the capacity to manage them?
- e) What constrains vulnerable households to accessing safety net programmes?
- f) the severity and frequency of coping strategies?
- g) As perceived by the households and communities, what is the trajectory of food insecurity and vulnerability of the households who are in chronic poverty and the households who are in transitory poverty for a 20 year time span? What are the reasons for particular group of households' trajectories?
- h) What is the perception of the communities about vulnerability?
- i) What are the trends in accessing resources and assets? Why these trends occurred?

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Annex B

Sampling Strategy for Socio-Economic Profiles of WFP Operational Areas and Beneficiaries

Two-Stage Sampling Procedure

I. Sample size

Assume that we want to measure the mean of a continuous variable (such as value of assets or household income) that has a coefficient of variation of 1.5 to within 15 percent of the actual value with a 90% confidence interval in a two-stage survey design (assume design effect of 1.5).

Sample size formula:

$$n = D * \{(z_{\alpha/2})^2 \sigma^2\} / E^2$$

$$= 405.9$$

Where n = minimum sample size

D = design effect [1.5]

$z_{\alpha/2}$ = z value for normal distribution with 90% confidence interval (2-tailed) [1.645]

σ = standard deviation of variable in underlying population (as proportion of mean) [1.5]

E = maximum desired sampling error (as proportion of mean) [0.15]

Then the minimum required sample size per zone is 406, to give a total sample size of 2,436 households. Adding in a non-response factor of 10% gives an initial target sample size of at least 446 per zone, or a total of approximately 2,676 households.

II. Sample Selection

The sampling procedure will provide a random sample of all households within each zone. Within each zone, all households have an equal probability of being selected. A two-stage sampling procedure will be followed. In order to minimize the design effect, the largest possible number of villages should be chosen per WFP priority zone. For logistic purposes, a target of 20 HH per village is preferred. In order to obtain a sufficient number of households per zone, a total of 23 villages per zone will be selected.

Step 1: Selection of Villages

First, a sample frame of all villages within each of the WFP priority zones will be prepared, along with an estimate of the population (or number of households) in each village. The lists should be arranged geographically, to ensure adequate geographic coverage of the sample. From these lists, a sample of villages will be systematically randomly selected using the probability-proportional-to-size (PPS) technique.

Table 1

WFP Priority Zone	Total Number of Upazilas	Total Number of Villages	Number of Villages Selected	HH per Village	HH per Zone

Coastal Zone	6	<i>TBD</i>	23	20	460
Chittagong Hill Tracts	13	<i>TBD</i>	23	20	460
Drought Zone	26	<i>TBD</i>	23	20	460
Northwest	36	<i>TBD</i>	23	20	460
North Central Chars	36	<i>TBD</i>	23	20	460
Haor Basin	28	<i>TBD</i>	23	20	460
Total	145	(<i>≈ 13,000</i>)	130		2,760

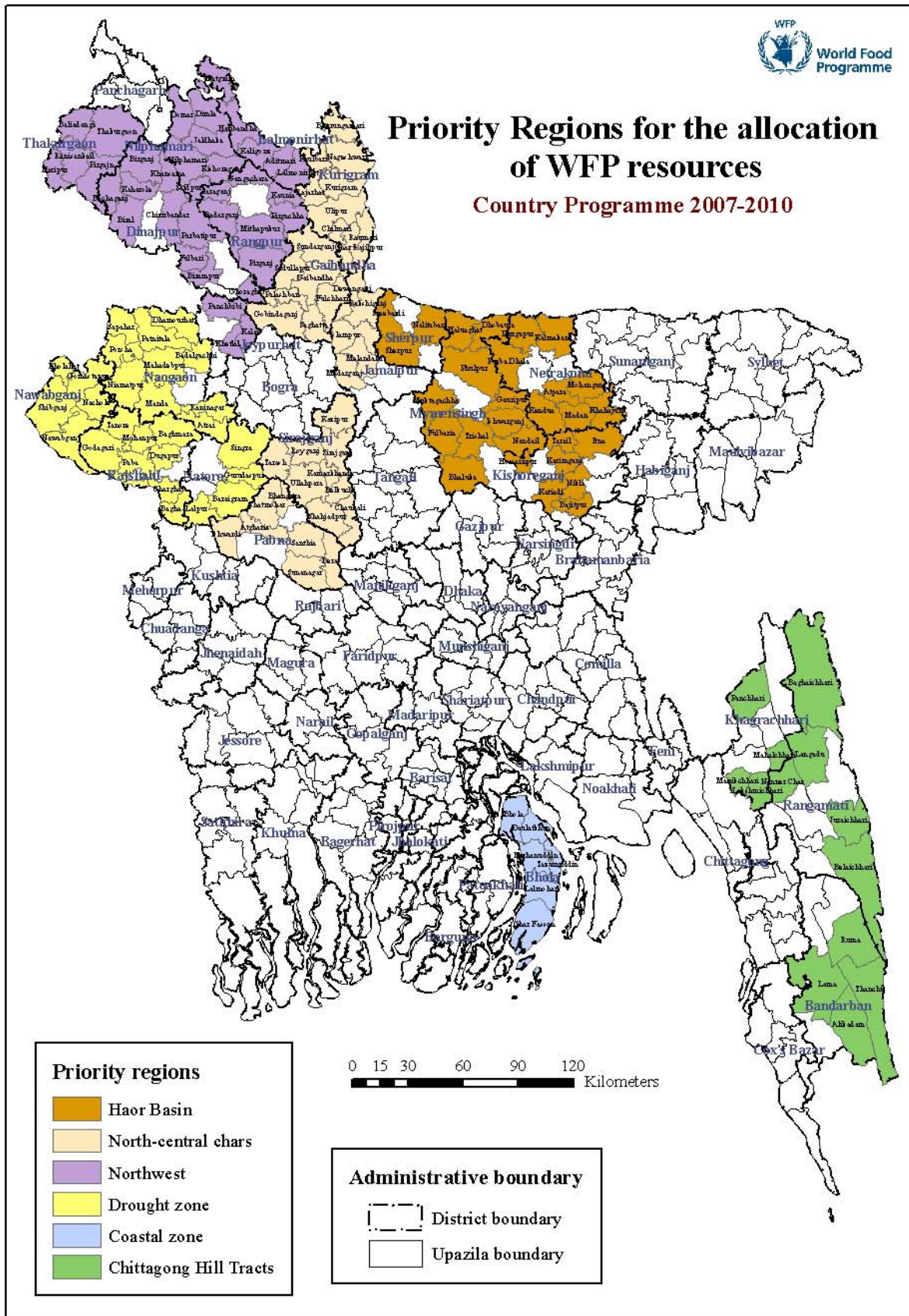
Step 2: Selection of households

Once the villages have been selected, the survey team will need to develop a census of all households within the selected villages. During the training for the village census, enumerators must be instructed to get complete list of all residents within the geographic boundaries of the village, whether or not the residents are considered to be part of the local community. From the list of all households in the selected villages, a sample of 20 HH will be selected using systematic random sampling technique. Households lists should be arranged by alphabetical order.

III. Sample Weighting Factors

Because the number of households selected from each zone is not the same as the proportion households within each zone, relative to the number of households in all six zones, households will have different probabilities of being selected in each zone. In order to correct for the fact that households in different zones have different probabilities of being selected, a weight factor will need to be constructed, with a different weight for each zone. The weight factor will be equal to the total number of households in the zone (may be estimated by dividing the total population in the zone by 5, the average HH size) divided by the number of households selected within the zone.

Annex C



Annex D

Selected Sample Cluster Villages

Chittagong Hill Tracts						Qualitative			
DISTRICT	UPAZILA	UNION	MOUZA	VILL.	LOCALITY NAME	TOTAL HH			
Rangamati	Nanner Char	38	447	2	Maieh Chhari	52			
Rangamati	Nanner Char	76	895	8	BarapuL Para	28			
Rangamati	Langdhu	40	590	7	9 No. Nutan Para	55			
Rangamati	Langdhu	67	135	5	Bengi Chhara	70		CHT1	1
Rangamati	Langdhu	81	904	6	1 No.block	39			
Rangamati	Belaichhari	23	994	1	Degal Chhari Adarshagrill	116			
Rangamati	Baghaichhari	11	52	17	Jautha Khalilar	52			
Rangamati	Baghaichhari	47	419	7	Uttar Pablakhal i	68		CHT2	2
Rangamati	Baghaichhari	83	314	2	Baghaihat Gangara Jh	87			
Kagrachhari	Panchhari	38	459	3	Ul tachhari (bangal ipara)	807			
Kagrachhari	Panchhari	76	765	13	Khadyagodam Area	78			
Kagrachhari	Manikchhari	19	552	5	Asalang Para	31			
Kagrachhari	Manikchhari	63	758	32	Oepua Para	54			
Kagrachhari	Mahalchhari	31	76	7	Mohazan Para	75		CHT3	3
Kagrachhari	Mahalchhari	63	688	3	Shalban	67			
Kagrachhari	Lakshmichhari	71	310	2	Tofazzal Hossain Para	10			
Bandarban	Thanchi	57	904	1	Nadira Para	49			
Bandarban	Ruma	76	781	25	Khoyai Para	8			
Bandarban	Lama	15	387	3	Khederband Para	127			
Bandarban	Lama	31	994	2	Membar Para	99		CHT4	4
Bandarban	Lama	63	166	12	Kuai lartek Para	59			
Bandarban	Lama	79	939	3	TJrmong Para	36			
Bandarban	Alikadam	63	426	13	Al i Member Para	36			
Coastal Zone						Qualitative			
DISTRICT	UPAZILA	UNION	MOUZA	VILL.	LOCALITY NAME	TOTAL HH			
Bhola	Sadar	7	899	1	Rohita	520	1		
Bhola	Sadar	29	344	2	Paschim Char sibpur	1029	2		
Bhola	Sadar	51	535	1	GIJpta Munshi	1141	3	Coast1	5
Bhola	Sadar	65	516	1	Gazaria	234	4		
Bhola	Sadar	80	449	1	Daksh;n Dighaldi	669	5		
Bhola	Borhanuddin	9	46	1	Bara Manika	1682	6		
Bhola	Borhanuddin	38	373	1	Dakshin Char lamchhidhali	740	7	Coast2	6
Bhola	Borhanuddin	57	668	1	Dakshin Kutuba	1105	8		

Annex: Selected Sample Cluster Villages

Bhola	Borhanuddin	95	404	1	Dalalpur	1718	9			
Bhola	Char Fashion	19	34	1	Ayeshabagh	599	10			
Bhola	Char Fashion	38	593	1	Hamidpur	483	11			
Bhola	Char Fashion	47	925	1	Uttar Char Aicha	1218	12	Coast3	7	
Bhola	Char Fashion	66	471	1	Dakshin Char Fasson	1427	13			
Bhola	Char Fashion	85	6	1	Ahmedpur	1144	14			
Bhola	Daulatkhan	9	127	1	Bhabanipur	1379	15			
Bhola	Daulatkhan	38	783	1	Paschim Hazipur	807	16			
Bhola	Daulatkhan	95	190	1	Char Bara Lamchhidhati	3076	17			
Bhola	Lal Mohan	19	244	1	Purba Char Bhuta	837	18			
Bhola	Lal Mohan	28	734	1	Kundar Hawla	439	19	Coast4	8	
Bhola	Lal Mohan	57	336	1	Char lalmohan	1106	20			
Bhola	Lal Mohan	76	933	1	Uttar Raychand	611	21			
Bhola	Tazmuddin	38	958	2	Uttar Purba Chanchra	440	22			
Drought Prone							Qualitative			
DISTRICT	UPAZILA	UNION	MOUZA	VILL.	LOCALITY NAME	TOTAL HH				
Naogaon	Atrai	84	795	1	Phulbari	61	1			
Naogaon	Dhamoorhat	21	370	1	Chak Subal	89	2			
Naogaon	Manda	33	339	1	Chak Raghunathpur	386	3			
Naogaon	Mohadebpur	9	580	1	ICHurda Narayanpur	410	4	Drought1	9	
Naogaon	Mohadebpur	95	994	1	Uttargram	1057	5			
Naogaon	Patnitala	17	907	1	Sidhatail	124	6			
Naogaon	Porsha	55	832	2	Dhawa Para	99	7			
Naogaon	Shapahar	71	191	1	Purbapara	57	8			
Nawabganj	Gomastapur	63	71	4	Lulapur	22	9			
Nawabganj	Sadar	3	781	1	Namo Rajarar	1684	10			
Nawabganj	Sadar	83	807	3	Uttar Krishna Gobinda	276	11	Drought2	10	
Nawabganj	Sheebganj	41	587	2	Balu Char	474	12			
Rajshahi	Bagha	15	769	1	Milikbagha	949	13			
Rajshahi	Baghmara	50	222	1	Chanderara	284	14			
Rajshahi	Baghmara	3	631	1	Natun Bi Ishimla	620	15	Drought3	11	
Rajshahi	Charghat	31	162	1	Batkamari	208	16			
Rajshahi	Durgapur	47	87	1	Bagalpara	108	17			
Rajshahi	Godagari	66	469	1	Jhikra	53	18			
Rajshahi	Tanore	27	361	1	Dhananjaipur	66	19			
Natore	Boroigram	59	163	1	Borni	227	20			
Natore	Gurudashpur	67	698	1	Majh Para	387	21			
Natore	Lalpur	85	674	1	Haminpur	335	22	Drought4	12	
Natore	Singra	79	88	2	Nilcllora	122	23			

Socio-Economic Profiles of WFP Operational Areas and Beneficiaries

Northwest						Qualitative			
DISTRICT	UPAZILA	UNION	MOUZA	VILL.	LOCALITY NAME	TOTAL HH			
Dinajpur	Birampur	59	279	1	Chaugharia	146	1	NW1	13
Dinajpur	Biral	28	553	1	Karala	219	2		
Dinajpur	Chirirbandar	15	13	1	Alokdihi	1044	3		
Dinajpur	Phulbari	84	744	1	Pathak Para	124	4		
Dinajpur	Khansma	79	506	1	Goaldihi	1492	5		
Joypurhat	Kalai	38	217	1	Boral	223	6		
Joypurhat	Panchbibi	52	107	1	Bal ighata	935	7		
Lalmonirhat	Hatibandha	9	742	1	purba Fak I r Para	780	8		
Lalmonirhat	Kaliganj	95	424	1	Kanchanshwar	840	9		
Lalmonirhat	Patgram	19	424	1	Dahagram	1526	10		
Nilphamari	Dimla	95	131	1	Char Kharibari	357	11	NW2	14
Nilphamari	Jaldhaka	51	445	1	Kaimari	2038	12		
Nilphamari	Kishoreganj	77	85	1	Baghdahara	1043	13		
Nilphamari	Sadar	75	805	2	Pasch i m Ramnagar	584	14		
Rangpur	Badarganj	25	19	1	Amrulbari	928	15		
Rangpur	Gangachhara	63	40	1	Ale Kismat	271	16		
Rangpur	Mitthapukur	22	222	1	Dakshin Tajpur	149	17	NW3	15
Rangpur	Mitthapukur	83	888	1	Sekur Para	208	18		
Rangpur	Pirgachha	85	773	1	Rahmat Char	756	19		
Rangpur	Pirganj	88	613	2	Jatimanpur	75	20		
Thakurgaon	Haripur	27	53	1	Bakua	846	21	NW4	16
Thakurgaon	Ranisangkail	31	393	1	Dhuljharl	240	22		
Thakurgaon	Sadar	42	621	1	Kismat Tewarigaon	349	23		
North Central Chars						Qualitative			
DISTRICT	UPAZILA	UNION	MOUZA	VILL.	LOCALITY NAME	TOTAL HH			
Gaibandha	Sadar	58	512	1	Kholahati	1846	1		
Gaibandha	Gobindaganj	39	775	1	Khulhar	633	2	Char1	17
Gaibandha	Palashbari	47	752	1	Paschim Nayanpur	188	3		
Gaibandha	Sadullapur	94	71	1	Bara Daudpur	708	4		
Kurigram	Bhurungamari	28	644	1	Marakhana	74	6		
Kurigram	Phulbari	40	398	1	Kabi r Mamud	534	7		
Kurigram	Nageshwari	25	321	2	Senpara	78	8	Char2	18
Kurigram	Rajarhat	73	746	1	putikata	201	9		
Kurigram	Ulipur	55	685	1	Paschim Kaludanga	570	10		
Sirajganj	Kamarkhanda	76	217	2	paschim Chaubari	216	11		
Sirajganj	Raiganj	38	324	1	Dhangara	605	12		

Annex: Selected Sample Cluster Villages

Sirajganj	Shahjadpur	43	255	2	China Oukuria	355	13	Char3	19
Sirajganj	Sadar	17	837	1	Ratani	100	14		
Sirajganj	Tarash	84	475	1	Kah it	306	15		
Sirajganj	Ullapur	87	684	1	Pang Khurua	268	16		
Jamalpur	Dewanganj	58	450	2	Psschimpara	157	17		
Jamalpur	Islampur	94	886	8	Uttar Jarduba	361	18		
Jamalpur	Melandaha	47	270	1	Charalkandi	170	19		
Pabna	Bera	31	222	1	Char Nakal ia	149	20		
Pabna	Chatmohar	60	144	1	Baruri a	343	21	Char4	20
Pabna	Santhia	25	531	1	Narlagodal	239	22		
Pabna	Sujanagar	95	552	1	Kror Dut ia	352	23		
Haor Basin						Qualitative			
DISTRICT	UPAZILA	UNION	MOUZA	VILL.	LOCALITY NAME	TOTAL HH			
Kishoreganj	Bajitpur	94	883	4	Puran Khala	101	1		
Kishoreganj	Itna	94	844	1	Ra Hut i	763	2		
Kishoreganj	Katiadi	19	829	1	Noapara	218	3		
Kishoreganj	Nikli	57	840	3	ShaharnaJI	449	4	Haor1	21
Mymensingh	Bhaluka	43	903	2	ohut ia	946	5		
Mymensingh	Dhobaura	47	825	1	Pethel 19aon	118	6		
Mymensingh	Fulbari	59	633	1	Kushmail	2544	7		
Mymensingh	Gauripur	58	126	1	Bhut i arkona	256	8		
Mymensingh	Haluaghat	67	821	1	Randhunlkura	230	9		
Mymensingh	Ishwarganj	76	306	1	Enayetnagar	310	10		
Mymensingh	Muktagachha	51	659	1	Mahishtara	1092	11		
Mymensingh	Nandail	39	470	6	Talia Para	214	12		
Mymensingh	Phulpur	22	226	1	Bishka	745	13	Haor2	22
Mymensingh	Phulpur	76	171	1	Batta	136	14		
Mymensingh	Trishal	57	626	4	Ainakhet	178	15		
Netrokona	Durgapur	8	927	1	Harala	217	16		
Netrokona	Kalmakanda	35	355	1	Chhota Dubi arkona	59	17		
Netrokona	Kendua	47	863	1	Ratnargati	48	18	Haor3	23
Netrokona	Mohanganj	21	93	3	Kashipur	123	19		
Netrokona	Purbadhala	79	842	3	Hapani a	196	20		
Sherpur	Sadar	1	402	1	Kalir Bazar	225	21	Haor4	24
Sherpur	Sadar	61	572	9	Daksh i n DQbar Char	378	22		
Sherpur	Sreebordi	71	78	1	Bali juri	299	23		

Annex E

**WORLD FOOD PROGRAMME
BANGLADESH**

SOCIO-ECONOMIC PROFILES

QUALITATIVE SAMPLE VILLAGES

SL#	Qual. Zone	Village	Union	Upazila	District	Sample ID#
1	CHT1	Thali Para	Mahalchhari	Mahalchhari	Kagrachhari	14010162
2	CHT2	Pillat Para	Rupakari	Baghaichari	Rangamati	14020099
3	CHT3	Headman Para	Banjugichhara	Juraichhari	Rangamati	14020210
4	CHT4	Dardari Barua Para	Lama	Lama	Bandarban	14030289
5	Coast1	Dakshin Dighaldi	Dakshin Digaldi	Bhola Sadar	Bhola	23010125
6	Coast2	Uttar Raychand	Ramganj	Lalmohan	Bhola	23010366
7	Drought1	Parlnethpur		Manda	Naogaon	31090934
8	Drought2	Lalcshimipur		Shibganj	Nawabganj	31101082
9	Drought3	Baliaghata		Gadagari	Rajshahi	31110881
10	Drought4	Hadhaimuri		Baraigram	Natore	31120129
11	NW1	Bhatpai	Betdighi	Fulbari	Dinajpur	41020933
12	NW2	Naodabas	Boragari	Domar	Nilphamari	41030063
13	NW3	Rasultari	Mahishkchocha	Aditmari	Lalmonirhat	41040077
14	NW4	Bhaktipur	Ranipukur	Mithapukur	Rangpur	41060624
15	Char1	Owarika		Ulipur	Kurigram	51051714
16	Char2	Damgachha		Gobindhaganj	Gaibandha	51070507
17	Char3	Balarampur		Kamarkandha	Sirajganj	51130177
18	Char4	Sara Pathai Ihat		Santhia	Pabna	51140977
19	Haor1	Nij Khosalpur		Sreebardi	Sherpur	62010423
20	Haor2	Barttakona		Mohanganj	Netrakona	62031252
21	Haor3	Nijpara		Trishal	Mymensingh	62042176
22	Haor4	Hidankhali		Karimganj	Kishoreganj	62050473

Annex F

**WFP BANGLADESH
SOCIO-ECONOMIC PROFILES STUDY**

**SCHEDULE FOR KEY INFORMANTS
VILLAGE PROFILE**

Village _____ Upazila _____

District _____ WFP Survey Zone _____

Interviewer _____

Name of KI _____ Status of KI _____

13. DEMOGRAPHIC FEATURES:

a. **Total Number of households in the village (estimates)**

Ethnic Group Composition	Household No		Estimated Population	
	Male Headed	Female Headed	Male	Female
1.				
2.				
3.				

Total: (1) Households _____ (2) Population of village _____

14. SETTLEMENT PATTERN: Scattered/ Individual/ Nested/ Clustered

- a. Settlement History
- When did people first settle here? _____
 - Why did people come? _____
 - From where did people come? _____
 - Where are they coming from now? _____
 - Are people moving out? Where to? _____
- b. Migration & Mobility
- Seasonal? _____
 - To & from where? _____
 - Why? _____

3. VILLAGE RESOURCES:

- a. Distance to forest (km) & Time: _____
- b. Distance to cultivated land: _____
- c. Area Irrigated (ha) _____
- d. Community land (ha) _____
- e. Electricity in Village? Yes/No How many households have access? _____
- f. Distance from nearest market centre: (km) _____
From Union HQ (km) _____
From Upazila town: (km) _____
- g. Is the village connected by a
 - 1. Pucca road: Yes/No
 - 2. All-weather kacha road: Yes/No
If no, distance to the nearest pucca road _____)
 - 3. How long walking (hrs): _____
- h. Main Source of drinking water in the village

Sources _____
(tubewell, piped water, river, open well, pond, other surface water)

Quality _____

Number of users/water source _____

Distance to source _____

Reliability of supply _____

Any arsenic in water supply? _____

If so, describe the arsenic problem

- i. How many latrines in the village? _____

Types of latrines _____
- j. 1. No. of union members from the village _____
2. No. of women union members from the village _____
3. No. & Assessment of union accomplishments

Annex: Key Informant Village Profile Format

k. Educational facilities in the village (estimates):

Type of School	Where is it located?	Distance (km) from village	Time (hrs) from village	No. of children attending	No. of girls attending
Primary School					
Junior High School					
Secondary School					
College					
Residential School					
Non-formal Education (NGO)					
Others (specify) _____					

What is the literacy rate in the community? _____

l. Medical Facilities:

Types of Medical Facilities / Personnel / Services	Where is it / he/she located?	Distance (km) from village	Time (hrs) from village
Union Health Centre			
Upazila Health Centre			
Hospital			
Medical Officer			
Satellite Clinic			
TBA (trained / untrained)			
Faith Healer			
Traditional Healer			
NGO (specify the NGO)			
Pharmacy or Shop			
Others (specify) _____			

Describe the prevalence of HIV/AIDS

j. Extension Service Facilities

Type of Extension Services	Where is it located?	Distance (km) from village	Time (hrs) from village
Grameen Bank			
BRAC			
Other large NGO Credit Service (specify the NGO & service)			
Commercial Bank			
Cooperative Society			
Agriculture Extension Service How often do they visit village?			
Fisheries			
Forest Department			
Government projects in village?			
Other NGOs (specify)			
Others (specify)			

4. CONCLUSIONS & MAJOR PROBLEMS

a. What major problems do you face in this community?

Problems	Causes	Rank
1.		
2.		
3.		
4.		
5.		

b. What are the potential solutions to these problems?

Signature of the Interviewer _____ **Date** _____

Annex G

WORLD FOOD PROGRAMME, BANGLADESH SOCIO-ECONOMIC PROFILES

Topical Outlines for Data Collection Focus Group Discussions

Village _____
Upazila _____ District _____
WFP Zone _____
Facilitator _____ Recorder _____
Focus Group Gender _____

Number of people in group discussion: _____ Date _____

We will collect qualitative information in four villages in each of the six Survey Zones for a total of 24 villages. There will be two Focus Group (FG) discussions in each qualitative sample village: one male and one female group, with approximately 6-10 members each. The Men's and Women's groups will be interviewed separately.

Two survey team members will conduct each group discussion: one facilitator and one note-taker or recorder. It is important that a female member of the team facilitates the Women's group and a male member of the team facilitates the Men's group.

Begin the discussion by introducing yourselves and the purpose of the Livelihood Survey to the Focus Groups. Explain that the discussion will take about two to three hours. Another hour will be needed for the wealth ranking exercise.

What follows is not a list of formal interview questions, but an outline to guide small group discussions. This is a guideline to help guide the discussion, not a list of questions to be filled in. Keep the conversation flowing and encourage discussion within the group.

1 VILLAGE INFORMATION

A. TYPICAL HOUSEHOLD

1. Settlement pattern: How long have people lived here? From where? Reasons for moving?
2. Migration as a general practice: How many families have migrated in/out of the community in the past three years? Types of migration? What were the reasons for migration?

B. INFRASTRUCTURE—PERCEPTIONS OF ACCESS/QUALITY

1. Transport (road type, seasonal accessibility, transport service)
2. Schools (all levels):
 - What types of schools? (Primary, Secondary)
 - Accessibility (time/distance, fees)
 - Where are the nearest schools?
 - Quality of school (desks/latrine/books, teachers)
 - Valued by community? for both boys and girls?
 - Drop outs & reasons: Why do children drop out?
 - Any difference for boys/girls? Why?
 - How are schools supported (what funds?)
 - General problems and participation in school management

- How has quality of schools changed over the past three years?
- 3. Markets
 - Describe the most commonly used market.
 - Accessibility: time/distance/transport available, costs, if accessible all seasons
 - Type / frequency: (Village, regional)
 - Why do you go to market? (primary and secondary uses)
 - Do you get fair prices? How do you know the fair prices (for sale / purchase)?
 - Have prices changed over the past three years? How? Why?

C. HEALTH FACILITIES:

1. Health Services and Quality:

- *Accessibility: (time/distance/cost)*
- *What kinds of health facilities do you use?*
- *Why do you use these different health facilities?*
- *Describe the quality of service of the health facilities.*
- *Do you consult traditional health providers?*
- *For what types of health issues or diseases?*
- *Why do you use traditional health providers instead of government health facilities?*
- *What types of traditional health providers are commonly used?*
- *Are there any health taboos, things the doctor recommends that you won't want to do?*
- *Any knowledge of HIV/AIDS? Is HIV/AIDS found in the community?*
How has HIV/AIDS affected the community?

2. Maternal/Child Care (Only ask women's group)

- *Seek antenatal care, go for birth/delivery?*
- *Do you consult with TBA – Traditional Birth Attendant? Trained or Untrained TBA?*
Please describe the quality of service.
 - *How many TBAs are in the village?*
- *Special diet for pregnant/lactating women?*
- *What foods do you give to newborns?*
- *Give the first breastmilk? breastfeed exclusively?*
- *Weaning foods (types, age of child)? When does weaning begin?*
- *What foods do you feed to small children?*
- *Common childhood diseases? Causes of child death?*
- *Any method of birth spacing? Availability of modern contraceptives – accessible to all who want?*

D. AREA FEATURES

1. Type of terrain - observation
2. Forest cover (probe deeply in CHT)
 - Types (species)
 - Uses by community
 - What are the problems they are facing in forest uses?
 - How has the forest changed over the last 5-10 years?Protected watersheds – If none, what potential exists? (probe in CHT)
 - Existing watershed schemes
 - Size/area covered
 - People's involvement in management
3. Water (drinking/irrigation/non-drinking)
 - Sources – seasonal availability, distance, reliability
 - Time to collect
 - Quality of water
 - Control of access to water (community/government/private – cost?)

Annex: Focus Group Discussion Topical Outline

- Methods of storage of water, Water Treatment procedure, Costs of water and use pattern
- Prevalence of arsenic in the water supply.
 - If arsenic is a problem, how does village cope with this problem? Any ways to get rid of the arsenic?
- Trends in access to water over the past 5 years? Any changes?
 - Describe the changes.

4. Climate
 - Any erratic rains over last decade, flash floods, major floods, cyclones?
 - How does the village cope with disasters?
 - Any activities to protect village and households from disasters?
 - Describe protection activities.
 - Trends/changes over the past 5-10 years?
 - Any major environmental problems? What are the effects?
- B. River Erosion: Extent of causes & seasonality?

E. SOCIAL ORGANIZATION

1. Union / Village leadership
 - Are there women members? Do they participate in meetings & events?
 - Accomplishments – If none, why?
2. What are the usual ways of solving problems?
3. Self-help groups
 - Types (advocacy, marketing, community improvement, credit)
 - Women's groups – activities, accomplishments
4. Other organizations? (NGOs, CBOs)
5. Do you feel you are well represented? (Please probe / explain)
6. What are the major causes of disputes or conflicts in the community?
 - Types of conflicts
 - What are the causes & consequences of the disputes?
7. How do you solve social problems?

II LIVELIHOOD STRATEGIES: All major livelihood activities

A. Agriculture – Crop Production

1. Amount & sufficient arable land nearby?
2. Major crops grown in order of importance
 - (food crops for domestic consumption / for sale as cash crops)
 - By land type/quality
3. Access to agriculture inputs
 - Sources & availability of seeds (local seeds / hybrid seeds)
 - Fertilizer use: Sources & extent of use (manure, compost, chemical)?
 - When & which crops use fertilizer
 - Pest Control: Cultural, mechanical, biological, chemical?
 - Animal traction: Use, own or rent, cost, availability?
 - Irrigation: Regular or irregular, source of irrigation, methods of irrigation
 - Which crops are irrigated?
 - Who has access to inputs; who has no access?
4. Access to government services
 - Types of services: Credit, extension?
 - Agricultural extension: Access & quality
 - Access to credit facilities (formal/informal, terms of repayment, specify NGO, Government, moneylender, dadan system)
 - Type of credit, quality, usefulness, frequency of use
5. Crop/Food Storage

- Types, length of storage, amount of losses, reasons for losses
Measures taken to prevent or control losses
6. Division of labor: What do men/women do at each stage of production?
 7. What is the agriculture wage rate? (with food/without food?)
Wage rate for men? Women?
Are there differences by season?
Trends in agriculture wage rate over the past five years
 8. Problems associated with production (Ranking exercise)
Potential solutions to the problems listed above
Has production been increasing or decreasing? Why?
 9. Land tenure systems – ownership / access patterns
Who owns land? Average landholding
Is landlessness a problem? Why?
Is there sharecropping? (terms & conditions, trends) Why?
What are the sharecropping arrangements? (lease, mortgage, etc)
Is there government khas land? (patterns of use, trends)
Is there any conflict over land? Describe
Trends in access to land
- B. Animal Husbandry**
1. Types of animals raised, in order of importance
Uses of livestock (Production, animal traction, slaughter, consumption, sale)
When are livestock sold and for what reasons?
 2. Availability of Pasture: is there any conflict over pasture land, fodder (availability, changes in accessibility)
 3. Major animal diseases, availability of veterinary services
 4. Changing trends in animal husbandry over the past 5-10 years
 5. Major constraints & potential solutions
- C. Horticulture**
1. What kinds of horticultural activities are practiced?
Homestead gardening?
 2. What is normally grown?
 3. Who participates in this activity?
 4. What are the seasons?
 5. Is the production for sale or for consumption (for each crop)?
 6. Do most households have gardens or arable land nearby? How far away normally?
- D. Collection of Forest Products**
1. Are wild foods or forest products consumed? Types, why consumed, time of year of consumption, importance in relation to distress, trends in the diet. Names of wild foods or forest products
 2. Types of forest products and uses. What forest products are processed for sale? When?
 3. To whom do you sell forest products, prices, seasonal variations?
 4. Fuel wood, charcoal production?
 5. Marketing of forest products: Where are the markets? (Timber, non-timber, bamboo etc.)
Who buys the forest products? When do you sell and Why?
 6. Any conflict related to forest resources and land tenure?
What is the nature of the conflict? Why? How to solve?
 7. Changes in availability / scarcity? Are wild foods disappearing? Why?
 8. Are they growing more significant in the diet? Why?
 9. Major constraints & potential solutions
 10. Trends in forest product use over the past 5-10 years?
Comment about Forest Department – Supportive or not? Why?
- E. Fishing**
1. Types in order of importance. Changes in reliance on fishing
 2. Fishing gear owned or funded/dadan boat, nets, costs

- 3 What is the moneylending and renting system, credit access for fishing and availability
Extension service availability and quality
- 4 Fishing production/harvest amounts
- 5 Marketing arrangements, price and seasonal variations
- 6 Changes in availability /scarcity?
- 7 Describe the quality/availability/access to fishing inputs (boats, nets etc), markets, and
storage facilities.
- 8 Problems or constraints to production? How to solve these problems?

F. Other Income Generating Activities (IGAs)

1. Type of activity, extent of practice, & number of activities practiced:
 - a. Artisanal production,
 - b. Agricultural enterprise
 - c. Weaving, local beer,
 - d. Micro-enterprise,
 - e. Skilled labor,
 - f. Petty vending and trading,
 - g. Service,
 - h. Wage labor.
 - i. Rice alcohol (CHT)
 - j. Other IGA
2. When do you do each of these activities? (Year-round, annually)
3. How much do you earn from each IGA?
4. How do you access raw materials? Are they always available? (seasonality)
5. Demand & use of credit: Is credit available?
Source of credit for IGAs (moneylenders, government, NGOs)
Terms of credit (interest rates, loan terms, mortgages)
6. Any support service provided by government? By NGOs?
Any technical skills training? Extension services? Who provides?
7. Availability of wage labour: How many days/month do you participate?
Months/year
Are wage rates different for men & women? Male rates? Female rates?
8. Migration for work: where to, why, who goes, when, for how long?
9. Remittances: from where, when?
10. Any constraints in earning enough from this activity?
11. Trends over the past 5-10 years

III. COMMUNITY PROBLEMS, COPING STRATEGIES, & SOLUTIONS

Rank in order of importance, and address strategies/trends for each

- A. MAJOR PROBLEMS: Thinking about the issues discussed above and others not discussed,
what are the major problems facing the community?
What are the major causes of these problems? *Prioritise -- Ranking Exercise*
- B. TRENDS – Are these problems getting worse or better over the last 3-5 years?
Why worse or better?
- C. Interviewer summarizes key problems discussed, asks if anything was left out.
- D. COPING STRATEGIES – What do you do to get through the problem periods? Rank coping
strategies from order of severity.
- E. What can the community do / is the community doing to solve these problems?
List and rank the most important initiatives.

COPING STRATEGIES INDEX EXERCISE

What are the major shocks facing the community?

As a result of these shocks, have the families in the community experienced a shortage of food? If so, when?

The purpose of the discussion is twofold: 1) identify coping strategies, and 2) group the strategies by severity. Use the following as a guide to facilitate a focus group discussion.

- a) *Begin by explaining what we mean by coping strategy. Ask open ended questions about types of coping strategies employed by the group, using the list of questions below as a guide.*
- b) *The Coping Strategies Matrix (attached) mirrors the strategies in the Quantitative Survey. Record any new coping strategies discussed in the group on the matrix, and ask about the specific strategies listed in the matrix if they do not come out in the discussion.*
- c) *The next step is to determine the 'severity' of each coping strategy, as follows:*
 - 4= very severe
 - 3 = severe
 - 2 = moderately severe
 - 1 = not severe
- d) *Next ask the group to select the most severe and least severe strategies first. It is easiest to establish the extreme types of coping strategy.*
- e) *Then ask if there are other individual strategies that are more or less the equivalent of these two in terms of how severe they are perceived to be. When these two extreme categories are established, it is easier to group the remaining strategies into intermediate categories.*

1. Limit portion sizes at mealtimes (less amount of food consumed)
2. Reduce number of meals eaten per day
3. Rely on less expensive or less preferred foods (change in the type of food consumed). Has the family substituted preferred staple or other food for another?
4. Borrowing food from relatives / friends (or other social exchange networks)
5. Purchase or borrow food on credit
6. Gather wild foods / unusual amounts of wild foods types or hunt.
7. Household members eat meals at relatives or neighbours.
8. Reduce adult consumption so children can eat.
9. Consume seed stocks to be saved for next season.
10. Skip entire days without eating.
11. Rely on casual labour for food.
12. Abnormal' migration for work (Differentiate between seasonal and distress migration.)
13. Other coping strategies. Please specify other important coping strategies used to cope with shocks.

WEALTH RANKING EXERCISE

Village _____ *Upazila* _____

District _____ *Survey Zone* _____

[Gather a group of women and another group of men together from the community. Begin by discussing their perceptions of the causes of poverty and who is most affected by poverty. Then talk in general terms about the differences between different groups of households – wealth groups – and what are the most important variables or indicators of belonging to the wealth group. The participating group should define the wealth group categories and then define the most important variables or indicators marking a household’s inclusion in that category (income levels, types of work, food access or consumption, asset ownership, type of house, etc.)]

1. Perceptions of poverty

- a. How is a poor person defined?
 - What would a poor/rich person have?
- b. What are the causes of poverty?
- c. Have there been changes in the poverty status of households and individuals in last 5 years -- Why?
- d. Who are the most vulnerable groups? (probe) - social vulnerability. Who are the Invisible Poor?

2. Wealth Ranking Breakdown

Indicators	Wealth Categories			
	Category 1	Category 2	Category 3	Category ...
Food / Diet (quality & quantity)				
Access to Land				
Size of Landholding				
House type/size				
Livestock (type & numbers)				
Assets (productive & non-productive) – list most important assets				
Remittances				
Type of Employment (including wage labor, Govt., business, etc.)				
Membership in Institutions (list the institutions)				
Clothing				
Size of Household				
Type of Household (male or female headed / dependency ratio)				
Other				
Proportion of HH				

Annex H

BANGLADESH SOCIO-ECONOMIC PROFILES

WORLD FOOD PROGRAMME

Matrix for Coping Strategies Index

Village _____ Upazila _____ District _____ Zone _____ Group Gender _____

Mark the appropriate severity category for each Coping Strategy. There are spaces below to add coping strategies discussed in your FG that are not already listed in the matrix.

Matrix for Ranking and Grouping Coping Strategies						
Coping Strategy		Very Severe 4	Severe 3	Moderate 2	Not Severe 1	<i>Not Applicable: Why?</i>
1	Limit portion sizes at mealtimes?					
2	Reduce the number of meals eaten in a day?					
3	Rely on less preferred and less expensive foods?					
4	Borrow food, or rely on help from friends/relatives?					
5	Purchase or borrow food on credit?					
6	Gather wild foods or unusual foods?					
7	Household members eat meals at relatives/friends?					
8	Restrict consumption of adults so children can eat?					
9	Consume seed stock held for next season?					
10	Skip entire days without eating?					
11	Rely on casual labour for food?					
12	Abnormal migration for work?					
13	Other:					
14	Other:					
15	Other:					
16	Other:					

Date _____ Facilitator _____ Recorder _____

Annex I

BANGLADESH SOCIO-ECONOMIC PROFILES – WORLD FOOD PROGRAMME

**ERREC, WFP & CARE
MATRIX FOR WEALTH RANKING EXERCISE**

Village _____ Upazila _____

District _____ WFP Zone _____

Group Gender _____ Date _____

Facilitator _____ Recorder _____

Indicators	Wealth Categories			
	Category 1	Category 2	Category 3	Category 4
Food/ Diet (quality & quantity)				
Access to land & Size of Landholding				
Livestock (types & numbers)				
House (type/size)				

Indicators	Category 1	Category 2	Category 3	Category 4
Assets (productive & non-productive)				
Remittances				
Clothing				
Types of Employment (e.g. fishing, wage labour, Govt., business, etc.)				
Membership in Institutions				
Indicators	Category 1	Category 2	Category 3	Category 4
Size of Household				
Type of Household (dependency ratio)				
Other				
Number & Proportion of HH in this category				

Observations:

Section A: Demographics

List all persons residing in the household:

		A1	A2	A3	A4	A5	A6	A7	A8	A9
	Name of the household members	Respondent's relationship	Sex	Age in years	Marital Status	Employment Status (15 yrs and above)	Employment Stability (15 yrs and above)	Primary Economic Activity <i>(15 years and above age group only)</i>	Other Economic Activities <i>(15 years and above age group only)</i>	No. of income sources
		(Code 1)			(Code 2)	(Code 3)	(Code 4)	(Code 5)	(Code 5)	
	1st line is the Head of Household		Male..1 Female2	If < 1, then 0		If <15 Skip to B2 If code 2 to 7 skip to B2			Multiple answers allowed	
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
...										
36										

A household is defined as all members who have been eating from the same pot and living together at least for last three months

Socio-Economic Profiles of WFP Operational Areas and Beneficiaries

A11. Total number of people living in the HH:

--	--

A12. Ethnicity of the household members

--	--

1= Bengali, 2=Chakma, 3=Bawn, 4=Marma, 5=Tripura,
6=Garo, 7=Khashia, 8=Murang, 9=Santal, 10=Jumma,
11=Tenchunga, 12=Pankho, 13=Mru, 14=Lushai, 15=Khyang,
16=Khumi, 17=Monipuri 18= Others

A13. Religion of the household members

--

1=Muslim, 2= Hindu, 3= Christian, 4=Budhhist, 5=Animist,
6=Other

A1: Code 1 Relationship	A4: Code 2 Marital Status	A5: Code 3 Employment Status	A6: Code 4 Employment Stability	A7 & A8: Code 5 Economic Activity Codes
Head of HH.....1	Not married.....1	Currently working..... 1	Permanent.....1	Agriculture labor.....1
Husband/Wife2	Married.....2	Not working looking for work..... 2	Temporary.....2	Non agriculture labor.....2
Son/daughter.....3	Divorced.....3	Not working, don't want to..... 3	Seasonal.....3	Agriculture/horticulture Nursery.....3
Son/daughter in laws.....4	Widowed.....4	Housewife.....4	Occasional.....4	Hatchery/nursery.....4
Parents5	Separated.....5	Student.....5		Fishing/fry trading.....5
Brother/sister.....6		Retired/old.....6		Fish farming.....6
Grandson/granddaughter.....7		Not able to work.....7		Poultry/livestock.....7
Nephew/niece8		Not involved is income earning.....8		Mining.....8
Other relative.....9				Construction/real state.....9
Other non-relative.....10				Government job.....10
				Private/ NGO job.....11
				Skilled labor.....12
				Small business.....13
				Business.....14
				Handicraft.....15
				International remittances.....16
				Local remittances.....17
				Rickshaw/ van pulling.....18
				Begging.....19
				Horticulture.....20
				Stipend.....21
				Others.....22

Section B: Education

(Note: This section is not applicable for children 4 and below age)

Member ID No.	Name	B1	B2	B3	B4	B5	B6	B7	
		Ask to members age 19 and above			Ask the following questions to people age 5 to 18 years				
		Educational Achievement (highest class completed)	Can s/he write a letter? 1= Yes 2= No If <19 Skip to B3	Educational Status	Reason (s) for non/partial attendance (Multiple answers allowed)	What class s/he is in	What type of school did s/he attend or are now attending?	Generally, how many days does s/he attend school in a week?	
	(Code 1)		(Code 2)	(Code 3)	(Code 4)	(Code 5)			
01									
02									
03									
04									
05									
06									
07									
08									
09									
10									

B1: Code 1 Educational Achievement	B2: Code 2 Educational Status	B3: Code 3 Reasons for non/ partial attendance to school		B4: Code 4 Schooling year		B5: Code 5 School Type
Illiterate.....1 Read/write.....2 Preparatory.....3 Primary completed.....4 Secondary completed.....5 Higher secondary completed.....6 Bachelor degree.....7 Post graduate degree.....8	Not enrolled1 Enrolled & regular.....2 Enrolled but irregular.....3 Waiting to be enrolled.....4 Drop out.....5	Chronic illness..... 1 Physical disabilities..... 2 Help in household works..... 3 Help parents to earn..... 4 Not promoted..... 5 Not interested in school..... 6 Too far/ No transportation.....7 Cannot afford..... 8 Taking care of parents/ grand parents / siblings/.....9	Personal safety/ security..... 10 Got married..... 11 Socio-cultural reasons..... 12 Bad weather..... 13 Parents' negative attitude towards the value of education 14 Too young to go to school.....15	Pre-school/ nursery 0 <u>PRIMARY</u> Class 1..... 1 Class 2..... 2 Class 3..... 3 Class 4..... 4 Class 5..... 5 Class 6..... 6	Class 77 Class 88 Class 9.....9 Class 10.....10 Class 11.....11 Class 12.....12 Above Higher Secondary.....13	Type: Government..... 1 Private Bangla..... 2 Private English..... 3 NGO-run..... 4 Madrasha..... 5

Section C: Health, Maternal & Child Care

Member ID No.	Name	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15
		Ask the following questions to all members age 15 years and above							Ask the following questions to women age between 15 and 49 years							
		Health Status	During the past 2 weeks have you suffered from an illness or injury?	What was the illness or injury?	During past 2 weeks did you have to stop your normal activities because of this or these illnesses?	For how many days in the past two weeks did you stop normal activities?	Who do you visit when household members are sick	Are you physically or mentally handicapped in any way?	In what way are you handicapped?	If woman age between 15 and 49 years and currently married	Are you currently breast-feeding a child?	Are you currently pregnant?	In past 12 months did you give birth to a child, even if born dead?	Did you regularly go to a health clinic when you were pregnant with this child?	Who delivered this child?	Have your children been immunized?
		Code 1	YES .1 NO .2 → C6	Code 2	YES .1 NO .2 → C6		Code 3	YES .1 NO .2 → C8	Code 4	YES.1 NO .2 (NEXT PERSON)	YES.1 NO .2	YES.1 NO .2	YES .1 NO .2 (NEXT PERSON)	YES.1 NO .2	(Code 5)	YES.1 NO. 2
01																
02																
03																
04																
05																
06																
07																
08																
09																

Annex: Household Questionnaire

C1: Code 1 Health Status	C3: Code 2 Illness			C3: Code 3 Access to Health Services	C7: Code 4 Handicap
Long-term illness (>3mo)..... 1	Diarrhoea..... 1	Weakness.....9	Paralysis..... 19	Medicine store..... 1	Missing Hand..... 1
Short-term illness (<3 mo).....2	Fever.....2	Dizziness.....10	Hysteria..... 20	General practitioner.....2	Missing Foot.....2
Disabled.....3	Dysentery.....3	Pneumonia.....11	Gastric..... 21	Upazila Health Complex..... 3	Lame..... 3
Both.....4	Pain/Headache.....4	Typhoid.....12	Eye disease.....22	Rural Dispensary.....4	Deaf.....4
Good..... 5	Injury.....5	Tuberculosis.....13	Other..... 23	Satellite clinic.....5	Blind.....5
	High blood pressure.....6	Malaria.....14		Village doctor.....6	Unable to speak.....6
	Heart disease.....7	Jaundice.....15		Homeopath.....7	Mentally disabled.....7
	Breathing trouble.....8	Female diseases.....16		Kabiraz.....8	Other (spec.).....8
		Cancer.....17		Self treatment.....9	
		Leprosy.....18			
C13: Code 5 Who Delivered					
Doctor or medical clinic officer.....1					
Nurse.....2					
TBA.....3					
Midwife.....4					
Friend or Relative.....5					
Self.....6					
Other.....7					

Section D: Infrastructure

D1. Do you own or rent your house? 1= Completely own → QD3
 2= Partly own → QD3
 3= Rent
 4= Other: _____

D2. How much do you rent this dwelling for per month (Taka) _____

D3. How many rooms does this dwelling consist of? _____

D4. What is the main material of the wall? 1= Cement blocks
 2= Bricks/ Cement/ Concrete
 3= Timber
 4= Tin
 5= Dirt
 6= Straw/ coconut leaves/ branches
 7= Bamboo
 8= Other: _____

D5. What is the main material of the dwelling floor? 1= Earthen
 2= Wood
 3= Stone-brick
 4= Cement/tile
 5= Vinyl strips
 6= Bamboo
 7= Other: _____

D6. What is the main material of the dwelling roof? 1= Straw/thatch
 2= Tin
 3= Wood/planks
 4= Plastic sheet/ tarpulin
 5= Cement/concrete
 6= Tiles/slate
 7= Other: _____

D7. What kind of toilet facility does your household use? 1= No toilet/ bush/ field
 2= Open pit/ traditional pit latrine
 3= Improved pit latrine
 4= Pour flash latrine (water sealed)
 5= Flush toilet
 6= Hanging latrine

D8. What is the main source of drinking water for members of your household? 1= Water piped to house
 2= Piped water outside of the house
 3= Public taps
 4= Spring
 5= Tube well
 6= River/pond
 7= Dug well
 6= Moveable cart
 7= Other: _____

D9. What is the main source of lighting for this house? 1= Kerosene lamp/lantern/ petromax
 2= Electricity
 3= Candle
 4= Generator
 5= Gas lamp/ bio gas
 6= Other: _____

D10. What is the main source of cooking fuel of this household? 1 = Wood
 2 = Charcoal
 3 = Gas/ Bio gas/ LPG
 4 = Kerosene
 5= Electricity
 6 = Dung
 7= straw/plant residuals/r Rice chaff or twigs
 8 = Other _____

E: Household Assets

	Asset Type	# own	Estimated value per unit if sold today	# sold in last 6 months	Main reason for selling (see codes below)
Livestock					
E1	Cows/Oxen / Buffalo	□□□□	□□□□□□□□	□□□□	□□
E2	Goats /sheep	□□□□	□□□□□□	□□□□	□□
E3	Poultry	□□□□□□	□□□□□□	□□□□□□	□□
E4	Pigs	□□□□	□□□□□□□□	□□□□	□□
Transport					
E5	Car/van	□□	□□□□□□□□□□	□□	□□
E6	Motorcycle	□□	□□□□□□□□□□	□□	□□
E7	Bicycle	□□	□□□□□□□□	□□	□□
Productive					
E8	Country Boat	□□	□□□□□□□□□□	□□	□□
E9	Engine Boat	□□	□□□□□□□□□□	□□	□□
E10	Fish net	□□	□□□□□□□□	□□	□□
E11	Rickshaw/ van	□□	□□□□□□□□	□□	□□
E12	Bus/truck	□□	□□□□□□□□□□	□□	□□
E13	CNG/ auto-rickshaw	□□	□□□□□□□□□□	□□	□□
E14	Carts	□□	□□□□□□□□	□□	□□
E15	Power tiller	□□	□□□□□□□□□□	□□	□□
E16	Sewing machine	□□	□□□□□□□□□□	□□	□□
E17	Plough	□□	□□□□□□□□□□	□□	□□
E18	Irrigation pump	□□	□□□□□□□□□□	□□	□□
E19	Threshing machine	□□	□□□□□□□□□□	□□	□□
Appliances					
E20	Radios	□□	□□□□□□□□	□□	□□
E21	Cassette Player	□□	□□□□□□□□□□	□□	□□
E22	Fan	□□	□□□□□□□□	□□	□□
E23	Cell phone	□□	□□□□□□□□□□	□□	□□
E24	Fixed phone	□□	□□□□□□□□□□	□□	□□
E25	Televisions	□□	□□□□□□□□□□	□□	□□
E26	VCR/ DVD	□□	□□□□□□□□□□	□□	□□
E27	Refrigerators	□□	□□□□□□□□□□	□□	□□
Estimated total value if sold today					
E28	Trees	□□□□	□□□□□□□□	□□□□	□□
E29	Bamboo stands	□□□□□□	□□□□□□□□	□□□□□□	□□

Socio-Economic Profiles of WFP Operational Areas and Beneficiaries

E30	Small agri. tools	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
E31	Furniture (beds, chair, table...)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
E32	Kitchen utensils	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
E33	Jewelry	<input type="text"/> 1=Yes	<input type="text"/> 2=No	<input type="text"/> 1=Yes	<input type="text"/> 2= No

Asset Type	decimal own*	Estimated value per decimal if sold today	# sold in last 6 months	Reason for selling (see codes below)
Land				
E33 Agricultural land	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
E34 Homestead land	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
E35 Pond	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
E46 Other land	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Note: * Share in, Lease in, Mortgage in lands are not own land while share out, lease out, and mortgage out lands could be own land.

Reason for selling codes:

- | | | |
|---------------------------|-------------------------|-------------------------------|
| 1= No longer needed | 6= Pay Social expenses | 10= Pay dowry |
| 2= Pay daily expenditure | 7= Pay funeral expenses | 11= Buy agricultural inputs |
| 3= Buy food for household | 8= Pay school fees | 12= Rent/lease in land/ asset |
| 4= Pay medical expenses | 9= Look for money | 13= Buy productive assets |
| 5= Pay debts | | 14= Pay lawyer/ court fees |
| | | 15= Other emergency needs |

E47. Do you and other household members have cloths to wear outside the home? 1= Yes
2= No

F. Agriculture/ Horticulture

F1. Did you/ your household cultivate any farm land last year? 1= Yes
2= No → QF13

Ownership type	Area in decimal
F2. Own land	<input type="text"/>
F3. Lease in Land	<input type="text"/>
F4. Mortgage in Land	<input type="text"/>
F5. Share in Land	<input type="text"/>
F6. <i>Khash</i> Land	<input type="text"/>

Annex: Household Questionnaire

F7. What did you cultivate last year on farm land?

Crop	Yes..1 No...2	F8. Area Cultivated	F9. Kg Produced
Paddy.....		□□□□□	□□□□□
Wheat.....		□□□□□	□□□□□
Corn.....		□□□□□	□□□□□
Jute		□□□□□	□□□□□
Tobacco		□□□□□	□□□□□
Sugar cane		□□□□□	□□□□□
Ground nut		□□□□□	□□□□□
Non leafy Vegetables		□□□□□	□□□□□
Leafy vegetables (<i>Shak</i>).....		□□□□□	□□□□□
Pulses (<i>Mug, Musuri, Keshari,...</i>).....		□□□□□	□□□□□
Beans (<i>Seem, borboti,</i>).....		□□□□□	□□□□□
Mustard/soybean.....		□□□□□	□□□□□
Potato/ sweet potato.....		□□□□□	□□□□□
Tubers (<i>Kochu,</i>).....		□□□□□	□□□□□
Onion.....		□□□□□	□□□□□
Chili.....		□□□□□	□□□□□
Spices (<i>Roshun, Ada,.....</i>).....		□□□□□	□□□□□
			# Produced
Banana/papaya/ guava/pineapple		□□□□□	□□□□□
Citrus		□□□□□	□□□□□
Betel nut/ coconut		□□□□□	□□□□□
Water melon		□□□□□	□□□□□
Gourds (<i>Mishti Kumra, Chal Kumra...</i>		□□□□□	□□□□□
Other.....		□□□□□	□□□□□

F10. Last year did you/ your household cultivate vegetables/ fruits on homestead?

1= Yes
2= No → QG1

F11. What did you cultivate?

Crop	F12. Kg Produced	F13. Kg Consumed	F14. KG Sold
Non leafy Vegetables (<i>Phul copy, Badha .</i>	□□□□□	□□□□□	□□□□□
Leafy vegetables (<i>Shak</i>).....	□□□□□	□□□□□	□□□□□
Chili	□□□□□	□□□□□	□□□□□
Beans (<i>Borboti, seem,</i>).....	□□□□□	□□□□□	□□□□□
Mustard/soybean	□□□□□	□□□□□	□□□□□
Sweet potato.....	□□□□□	□□□□□	□□□□□
Chili.....	□□□□□	□□□□□	□□□□□
Tubers (<i>Kochu,</i>).....	□□□□□	□□□□□	□□□□□

Socio-Economic Profiles of WFP Operational Areas and Beneficiaries

Spices (<i>Roshun, Ada,.....</i>).....	□□□□	□□□□	□□□□
Drum sticks	□□□□	□□□□	□□□□
	# Produced	# Consumed	# Sold
Gourds (<i>Mishiti Kumra, Chal Kumra, Lau</i>)	□□□□	□□□□	□□□□
Papaya/banana/mango/jackfruit.....	□□□□	□□□□	□□□□
Citrus/lichi/guava/jujube	□□□□	□□□□	□□□□
Betel nut/coconut	□□□□	□□□□	□□□□
Other	□□□□	□□□□	□□□□

G. Income & Expenditure

G1	G2	G3	G4	Who participated (Code 1)
Income activity in 12 months	Who participated (Code 1)	Estimated monthly income (Taka)	# of months per year income is expected	
Agricultural wage labor	□	□□□□□□□□	□□□	Male.....1
Non agricultural wage labour	□	□□□□□□□□	□□□	Female.....2
Fisheries	□	□□□□□□□□	□□□	Both.....3
Livestock	□	□□□□□□□□	□□□	
Poultry	□	□□□□□□□□	□□□	
Business	□	□□□□□□□□	□□□	
Remittances	□	□□□□□□□□	□□□	
Skilled labour	□	□□□□□□□□	□□□	
Government/ private job	□	□□□□□□□□	□□□	
Domestic worker	□	□□□□□□□□	□□□	
Rickshaw/ van pulling	□	□□□□□□□□	□□□	
Handicraft	□	□□□□□□□□	□□□	
Begging	□	□□□□□□□□	□□□	
Street vendor/ hawker (<i>ferry wala</i>)	□	□□□□□□□□	□□□	
Bee keeping/ silk worm	□	□□□□□□□□	□□□	
Land/ pond lease out	□	□□□□□□□□	□□□	
Interest on savings or lending	□	□□□□□□□□	□□□	
NGO facilitated IGAs	□	□□□□□□□□	□□□	
Tailoring	□	□□□□□□□□	□□□	
Other	□	□□□□□□□□	□□□	

- G5. Do you/ other members of your households seasonally migrate to earn income? 1= Yes
 2= No → QG9
- G6. Why do you/he/she migrate(s)? 1= There is no income opportunity in my area
 2= Wage is good there
 3= Wage is too low in this area
 4= Other (Specify) _____
- G7. On average how many weeks in a year do you/ he/ she stay(s) outside of home for work (during migration)? □□□
- G8. What type of problem (s) do you or household members face when you / he/ she migrates to work. (multiple answers allowed)
- Problems: 1 2 3 0= No problem at all
 1= Sending money back to home
 2= Woman feel insecure at home without a male member
 3= Difficult to market or shop without an adult male
 4= Physical insecurity
 5= Child (ren) feels unsafe
 6= Community discriminates
 7= Others (specify) _____
- G9. How has income in your household changed over the 1= Increased significantly → QG11
 2= Increased slightly → QG11

Annex: Household Questionnaire

last 3 years?

3= Stayed about the same → QG12
 4= Decreased slightly
 5= Decreased significantly

G10. What are the factors that led to a decrease in your household income?
 (multiple answers allowed)

Factors: 1 2 3

1= Loss of employment
 2= Loss of crop/animal
 3= Prolonged illness of income earner
 4= Death of income earner
 5= Decrease in remittance income
 6= Loss of asset
 7= Exposure to natural disaster (s)
 8= Market failure
 9= Other _____

G11. What are the factors that led to an increase in your household income?
 (multiple answers allowed)

Factors: 1 2 3

1= Better crop varieties
 2= Increase in area cultivated
 3= Less pest attack
 4= Better crop management
 5= Decrease in incidence of natural disasters
 6= Enhanced ability in disaster management
 7= Got a new/ better job
 8= Increase in number of income sources
 9= Increase in number of income earners
 10= Started new business
 11= Occupation change
 12= Seasonal migration
 13= Remittances
 14= Hard work
 15= Other

G12. How much did you spend last month on the following items?

Expenditure item	Monthly (Taka)
G12.1 Healthcare (doctor fees, drugs, hospitalization, etc...)	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
G12.2 Household goods (Furniture, cooking utensils, plate, glass, etc....)	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
G12.3 Transportation (rickshaw/ van/bus,.....)	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
G12.4 Rentals	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
G12.5 Utilities	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
G12.6 Cosmetics & personal care products (lipstick, shampoo, paste, soap)	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
G12.7 Cleaning products (cloth soap, soda, bleaching, brooms, etc)	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
G12.8 Mosquito coils, and other insect repellent	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
G12.9 Repair cost (radio, TV, Bicycle, shallow pump, petromax, etc..)	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
G12.10 Cigarette /Biri/ Jorda/ Pan	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
G12.11 Savings deposit	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
G12.12 Petrol/ Diesel/ Kerosene	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
G12.13 Wages paid to the labourers/ servants	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

G13. How much did you spend on the following items last year?

Expenditure item	Annually (Taka)
G13.1 Education (admission fee, books, exam fees, private tuition, uniform, etc.)	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
G13.2 Cloth/ shoes	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
G13.3 Agricultural Inputs: Seeds	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
G13.4 Fertilizer	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
G13.5 Pesticide/ Fungicide	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

G13.6 Irrigation	_ _ _ _ _ _ _ _ _
G 13.7 Labour	_ _ _ _ _ _ _ _ _
G 13.8 Plough	_ _ _ _ _ _ _ _ _
G13.9 Other agricultural inputs (fisheries/ poultry/ livestock/ etc.)	_ _ _ _ _ _ _ _ _
G13.10 Business inputs	_ _ _ _ _ _ _ _ _
G13.11 Land mortgage/ rent in	_ _ _ _ _ _ _ _ _
G13.12 Investing on land/ cattle/ house/ business/ or other assets	_ _ _ _ _ _ _ _ _
G13.13 Social/ religious occasions (wedding, Eid, Puja, Christmas, Khatna)	_ _ _ _ _ _ _ _ _
G13.14 Dowry	_ _ _ _ _ _ _ _ _
G13.15 Birth related expenses	_ _ _ _ _ _ _ _ _
G13.16 Zakat, donation, Fitra, etc.	_ _ _ _ _ _ _ _ _
G13.17 Funeral (Koolkhani)	_ _ _ _ _ _ _ _ _
G13.18 Legal fees	_ _ _ _ _ _ _ _ _
G13.19 Other	_ _ _ _ _ _ _ _ _

H. Savings & Loan

- H1. Do any of your household members save? 1= Yes
2= No → QH6
- H2. Where do you save? 1= At home
2= Bank
3 = NGOs/ CBO/ Society (*Samity*)
4= Grameen Bank
3= Insurance company
4= With relatives/ friends
5= Postal saving bank
6= Other (specify) _____
- H3. What is your current level of savings? (*Taka*) |_|_|_|_|_|_|_|_|_|
- H4. Can you access to your savings in need? 1= Yes → QH6
2= No
- H5. Why can't you access to your savings? 1= I have a loan from the same NGO/ Grameen where I save
2= It is not allowed.
3= It is deposited for a longer time (fixed deposit)
4= I can only access my savings when I quit my membership with the NGO/ Grameen/ *Samity*
5= Other (specify) _____
- H6. Do you have any outstanding loan? 1= Yes
2= No → QI1
- H7. How many outstanding loans do your household members currently have? |_|_|_|

Loan sources, level, and use

Loan	H8 Source of Loan (code 1)	H9 Amount of Loan (Taka)	H10 Amount repaid (taka)	H11 Interest rate	H12 Loan repaid last month (Taka)	H13 Loan Use (multiple answers) (code 2)					
Loan 1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Loan 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Loan 3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Loan 4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Loan 5	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

H8: Code 1 Sources of Loan		H13: Code 2 Loan Use	
Relative/ friend.....1	Meet daily HH needs.....1	Buy poultry/ livestock.....9	
Bank or financial institution.....2	Purchase food.....2	Invest on small business.....10	
NGO/ CBO/ Samity.....3	Ag. inputs.....3	Education.....11	
Grameen.....4	Social events.....4	Dowry payment.....12	
Money lender.....5	Medical expenses.....5	Buy clothes.....13	
Other (list).....6	Buy/ lease in/ mortgage in land6	Buy household items.....14	
	Repaid loan.....7	Other (list).....15	
	Housing/repair expenses.....8		

H13. Are you paying regular installments to pay back loan (s)

- 1= Yes → Q11
 2= No

H14. If no, why not?

- 1= Do not have income to pay back
 2= The income project (IGA) failed
 3= Spend on food/ health/ or other things
 4= Other (specify) _____

I. Food Consumption

11. Has your household consumed any food falling under the following food groups in last seven days?

Group	Food group	Yes	No	12. How many times in last seven days household members consumed these food items?		
Cereals/ roots/ tubers	a. Grain staples (rice, wheat...)	1	2			
	b. Tubers (sweet potato, potato.....)	1	2			
Vegetables	c. Green leafy vegetables (<i>pui shak/ kolmi shak/ data shak/ palong shak,</i>)	1	2			
	d. Other vegetables (carrot, tomato, gourds,	1	2			
Pulses	e. Dal (pulses)	1	2			
Fruits	f. Fruits (mango, banana, pineapple, jackfruit.....)	1	2			
Meat & Fish	g. Meat (poultry, beef, mutton,.....)	1	2			
	h. Fish (fresh fish, dried fish, smoked fish,....),	1	2			
Eggs	i. Eggs	1	2			
Dairy products	j. Milk & dairy products (cow milk, goat milk, cheese, yogurt,.....)	1	2			
Oils & Fats	k. Oils & fats (soybean oil, mustard oil, cooking oil,)	1	2			
Other foods	l. Sugar/ honey	1	2			
	m. Beverages (tea, coffee, coke, sarbat, <i>rhuafza</i> ...)	1	2			
	n. Soups, spices, etc.	1	2			
Prepared meals & snacks	o. Prepared meals bought & consumed outside home	1	2			
	p. Snacks & other food items bought & consumed outside home	1	2			

13. Last year, in which month(s) did your household have adequate foods for all of your household members? Which months did your household have food shortage?

Codes: 1 = adequate food 2 = food shortage

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Baishakh</i>	<i>Jaisthay</i>	<i>Ashar</i>	<i>Sravan</i>	<i>Bhadra</i>	<i>Ashyin</i>	<i>Kartik</i>
April-May	May-June	June-July	July-August	August-Sept	Sept-Oct	Oct-Nov
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<i>Agrahayan</i>	<i>Poush</i>	<i>Magh</i>	<i>Falgun</i>	<i>Chaitra</i>		
Nov-Dec	Dec-Jan	Jan-Feb	Feb-Mar	Mar-Apr		

I4. Last year, what were the sources for most of your food items in this food group?

Food group	Yes ...1 No...2	Own production	Purchase	Donation	Relief/ Food for work/education	15. How much you spend last <u>WEEK</u> on the listed food items?
a. Grain staples (rice, wheat, <i>muri</i> , <i>chira</i>)		<input type="checkbox"/> 1	2	3	4	
b. Tubers (sweet potato, potato.....)		<input type="checkbox"/> 1	2	3	4	
c. Green leafy vegetables (spinach		<input type="checkbox"/> 1	2	3	4	
d. Other vegetables (carrot, tomato, cauliflower.....)		<input type="checkbox"/> 1	2	3	4	
e. <i>Dal</i> (Pulses)		<input type="checkbox"/> 1	2	3	4	
f. Fruits (banana, pineapple, mango...)		<input type="checkbox"/> 1	2	3	4	
g. Meat (poultry, beef, mutton,.....)		<input type="checkbox"/> 1	2	3	4	
h. Fish (fresh fish, dried fish, smoked fish,....),		<input type="checkbox"/> 1	2	3	4	
i. Eggs		<input type="checkbox"/> 1	2	3	4	
j. Milk & dairy products (cow milk, goat milk, yogurt,.)		<input type="checkbox"/> 1	2	3	4	
k. Oils & fats (soybean oil, mustard oil,		<input type="checkbox"/> 1	2	3	4	
l. Sugar/ molasses (<i>Gur</i>)		<input type="checkbox"/> 1	2	3	4	
m. Beverages (tea, coffee, coke...)		<input type="checkbox"/> 1	2	3	4	
n. Soups, spices, etc.		<input type="checkbox"/> 1	2	3	4	

I6. How many meals has your household members eaten over the last 24 hours?

I7. Does everyone in your household eat the same number of meals?

1 = Yes → QJ1
2 = No

I8. If not, who consumes fewer number of meals?

1=Men
2=Women
3=Children

J. Shocks & Coping Strategies

J1. Over the past one year, was your household severely affected negatively by any of the following events?

1 = Yes
2 = No → QK

J2. If yes, what are the events that negatively affected your household?
(Multiple answers allowed) (Use the following codes)

	1 st	2 nd	3 rd	4 th
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Codes for shocks

- | | |
|--|--|
| 1= Flood | 12= Dowry / marriage expenses |
| 2= Drought | 13= Loss of property due to theft/robbery, flood, fire, etc. |
| 3= Agricultural Crop failure | 14= Eviction from residence |
| 4= Loss of employment | 15= Dwelling damaged, destroyed |
| 5= Household business failure, non-agricultural | 16= Family member arrested, imprisoned |
| 6= Major illness or accident of household member | 17= Divorce/ separation |
| 7= End of regular assistance, aid, or remittances from outside household | 18= Flash floods |
| 8= Birth in the household | 19= Cyclone |
| 9= Death of working member of household | 20= Influential people confiscated land/ other resources |
| 10= Death of other family member | 21= Political discrimination |
| 11= Break-up of the household | 22= Religious discrimination |
| | 23= Ethnic discrimination |

J3. During that time, did your household ever faced a situation where you (household) did not have enough money or food to meet your food needs?

1 = Yes
2 = No → QK

J4. During that time, did you or anyone in your household ever use any of the following strategies?
(check only one answer per strategy).

Coping Strategies		Never	Seldom (< 1 day a week)	Sometime (1-2 days /week)	Often (3 or more days a week)	Daily	I18. Who engages in these behaviors? Code: 1 = men, 2= women, 3= boy child, 4=girl child, 5=both of men & women
J5	Limit portion size at mealtimes?	1	2	3	4	5	
J6	Reduce number of meals eaten per day?	1	2	3	4	5	
J7	Borrow food or rely on help from friends or relatives?	1	2	3	4	5	
J8	Rely on less expensive or less preferred foods?	1	2	3	4	5	
J9	Purchase/borrow food on credit?	1	2	3	4	5	
J10	Gather unusual types or amounts of wild food / hunt?	1	2	3	4	5	
J11	Have household members eat at relatives or neighbors?	1	2	3	4	5	
J12	Reduce adult consumption so children can eat?	1	2	3	4	5	
J13	Rely on casual labour for food?	1	2	3	4	5	
J14	Abnormal migration for work	1	2	3	4	5	
J15	Skip entire day without eating	1	2	3	4	5	
J16	Consume seed stalk to be saved for next season	1	2	3	4	5	

J17. Over the last 12 months has your household ever used following activities to cope with the natural disasters.

Coping Strategies		Never	Seldom (< 1 day a week)	Sometime (1-2 days /week)	Often (3 or more days a week)	Daily	I31. Who engages in these behaviors? Code: 1 = men, 2= women, 3= boy child, 4=girl child, 5=both of men & women
J18	Borrow form NGOs/ Grameen Bank	1	2	3	4	5	
J19	Borrow from Money lenders	1	2	3	4	5	
J20	Borrow from friends/ relatives	1	2	3	4	5	
J21	Borrow from bank	1	2	3	4	5	
J22	Farmland mortgage out	1	2	3	4	5	
J23	Farmland lease out	1	2	3	4	5	
J24	Sold small animals	1	2	3	4	5	
J25	Sold large animals	1	2	3	4	5	
J26	Sold household assets	1	2	3	4	5	
J27	Sold land	1	2	3	4	5	
J28	Sold other productive assets	1	2	3	4	5	
J29	Begging/ gleaning rice from paddy field	1	2	3	4	5	
J30	Pledge labour	1	2	3	4	5	

K. Membership & Affiliation

Do you or anyone in your household have membership or affiliated with any of the following institution/ organization?

Affiliation Type	Yes=1 No=2	Men	Women
K1. Affiliation with political party		1	2
K2. Membership in <i>Union Parishad</i>		1	2
K3. Membership in the committees of school/ <i>madrasha</i> / market/mosque		1	2
K4. Member of <i>Grameen Bank</i>		1	2
K5. Membership in club/village court		1	2
K6. Membership in NGOs/CBO groups		1	2
K7. VGD Card/ RMP/ Old age pension membership		1	2
K8. Other associations (rickshaw driver, labor, etc,		1	2
K9. Member of different govt. organizations (BRDB, BADC, etc.)		1	2
K10. Others (Specify)		1	2

K11. Do you participate in the community festivals or other community organized events?

1 = Yes → QL1
2 = No

K12. Why not?

1= Do not get invitation
2= Do not have time
3= Do not like to participate
4= Do not have the resources to participate
5= Others _____

L. Access to Safety Net

L1. Do you or anyone in your household have a VGD card?

1 = Yes → QL3
2 = No

L2. Why don't you have a card?

1 = Do not know about the card
2 = Have tried in the past but did not get one
3 = Household income is too high to qualify
4 = No need
5 = Other (specify) _____

L3. Do you or anyone in your household participate in a food security programme (FFW...)?

1 = Yes → QL5
2 = No

L4. Why don't you participate?

1 = Do not know about the programme
2 = Have tried in the past but could not get into
3 = Household income is too high to qualify
4 = No need
5 = Other (specify) _____

L5. Do you or anyone in your household participate in a Rural Road Maintenance Programme?

1 = Yes → QL7
2 = No

L6. Why don't you participate?

1 = Do not know about the programme
2 = Have tried in the past but could not get into
3 = Household income is too high to qualify
4 = No need
5 = Other (specify) _____

L7. Do you or anyone in your household receive old age Pension from the Union Parishad?

1 = Yes → QL9
2 = No

L8. Why don't you receive a pension?

1 = Do not have know about the programme
2 = Have tried in the past but did not receive
3 = Household income is too high to qualify
4 = No one in the household qualifies because of age
5 = No need
6 = Other (specify) _____

L9. Do you or anyone in your household receive an "Allowance Scheme for Widowed and (Husband deserted) Distressed Women"?

1 = Yes → QL11
2 = No

L10. Why don't you receive an allowance?

1 = Do not have know about the programme
2 = Have tried but did not receive
3 = Do not have anyone who qualifies
4 = Household income is too high to qualify
5 = No need
6 = Other (specify) _____

L11. Do you or anyone in your household receives food Under "Food for Education Programme"?

1 = Yes → QL13
2 = No

L12. Why don't you receive food?

1 = Do not have know about the programme
2 = The school does have the programme
3 = Attendance/ result is not good enough to qualify
4 = Do not have anyone who qualifies
5 = Household income is too high to qualify
6 = No need
7 = Other (specify) _____

Annex: Household Questionnaire

L13. Do you or anyone in your household receives help from the community (*Zakat, Fitra, Donation, dhar?*)

1 = Yes → Skip QM1
2 = No

L14. Why does the community not help you out?

1 = We never ask for.
2 = Community members do not have the ability to help out.
3 = Relationship with the community is not good.
4 = They do not care.
5 = We do not need
6 = Other (specify) _____

M. Household's perception about own poverty status

M1. How would you compare your economic situation today compared to 10 years ago?

(Please prompt the answer choices)

Code:

1 = Poor 10 years ago and still poor today

2 = Poor 10 years ago and are not poor today

3 = Not poor 10 years ago but poor today

4 = Not poor 10 years ago and not poor today

Annex: K



Study on Socio-Economic Profiles of WFP Operational Areas and Beneficiaries

Socio-economic Profile Study Field Manual

***June 2006
Dhaka, Bangladesh***

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I. Introduction

The UN World Food Program (WFP), Country Office in Bangladesh is underway to initiate the planning process for the new Country Programme 2007-10. To prioritize activities and resources in areas of highest needs the Government of Bangladesh in collaboration with World Food Programme (WFP) undertook a geographical targeting analysis⁴ applying a variant of the small area estimation technique. The analysis resulted in estimates of the proportion of population below the lower poverty line, at Upazila level. The lower poverty line is associated with a food calorie consumption level below 1805 kcal/person/day.

Mapping the data revealed six geographical areas and concentrations of highly food insecure Upazilas. An attempt was taken to identify some major causes of food insecurity in these priority areas through an area profiling study. Rapid appraisals were carried out in the severely food insecure unions within the six geographical regions.

Although the main geographic patterns of food insecurity have been captured, an in-depth and more robust analysis of the available indicators remains necessary to more precisely confirm the geographic targeting as well as the community and household level targeting in the new Country Programme.

Based on a logical framework of the linkages between food security and nutritional status, the study is expected to develop a socio-economic profile of the priority areas, and will serve as a key input for both the planned Country Programme Activity Plan (CPAP) and for the planned Results Based Management baseline surveys.

This manual provides some guidance on each of the questions in the Socio-economic Profile Study Questionnaire and helps to clarify some of the English terminology in the questions. It will also be useful to help guide decision-making in the field.

II. General Guidelines

Introductions and Greetings

Every Enumerator and Supervisors will carry an official letter, signed by WFP.

Be **clear** about the objectives of the survey, at two levels: 1) village, and 2) household.

- The purpose of the survey, as stated above is to:
“develop socio-economic profiles of WFP operational areas and beneficiaries”.
- Introduce yourself and the village and household have been randomly selected to participate in the survey.
- The purpose of the survey is *not* to give food aid to the respondent’s household.

⁴ Local Estimation of Poverty and Malnutrition in Bangladesh, May 2004. GoB BBS and UN WFP. The small area estimates technique was pioneered by the World Bank, and has been used successfully to target development assistance in many countries around the world, including Thailand, Cambodia, South Africa, and Brazil.

Definition of Household & Household Head

Our definition of the household is: “those people who live together and have regularly been eating together at least for the past three months”. This definition does *not* include household members who have not been present for reasons of work or school in the past three months.

The “**Head of the Household**” will be the primary decision-maker in terms of allocating the natural, human, and financial resources available to the household. The Household Head must have been present for the past 3 months, but could be absent at the time of the survey. For example, the Head could be shopping or working in the field.

The Respondent will decide who is the Head of the Household but may need assistance from the Enumerator in cases of a Female or Child headed household. A Female-headed household is defined as a household in which:

- the male head of the household has been away in the National Service for the past three months, or
- the woman manages the home because she is widowed, divorced, separated, or single for the past three months.

Quantitative Household Questionnaire

When conducting the Household Questionnaire:

1. Introduce yourself and ask the household for permission.
2. Ask to interview the head of household and his spouse.
3. Explain the purpose of the survey (above).
4. Explain that the survey will take about 1 hour.
5. Avoid leading words or questions.
6. Ask the question exactly the way it in formulated, do not change the question.
7. Keep it simple

To complete the survey:

- Write clearly
- Use pen
- Complete the entire questionnaire: **Circle all coded responses** and fill in all boxes (except where appropriate for ‘Skip’ rules). For example:

....1
...2
....3

- Indicate a response change on the survey instrument as follows:

~~20~~ 40

~~Slaughtered for food~~ Sold for cash

- Most responses have been coded. For those that are not coded, be sure to write all responses clearly. The data entry team should not have any question about your recorded response.

- Be specific: Record a single numeric response, rather than a range of numbers.
- In case when the answer choice is ‘other’, you have to write what it is.

III. Household Survey Questionnaire

Page 1 Location and responsible people

The first page of the questionnaire provides the basic background information on the survey location and date (we need all of this information!), and those people that were involved in, and responsible for, the accuracy of the questionnaire. The respondent should be the head of household and his/her spouse together. This is important that we interview both of the spouse together.

Write in the name of the Village, District, Upazilla, WFP Zone, code numbers and Respondent’s Name and Serial Number. The **Supervisor** will provide the codes for WFP Zone, District, Upazilla, Cluster, Village. For codes, enter one numeric digit in each box. For example, if the Zoba code is ‘1’, the Supervisor will enter ‘01’. The household codes are 01-20 for each village, and will be determined by the Supervisor after the surveys are complete.

The sex, marital status, and total number of household members are clear.

Supervisors will sign the form after they have carefully checked the form for completeness, accuracy, and clarity. This is a critical step because the people who will do the data entry from the forms will not have any context to interpret missing or unclear information or cover for mistakes.

A. Household members

Please make sure, that the information of the household head are recorded on the **first** row.

For the coded entries in the matrix, be sure to write the correct coded response in the box for each household member listed. For this matrix, do *not* circle the code.

A1. ‘Respondent’s relationship’ is coded. Head of Household head = ‘1’, Husband wife = ‘2’, Son or daughter = ‘3’ and so on. For each household member row, write the correct code.

A2. ‘Sex’ is coded Male = ‘1’ and Female = ‘2’. For each household member row, write the correct code.

A3. Record ‘Age’ in number of years, for each household member. If less than 1 year write 0.

A4. Write ‘1’ if the member is not married, ‘2’ for married, ‘3’ for Divorced, ‘4’ for Widowed, ‘5’ for Separated.

A5. Employment Status information is required for the household members whose age 15 years and above. The codes are provided on the following page.

A6. Employment Stability refers to the stability of job. The codes are provided on page 3 of the questionnaire. Write the code in the correct box.

A7. Primary Economic Activity refers to the primary occupational skills a person relies on as a livelihood strategy. For example a household member may primarily engage as agricultural labour

but he/ she may also rear cattle, and poultry. Here you should record the primary economic activity. The codes for economic activities are presented on the last column of page 3.

A8. Other Economic Activities could be more than one. The questionnaire will allow you to record maximum two other income sources for each member. If a member has more than 2 activities, please ask the member to choose two based on the importance of the activity to that member. The codes are on page 3.

A9. Please ask the **Number of Income Sources** of each member. This question requires facilitation. Often members tend to identify only the major income sources (e.g. farming, job, etc.) and forget to mention the minor ones (poultry rearing, vegetable gardening, etc.). For this study all of them are equally important.

B. Education

B1. Educational Achievement codes are provided at the bottom of page 4 as **code 1**. If a member completed grade 5, then the appropriate code should be '4'. If s/he completed grade 4 then the code would be '3' which is 'preparatory'.

B2 to B5. These information are required for the member whose age is in between 5 to 18 years. The codes are provided on the same page at the bottom. Multiple answers are expected for the reasons for non/ partial attendance.

C. Health, Maternal & Child Care

List all members age 15 years and above from page page 2. Please make sure that the member ID number matches with page 2.

C2, and C4. The recall period is two weeks. Both of the questions require 'yes' or 'no' answer. Please use '1' for yes and '2' for no. If the answer in C2 is 'no', skip to C6. Similarly, if the answer in C4 is 'no' skip to C6. If the answer in C6 is 'no' skip to C8.

C8 to C13. These information are needed from the women members who are **currently married** age between 15 and 49 years. For other please skip the questions. Age and sex of the household members recorded on page 2 will help to identify to whom you should ask these questions.

C11. If a child was aborted or terminated before 7 months of pregnancy, then do not consider that as child birth.

The answers for C1, C3, C7, and C13 are coded and presented at the bottom of page 5. Code 1 contains health status code. Illness for more than 3 months is considered as Long-term illness while illness for less than three months is considered as Short-term illness. The question in C13 is '**who delivered this child**'? The answers are coded under **code 4**. One of the answer choices is trained TBAs. TBAs are traditional birth attendants whose work is helping women in childbirth.

D. Infrastructure

D1. **Do you own or rent house?** If the household either completely or partially owns the house, skip to D3.

D3. **How many rooms does this dwelling consist of?** Do not include kitchen or animal shed in counting number of rooms.

D4 to D6. **What is the main material of the wall/ floor/ roof?** If more than one house then collect the information of the main house. If more than one type of material was used, the answer should be the one that was used in the bed room. Write the answers based on your observation. You don't have to ask these questions.

D7. **What kind of toilet facility does your household use?** You should physically see the latrine before writing the answer. Don't ask and record. **Open pit/ traditional pit** latrine is just a whole on the ground that is used as latrine. **Improved pit latrine** has a cover on it. The latrine is covered by a wooden or metal cover to prevent from flies and other insects. **Ring slab latrine** is the one that has a cement/ plastic/ porcelain commode and it has to be water sealed. If you look through the whole you should be able to see water in it. This water is trapped inside the whole to prevent from flies. If the water seal is broken then it is no more water sealed and should be considered as pit latrine. **Flush toilet** is the type of latrine that we usually see in town areas. It has a water tank attach to the latrine and if you press or pull the knob it flushes out. **Hanging latrine** can be seen in some villages particularly in haor areas. This type of latrine is typically built on the river or pond or lake or haor that drains the feces directly to the water reservoir.

E. Household Assets

The list of household assets is more than a checklist because it asks for **numbers** of these items. You will read each item on this list and ask for the number of each of these items that are currently in or around the house.

E1 to E26. Record the number of assets on the second column '# own'. If the household do not have any particular asset you have to write '00'. You should not leave any space blank. the third column is for 'estimated value per unit if sold today'. Ask the household that if s/he wants the sell it today how much s/he may get given its current condition. The next question is how many of them were sold in last six months? If none then write '00'. The last column is for the main reason for selling. If a household sold any asset in last 6 months, then ask why did you sell? and record the main reason for selling. The codes are given on the following page. A household may have sold an asset for more than one reason, but we want to know the main reason. If a household share in an animal, and they have to return the animal then write '00' because they do not own it. If the animal has a calf and the household will keep it as share in agreement, then write '01' and write the current value of the calf.

E27 to E31. Write the estimated total value of these assets instead of unit value.

E32. We do not want to know the number own. If the household has gold or silver jewelry tick off 'yes'. If none then tick off 'none'. Ask the current estimated total value of all jewelry and record accordingly.

E33 to E34. The second column is for the area of land. Ask how many decimals of land that the household own. You may find situations where household has been using parental land that has yet to be officially given to the household. In other words the land is not registered to the household's name. In that case ask the household how many decimals of land they will get from their parents? Please remember that share in, lease in and mortgage in land are not owned by the household while share out, lease out and mortgage out land are own land.

E47. **Do you and other household members have cloths to wear outside the home?** The question is to understand whether the household members have at least a set of cloth that is kept for outside use. Typically the clothes that are kept for outside use are slightly better in quality. Many poor

households do not have a separate set of cloths for outside use. They wear the same cloth when they are at home and also when they go out. In that case the household do not have cloths for outside use.

F. Agriculture/ Horticulture

F1 to F6. These are straight forward questions and easy to record. If the household cultivated farmland in last year, record the area of land cultivated on F2 to F6 based on the type of access to the land.

F7. What did you cultivate last year on farm land? The crops are listed on the first column. If you find that they have used other crops, please write the name of other crop. All *shak* should be recorded under ‘leafy vegetables’. All vegetables that grow over the land should be recorded under ‘non leafy vegetables’. All vegetables that grow under the soil (potato is not a vegetable) should be recorded under tubers (e.g. *kochu*, *gajor*, *shalgom*, etc.). All *dals* should be recorded under Pulses. *Roshun*, *ada*, *dhaina* should be recorded under spices. All gourds (*misti kumra*, *chal kumra*, *lau*, *chichinga*, *potol*, *jhinga*) should be recorded under gourds.

F13 and F14. These two questions are for homestead gardens and homestead crops. The classification of crops is quite similar. All *shak* should be recorded under ‘leafy vegetables’. All vegetables that grow over the land should be recorded under ‘non leafy vegetables’. All vegetables that grow under the soil (potato is not a vegetable) should be recorded under tubers (e.g. *kochu*, *gajor*, *shalgom*, etc.). All *dals* should be recorded under Pulses. *Roshun*, *ada*, *dhaina* should be recorded under spices. All gourds (*misti kumra*, *chal kumra*, *lau*, *chichinga*, *potol*, *jhinga*) should be recorded under gourds.

G. Income & Expenditure

G1 to G4. These questions are related to income. Remember household usually rely on a range of activities to earn income. Although women may identify themselves as ‘housewife’ but often they rear poultry and cattle, sell vegetables or fruits from home-garden, sell milk or eggs, make handicrafts, or may lend out money and earn income from interest. So you have to keep on asking ‘anything else’? until you are completely satisfied that all of the income sources are captured.

Remittances are money that the household receives from family members working in cities, towns or neighboring villages within Bangladesh as well as the money that comes from family members living in other countries.

G5. Do you/ other members of your households seasonal migrate to earn income? If no skip to question G9.

G7. On average how many weeks in a year do you/ he/ she stay(s) outside of home for work (during migration)? The answer should be in week. If the answer is less than a week write 1.

G8. What type of problem (s) do you or household members face when you / he/ she migrates to work. The question allows multiple answers.

G9. How has income in your household changed over the last 3 years? The perception of the respondent about income change has to be recorded. If the income has increased in 3 years skip to G11. If there is no change skip to G12. Otherwise ask G10.

G10. What are the factors that led to a decrease in your household income? Factors responsible for decrease in income have to be recorded here. Possible factors are coded and presented next to the question. If the answer (s) is (are) different to the answer choices, record 9 and write what it is. Multiple answers (maximum three) are allowed for this question. Ask ‘any other factors?’ to find out the second and the third factor.

G11. What are the factors that led to an increase in your household income? Factors responsible for increase in income have to be recorded here. Possible factors are coded and presented next to the question. If the answer (s) is (are) different to the answer choices, record 99 and write what it is. Multiple answers (maximum three) are allowed for this question. Ask ‘any other factors?’ to find out the second and the third factor.

G12. How much do you spend per month on the following items? This is a tricky question and you have to probe before you take the answer. Whatever answer you get, think whether the amount sounds right to you. Here you are asking for average **monthly** expenses. For example if the household members only visited doctor for 3 times in a year, add the expenses up and divide by 12 to get an average monthly expenditure. Help respondents in breaking down the line items. For example, to get a reliable estimation of health expenses, you can ask how much the household members spend on doctors fee, how much on medicine, how much on pathological tests (if performed), how much on hospitalization cost (if someone hospitalized during the year).

G13. How much did you spend on the following items last year? This question is similar to G12. The only difference is the question is asking for **last year’s** expenses. Whatever answer you get, think whether the amount sounds right to you. Here you are asking for average **monthly** expenses.

H. Savings & Loan

H1. Do any of your household members save? If no, skip to H6.

H4. Can you access to your savings in need? This question can also be asked in the following way. ‘If you want to use the savings can you access to your savings?’ If no, skip to H6.

H6. Do you have any outstanding loan? The loans that are already paid off will not appear here. If no, skip to I1.

H8. Sources are coded and presented at the bottom as code 1.

H10. Interest rate. Relatives, friends, or money lenders often charge interest per month. For example if one borrows 1000 taka and s/he pays 100 taka per month as interest, the interest rate is 120% not 10%.

H11. Loan repaid last month. Often loan is repaid in installments. Ask how much s/he paid last month. Often the repayment schedule for NGO or Grameen loans are weekly. Please compute the last month’s installment in case if repaid weekly.

H12. Loan use are coded and presented at the bottom as Code 2.

H13. Are you paying regular installments to pay back loan (s). If the household have been irregularly repaying the installments record no and skip to I1.

I. Food Consumption

I1. Has your household consumed any food falling under the following food groups in last seven days? This question has to be asked in a slightly different way. For grain staples ask ‘has your household consumed *bhat / ata/ muri/ chira* in last seven days?’ Then ask ‘how many times in last seven days household members consumed rice’. For each food group please name all foods in the food group to help the respondent.

I3. Last year, in which month(s) did your household have adequate foods for all of your household members? Which months did your household have food shortage? Adequate foods meaning all member of the household can eat enough food in terms of quantity for the entire month. If there were months in last year when the household did not have adequate food for all of its members then record 2 in the box next to that month. If a household suffered from food shortages for a part of the month (not the entire month) still record 2.

I4. Last year, what was the main source for most of your food items in this food group? Please circle only one answer for each food group. A household may have consumed rice and wheat and *muri* last year. They may have consumed most of the rice from own production, however they also bought some rice, they may have bought *ata*, and *muri*. If rice is the major staple among these three foods they have consumed and as the source of rice was own production circle ‘1’.

J. Shocks and Coping Strategies

J1. Over the past one year, was your household severely affected negatively by any of the following events? Please help the households in giving some examples from the codes for shocks presented after question number J2. If no, skip to J3.

J2. If yes, what are the events that negatively affected your household? You can record upto 4 answers.

J3. During that time did your household ever faced a situation where you (household) did not have enough money or food to meet your food needs? If the answer is ‘no’, skip to K1.

J4. During that time, did you or anyone in your household ever use any of the following strategies? This question is directly linked to the previous question. So if a household in the past 30 days faced a situation where the members did not have enough money or food to meet their food needs, what did they do? Keep this introduction in mind as you go through the list. Read each strategy one by one and explain them if necessary. The answer has to be based on the frequency of use. For example if a household did not limit portion size at meal times in last 30 days, then circle 1. If a household used the strategy less than a day per week (e.g. less than 4 days per month) then circle 2. If a household employed the strategy for 1 to 2 days per week then circle 3 and so on. **Remember** that this is a thirty-day recall. Please circle only one answer per strategy. For every Coping Strategy row (rows J5 to J16), check one frequency box (“Times per week”).

J17. Who engages in these behaviors? Ask who engaged in each of these behaviors. The answers are coded as ‘1’ men, ‘2’ women, and ‘3’ boy child, ‘4’ girl child and ‘5’ both man and woman.

K. Membership & Affiliation

Do you or anyone in your household have membership or affiliated with any of the following institution/ organization?

If yes write '1' and ask who has the membership. If no write '2' and skip to the next question.

If any of the man from the household is member circle 1, and if the woman is a member circle 2. If both man and woman are members circle both 1 and 2.

K11. Do you participate in the community festivals or other community organized events? Ask whether the household members participate in community organized festivals or other events. If 'yes' skip to L1.

L. Access to Safety Nets

L1. Do you or anyone in your household have a VGD card? If any of the household members have a Vulnerable Group Development Card record 'yes' and skip to L3.

L3. Do you or anyone in your household participate in a food security programme (FFW....)? If in one year any of the household members participated in Food for Work programme, record 'yes' and skip to L5.

L5. Do you or anyone in your household participate in a Road Maintenance Programme? If in one year any of the household members participated in Road Maintenance Programme, record 'yes' and skip to L7.

L7. Do you or anyone in your household receive Old Age Pension? If in one year any of the household members received Old Age Pension, record 'yes' and skip to L9.

L9. Do you or anyone in your household receive an Allowance Scheme for Widows and Distressed Women? If in one year any of the household members received allowance for widows and distressed women, record 'yes' and skip to L11.

L11. Do you or anyone in your household receive food under "Food for Education Programme"? If in one year any of the household members received food from Food for Education Programme, record 'yes' and skip to L13.

L13. Do you or anyone in your household receive help from the community ? If in one year any of the household members received help from community in the form of *zakat*, *fitra*, donation, *dhar*, record 'yes' and skip to M1.

M. Household's perception about own poverty status

M1. How would you compare your economic situation today compared to 10 years ago. This question is to understand the perception of the household about their poverty status in a relative term. The answer choices are '1' Poor 10 years ago and still poor today, '2' Poor 10 years ago and are not poor today, '3' Not poor 10 years ago but poor today, and '4' Not poor 10 years ago and not poor today.

Annex L

Matrix for Coping Strategies Index

Village: **Upazila:** **District:** **Zone:** **Group Gender:**

Mark the appropriate severity category for each Coping Strategy. There are spaces below to add coping strategies discussed in your FG that are not already listed in the matrix.

Matrix for Ranking and Grouping Coping Strategies

Coping Strategy		Very Severe 4	Severe 3	Moderate 2	Not Severe 1	Not Applicable: Why?
1	Limit portion sizes at mealtimes?					
2	Reduce the number of meals eaten in a day?					
3	Rely on less preferred and less expensive foods?					
4	Borrow food, or rely on help from friends/relatives?					
5	Purchase or borrow food on credit?					
6	Gather wild foods or unusual foods?					
7	Household members eat meals at relatives/friends?					
8	Restrict consumption of adults so children can eat?					
9	Consume seed stock held for next season?					
10	Skip entire days without eating?					
11	Rely on casual labour for food?					
12	Abnormal migration for work?					
13	Other: sell roof of their living house					
14	Other: sell furniture or other goods					
15	Other: Beg food					
16	Other:					

Date:

Facilitator:

Recorder:

WFP BANGLADESH
SOCIO-ECONOMIC PROFILES STUDY
MATRIX FOR FOCUS GROUP DISCUSSIONS

District: Upazila: Village: WFP Survey Zone:

Topics for Discussion	Men's Group	Women's Group
I. Village Information		
A. Typical Household		
1. Settlement pattern		
2. Migration pattern		
B. Infrastructure		
<i>1. Transport</i>		
<i>2. Schools</i>		
Types of Schools		
Accessibility		
Quality		
Use & drop outs		
School Management		
Trends		
<i>4. Markets</i>		
C. Health Facilities		
<i>1. Health Services</i>		
Accessibility		
Quality		
Traditional health providers		
HIV/AIDS		
<i>2. Maternal Child Care</i>		
TBA		
Weaning foods & maternal foods		
Child diseases		
Birth spacing		
D. Area Features		
<i>1. Type of Terrain</i>		
<i>2. Forest</i>		
<i>3. Water</i>		
Sources		
Storage		
Arsenic		
Trends		
<i>4. Climate</i>		
<i>5. River Erosion</i>		
<i>Social Organizations</i>		
II. Livelihood Strategies		
A. Agriculture		
1. Crops		
2. Inputs		
3. Services		

Annex: Qualitative Matrices

4. Storage		
5. Division of Labor		
6. Wage rates		
7. Constraints		
8. Land Tenure Systems		
B. Animal Husbandry		
C. Forest Products & Wild Foods		
Horticulture		
D. Fishing & Hunting		
E. Other Income Generating Activities		
IV. Community Major Problems		
B. Trends		
C. Coping Strategies		
D. Community Initiatives		

**WFP BANGLADESH
SOCIO-ECONOMIC PROFILES STUDY**

**SCHEDULE FOR KEY INFORMANTS
VILLAGE PROFILE**

Village : **Upazila :** **District :** **WFP Survey Zone :**
Interviewer :

Name of KI : **Status of KI:**

1. DEMOGRAPHIC FEATURES:

a. Total Number of households in the village (estimates)

Ethnic Group Composition	Household No		Estimated Population	
	Male Headed	Female Headed	Male	Female
1.				
2.				
3.				

Total: (1) Households: (2) Population of village:

2. SETTLEMENT PATTERN:

- a. Settlement History
- When did people first settle here?
 - Why did people come?
 - From where did people come?
 - Where are they coming from now?.
 - Are people moving out? Where to?
- b. Migration & Mobility
- Seasonal?
 - To & from where?
 - Why?

3. VILLAGE RESOURCES:

- a. Distance to forest (km) & Time:
- b. Distance to cultivated land:
- c. Area Irrigated (ha) :
- d. Community land (ha):

Annex: Qualitative Matrices

e. Electricity in Village? How many households have access?

f. Distance from nearest market centre: (km):

From Union HQ (km):

From Upazila town: (km):

g. Is the village connected by a

1. Pucca road:

2. All-weather kacha road:

If no, distance to the nearest pucca road:

3. How long walking (hrs):

h. Main Source of drinking water in the village

Sources:

Quality:

Number of users/water source:

Distance to source:

Reliability of supply:

Any arsenic in water supply?

If yes, describe the arsenic problem

i. How many latrines in the village?

Types of latrines

1. No. of union members from the village :

2. No. of women union members from the village:

3. No. & Assessment of union accomplishments:

k. Educational facilities in the village (estimates):

Type of School	Where is it located?	Distance (km) from village	Time (hrs) from village
Primary School			
Junior High School			
Secondary School			
College			
Residential School			
Non-formal Education (NGO)			
Others (specify) <i>Mactob</i>			

What is the literacy rate in the community? :

l. Medical Facilities:

Socio-Economic Profiles of WFP Operational Areas & Beneficiaries

Types of Medical Facilities / Personnel / Services	Where is it / he/she located?	Distance (km) from village	Time (hrs) from village
Union Health Centre			
Upazila Health Centre			
Hospital			
Medical Officer			
Satellite Clinic			
TBA (untrained)			
Faith Healer			
Traditional Healer			
NGO (specify the NGO)			
Pharmacy or Shop			
Others (specify) _____			

Describe the prevalence of HIV/AIDS:

j. Extension Service Facilities

Type of Extension Services	Where is it located?	Distance (km) from village	Time (hrs) from village
Grameen Bank			
BRAC			
Other large NGO Credit Service (specify the NGO & service)			
Commercial Bank (Sonali Bank)			
Cooperative Society			
Agriculture Extension Service How often do they visit village?			
Fisheries			
Forest Department			
Government projects in village?			
Other NGOs (specify) 1.ASA, 2.BURO Tangail			
Others (specify)			

4. CONCLUSIONS & MAJOR PROBLEMS

a. What major problems do you face in this community?

Problems	Causes	Rank

b. What are the potential solutions to these problems?

Signature of the Interviewer:

Date:

MATRIX FOR WEALTH RANKING EXERCISE

Village:

Upazila:

District:

WFP Zone: Group Gender:

Date:

Facilitator:

Recorder:

Indicators	Wealth Categories			
	Category 1 Rich	Category 2 Middle Class	Category 3 Lower middle	Category 4 Poor
Food/ Diet (quality & quantity)				
Access to land & Size of Landholding				
Livestock (types & numbers)				
House (type/size)				

Indicators	Category 1 _____	Category 2	Category 3 _____	Category 4 _____
Assets (productive & non-productive)				
Remittances				
Clothing				
Types of Employment (e.g. fishing, wage labour, Govt., business, etc.)				
Membership in Institutions				
Indicators	Category 1 _____	Category 2	Category 3 _____	Category 4 _____
Size of Household				
Type of Household (dependency ratio)				
Other				
Number & Proportion of HH in this category				

Observations: