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USAID OFFICE OF FOOD FOR PEACE
BANGLADESH FOOD SECURITY COUNTRY
FRAMEWORK FY 2010-2014

OCTOBER 2009



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TABLE OF CONTENTS

TABLE OF CONTENTS.....	I
ACRONYMS & ABBREVIATIONS.....	I
EXECUTIVE SUMMARY.....	IV
OBJECTIVES OF THE PROGRAMMING STRATEGY.....	VIII
1. DEFINITION OF FOOD SECURITY.....	I
2. OVERVIEW OF THE COUNTRY CONTEXT.....	I
3. FOOD SECURITY SITUATION IN BANGLADESH.....	8
3.1 FOOD INSECURITY AT THE NATIONAL LEVEL.....	8
3.1.1 Food Availability.....	8
3.1.2 Food Access.....	12
3.1.3 Food Utilization.....	17
3.2 GEOGRAPHIC DISTRIBUTION OF FOOD INSECURITY.....	23
3.2.1 Food Availability.....	23
3.2.1 Food Access.....	25
3.2.3 Food Utilization.....	29
3.2.4 Risks and Vulnerabilities.....	33
4. STRATEGIES, POLICIES AND PROGRAMS RELATED TO REDUCING FOOD INSECURITY IN BANGLADESH.....	37
4.1 GOB POLICIES, PLANS AND PROGRAMS.....	38
4.1.1 Poverty Reduction Strategies.....	38
4.1.2 Sector Policies and Plans.....	39
4.1.3 Key Programs Affecting Food Access and Utilization.....	39
4.2 USG STRATEGIES AND PROGRAMS.....	41
4.2.1 Alignment with the US Foreign Assistance Framework.....	41
4.2.2 USAID/Bangladesh Strategies and Programs.....	43
4.2.3 USAID/Food for Peace (FFP) 2006-2010 Strategic Plan.....	44
4.2.4 The FY 2005-2009 Title II Development Assistance Program (DAP) in Bangladesh.....	44
4.3 WORLD FOOD PROGRAMME (WFP).....	47
4.4 OTHER DEVELOPMENT PARTNERS.....	48
5. COUNTRY FRAMEWORK TO REDUCE FOOD INSECURITY.....	59
5.1 ROLE OF MISSION PROGRAMS FUNDED BY OTHER ACCOUNTS IN SUPPORTING IMPROVEMENTS IN FOOD SECURITY.....	59
5.2 ROLE OF THE TITLE II MYAP IN ADDRESSING FOOD INSECURITY.....	59
5.2.1 Objectives and Desired Outcomes.....	59
5.2.2 Program Priorities.....	61
5.2.3 Mission Management Priorities.....	80
5.2.4 Key Design Considerations.....	80
5.2.5 Cross-cutting Issues.....	91
6. COLLABORATION AND RESOURCE INTEGRATION.....	92
REFERENCES.....	94

ANNEXES

ANNEX 1. FFP STRATEGIC FRAMEWORK FOR 2006 – 2010	100
ANNEX 2. FFP EXPANDED CONCEPTUAL FRAMEWORK FOR UNDERSTANDING FOOD INSECURITY	101
ANNEX 3. DESCRIPTIONS OF COMMUNITY-BASED NUTRITION PROGRAMS.....	102
ANNEX 4. WFP PROCEDURES FOR ESTIMATING CHILD MALNUTRITION AT THE LOCAL LEVEL.....	109
ANNEX 5. PREVENTION OF MALNUTRITION IN CHILDREN UNDER TWO APPROACH (PM2A).....	110
ANNEX 6. RESOURCES ON COMMUNITY-BASED PROGRAMS AND BEHAVIOR CHANGE PROGRAMMING.....	112
ANNEX 7. ADMINISTRATIVE MAP OF BANGLADESH.....	114

BOXES

BOX 1: PRIORITY OUTCOMES & ACTIVITIES FOR THE BANGLADESH TITLE II PROGRAM.....	VI
BOX 2. NATIONAL NUTRITION PROGRAMME (NNP) OBJECTIVES FOR 2011	40
BOX 3. SUGGESTED PRINCIPLES FOR IMPLEMENTING TITLE II-SUPPORTED ASSET PROTECTION/CREATION PROGRAMS IN BANGLADESH	79

TABLES

TABLE 1. BASIC STATISTICS FOR BANGLADESH	2
TABLE 2. POVERTY AND EXTREME POVERTY (PERCENT).....	12
TABLE 3. DEPTH AND SEVERITY OF POVERTY	12
TABLE 4. TRENDS IN POVERTY AND LANDOWNERSHIP IN RURAL AREAS.....	16
TABLE 5. POVERTY RATE AND POPULATION SHARE BY OCCUPATION OF HEAD OF HOUSEHOLD IN 2005	16
TABLE 6. CHANGES IN THE PROPORTION OF CHILDREN UNDER FIVE MALNOURISHED.....	18
TABLE 7. POVERTY AND EXTREME POVERTY BY URBAN AND RURAL AREAS (PERCENT).....	26
TABLE 8. POVERTY RATES BY DIVISION (PERCENT).....	26
TABLE 9. GEOGRAPHIC DISTRIBUTION OF MALNUTRITION AND RELATED FACTORS.....	29
TABLE 10. OBJECTIVES AND STRATEGIC LINES OF ACTION IDENTIFIED IN THE 2006 NATIONAL FOOD POLICY AND THE 2008 NATIONAL FOOD POLICY PLAN OF ACTION.....	38
TABLE 11. ALIGNMENT OF THE CURRENT DA, CSH AND ESF-FUNDED AND TITLE II PROGRAMS WITH THE U.S. FOREIGN ASSISTANCE FRAMEWORK	42
TABLE 12. BASIC CHARACTERISTICS OF THE TWO CURRENT TITLE II DEVELOPMENT PROGRAMS (2005-2009).....	45
TABLE 13. SUMMARY OF WORLD FOOD PROGRAMME BENEFICIARIES BY ACTIVITY 2007 – 2010.....	48
TABLE 14. EXAMPLES OF MAJOR ACTORS INVOLVED IN FOOD SECURITY IN BANGLADESH.....	52
TABLE 15. SUMMARY OF STRATEGIES AND PROGRAMS RELEVANT TO ACHIEVING FOOD SECURITY IN BANGLADESH COUNTRY FRAMEWORK TO REDUCE FOOD INSECURITY.....	53
TABLE 16. PRIORITY OBJECTIVES FOR THE TITLE II MCH/N PROGRAM IN BANGLADESH AND HOW CORE COMPONENTS OF “PM2A” CONTRIBUTE TO THESE OBJECTIVES.....	69
TABLE 17. UPAZILAS AT HIGHEST RISK.....	84
TABLE 18. UPAZILAS AT HIGH RISK.....	85

FIGURES

FIGURE 1. FOOD SUPPLY PER PERSON.....	9
FIGURE 2. COMPOSITION OF THE NATIONAL DIET (% SHARE DAILY ENERGY, FAO, 2003-2005).....	9
FIGURE 3. RICE PRODUCTION	10
FIGURE 4. CEREAL IMPORTS.....	11
FIGURE 5. PROPORTION OF UNDERNOURISHED.....	14
FIGURE 6. NUMBERS OF UNDERNOURISHED	15
FIGURE 7. INTENSITY OF HUNGER.....	15
FIGURE 8. PERCENTAGE OF CHILDREN AGED 0-59 MONTHS WHO ARE MALNOURISHED, BANGLADESH, 2007	19
FIGURE 9. PERCENT CHILDREN WITH MODERATE MALNUTRITION BY WEALTH QUINTILE	21
FIGURE 10. PERCENT WOMEN MALNOURISHED (BODY MASS INDEX (BMI)<18.5) BY WEALTH QUINTILE.....	22
FIGURE 11. FOOD AVAILABILITY IN BANGLADESH.....	23
FIGURE 12. PROPORTION OF POPULATION EXTREME POOR 2005.....	27
FIGURE 13. BANGLADESH PROPORTION OF THE POPULATION POOR 2005	28
FIGURE 14. MAP OF PROBABILITY OF HIGH PREVALENCE OF STUNTING (CHILDREN UNDER FIVE, RATE > 50 %).....	30
FIGURE 15. MAP OF RISK OF CYCLONES IN BANGLADESH	35

FIGURE 16. MAP OF FLOOD PRONE AREAS IN BANGLADESH.....	36
FIGURE 17: CONCEPTUAL FRAMEWORK FOR THE BANGLADESH TITLE II DEVELOPMENT PROGRAM	61
FIGURE 18. MAP OF PRIORITY DISTRICTS AND UPAZILAS AT RISK.....	83
FIGURE 19. TARGETING AT THE COMMUNITY LEVEL.....	86

ACRONYMS & ABBREVIATIONS

ABCN	Area-based community nutrition
ANC	Antenatal care
APB	Actionable Policy Brief
ARI	Acute respiratory infection
ASB	Asian Development Bank
AusAID	Australian Agency for International Development
BBS	Bangladesh Bureau of Statistics
BCC	Behavior change and communication
BDHS	Bangladesh Demographic and Health Survey
BINP	Bangladesh Integrated Nutrition Project
BMI	Body mass index
BRAC	Bangladesh Rural Advancement Committee
BRCS	Bangladesh Red Crescent Society
CAP	Community Action Plan
CAS	Country Assistance Strategy
CBN	Cost of basic needs
CDMP	Comprehensive Disaster Management Programme
CFW	Cash for work
CIDA	Canadian International Development Agency
C-IMCI	Community-integrated management of childhood illness
CLTS	Community-led total sanitation
CMAM	Community-based Management of Acute Malnutrition
CPP	Cyclone Preparedness Programme
CPR	Contraceptive prevalence rate
CSH	Child Survival and Health
CNS	Child Nutrition Survey
DA	Development Assistance
DANIDA	Ministry of Foreign Affairs of Denmark
DAP	Development Assistance Program
DIFID	Department for International Development (United Kingdom)
EBF	Exclusive breastfeeding
EC	European Commission
EMOP	Emergency Operation
ESF	Economic Support Funds
EPI	Expanded Program on Immunization
F	Directorate of US Foreign Assistance, Department of State
FAO	Food and Agriculture Organization of the United Nations
FFP	Office of Food for Peace
FFW	Food for work
FoSHoL	Food Security for Sustainable Household Livelihoods
FP	Family planning
FPMU	Food Planning and Policy Unit
FSCF	Food Security Country Framework

GCC	Global Climate Change
GDP	Gross domestic product
GMP	Growth monitoring and promotion
GOB	Government of Bangladesh
GR	Gratuitous Relief
HFP	Homestead food production
HIES	Household income and expenditure surveys
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
HKI	Helen Keller International
IDA	International Development Association
IDRCB	International Center for Diarrheal Diseases Research, Bangladesh
IFA	Iron/folic acid
IFAD	International Fund for Agricultural Development
IG	Income generation
IGA	Income generating activities
IMF	International Monetary Fund
IMCI	Integrated management of childhood illnesses
INP	Integrated Nutrition Project
IPAC	Integrated Protected Area Community-Management Program
IPM	Integrated pest management
IPHN	Institute of Public Health Nutrition
IR	Intermediate Result
IRRI	International Rice Research Institute
IYCF	Infant and young child feeding practices
JICA	Japan International Cooperation Agency
kcal	Kilocalorie(s)
kg	Kilogram(s)
km	Kilometer(s)
LAPM	Long-acting and permanent family planning methods
LBW	Low birth weight
MCHN	Maternal child health and nutrition
MDG	Millennium Development Goal
MFDM	Ministry of Food and Disaster Management
MMR	Maternal mortality rate
MOA	Ministry of Agriculture
MOH	Ministry of Health and Family Welfare
MOL	Ministry of Livestock
MUAC	Mid-upper arm circumference
MYAP	Multi-year Assistance Program
NAP	National Agricultural Policy
NFNP	National Food and Nutrition Policy
NFP	National Food Policy
NFP PoA	National Food Policy Plan of Action
NGO	Non-Governmental Organization
NHP	National Health Policy
NITAPAD	Network for Information, Response and Preparedness Activities on Disaster

NDMP	National Disaster Management Programme
NNP	National Nutrition Programme
NPAN	National Nutrition Plan
NPDM	National Plan for Disaster Management
NPWA	National Policy for Women's Advancement
NSIYCF	National Strategy for Infant Young Child Feeding
NWG	Nutrition Working Group
OR	Operations research
ORS	Oral rehydration salts
ORT	Oral rehydration therapy
PDI	Positive Deviance Inquiry
PDMC	Pourashava Disaster Management Committee
PEPS	Primary Education Stipend Project
PMP	Performance Management Plan
PM	Pest management
PMTCT	Prevention of mother to child transmission
PM2A	Preventing malnutrition among children under 2
PRRO	Protracted Relief and Recovery Operation
PRSP	Poverty Reduction Strategy Paper
RIMP	Rural Infrastructure Maintenance Programme (Test Relief)
RMG	Ready made garment industry
RMP	Rural Maintenance Programme
RUTF	Ready to use therapeutic food
SAM	Severe Acute Malnutrition
SC	Save the Children US
SDC	Slum Development Committee
SHEWA-B	Sanitation, Hygiene Education and Water Supply in Bangladesh
SHOUHARDO	Strengthening Household Abilities for Responding to Development Opportunities
SMC	Social Marketing Company
TFR	Total Fertility Rate
UDMC	Union Disaster Management Committees
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USG	United States Government
VDC	Village Development Committee
VGD	Vulnerable Group Development
VGf	Vulnerable Group Feeding
VMF	Village Model Farms
WFP	World Food Programme
WHO	World Health Organization
WRA	Women of reproductive age
WSB	Wheat-soy blend

EXECUTIVE SUMMARY

The purpose of the United States Agency for International Development (USAID) Food Security Country Framework (FSCF) for Bangladesh is to provide programming guidance to current and potential USAID/Bangladesh Mission food security partners on the development of Title II-funded multi-year assistance programs (MYAPs) for the period 2010-2014 in Bangladesh, and to improve program and resource integration.

Bangladesh has made many important gains in the last fifteen to twenty years in economic and social indicators, including reducing the prevalence of poverty and child malnutrition. Although still a poor country, with a per capita income of only \$470 in 2007, Bangladesh has established a credible record of sustained growth within a stable macroeconomic framework. For a country at a relatively low level of development Bangladesh has also managed to achieve some major successes in improving several key social indicators and graduating into the medium human development group using the United Nations Development Programme (UNDP) rankings.

Despite these improvements, Bangladesh remains a food insecure country, with improvements needed in food access and utilization in particular. Fifty-six million people (40 percent of the population) were living in poverty in 2005 and 35 million in extreme poverty. The country is also particularly vulnerable to rapid onset natural disasters, including floods, cyclones and storm surges, which have major adverse effects on the economy as a whole as well as on people's livelihoods, food security and health. Bangladesh was hit by three natural disasters in 2007 – two major floods and a devastating cyclone – within a few months of each other. The steep rise in food prices in 2007-08, including the main staple, rice, was another significant shock, which revealed the risk posed by global price volatility for a net food importing country like Bangladesh. The fact that 43 percent of the children less than five years of age suffered from chronic malnutrition (stunting) in 2007 is another concrete indicator of the magnitude and persistence of the food insecurity problem. It also highlights the serious implications of the current food insecurity situation for the country's future economic, social and political development.

Chronic poverty and malnutrition remains primarily a rural problem. More of the poor and more of the chronically malnourished children live in rural areas. People living in rural areas are also more likely to be poor and to have malnourished children than those living in urban areas. The degree of food insecurity also varies geographically depending on the agro-ecology of specific areas, the levels of poverty and chronic malnutrition and the risks and vulnerability to shocks, particularly floods and cyclones. According to the poverty maps produced by the World Food Programme (WFP) as part of its food security mapping exercises, the rates of poverty and extreme poverty are highest in the districts in the northwest, the coastal belt and the districts of Mymensingh, Jamalpur and Jessore. (See poverty and extreme poverty maps on pages 26 and 27). Another WFP-produced map indicates that stunting is more prevalent in the northern part of the country and in the coastal areas in the south and southeast (see **Figure 19**).

The Title II Program can play a positive role in this environment by helping “to reduce food insecurity among vulnerable rural populations in Bangladesh.” In Bangladesh vulnerable populations include the poor and extremely poor, who by definition do not have sufficient income to purchase an adequate diet and other basic necessities, as well as pregnant and lactating women and children less than two years of age. Awardees should plan to concentrate their efforts in rural Bangladesh, as this is where the country’s food insecurity problems are concentrated. The FSCF does leave the option open, however, for Awardees to propose including a small urban slum component in their programs. Bangladesh has been urbanizing rapidly, there is evidence of growing disparities in living standards in urban areas and the urban poor are underserved by the existing safety net system.

The new MYAPs should give priority to activities designed to improve food access and utilization and to reduce the vulnerability of the individuals, households and communities targeted by the program to rapid onset natural disasters, including floods and cyclones. Lack of access to food or poverty is the root cause of food insecurity in Bangladesh, and programs designed to increase the incomes of the poor and extremely poor, to be effective, will have to take into account the fact that the rural poor in Bangladesh have limited access to land with many of the poorest dependent on daily labor in farm and non-farm activities as their major source of income.

More specifics about the priority outcomes and activities that are being recommended in the FSCF are outlined in the following box and described in more detail in **Section 5.2.2** on “Program Priorities.”

MYAPs should target districts that are characterized by high rates of poverty and chronic malnutrition. These include the 18 districts in which the 45 upazilas with highest rates of both poverty and chronic malnutrition are located: Jamalpur and Mymensingh (in Dhaka division); Barisal, Bhola, Patuakhali, and Barguna (in Barisal division); Khulna, Narail, and Bagerhat (in Khulna division); Kurigram, Nilphamari, Bogra, Dinajpur, Pabna, Rangpur, and Sirajganj (in Rajshahi division); and Cox' Bazaar (in Chittagong division). While Awardees are not required to work exclusively in the 45 upazilas identified, they should to work within the 18 priority districts. Once Awardees have made their decisions about the districts they will target, they will also have to make further decisions about which upazilas, unions and communities they want to work in. The criteria and procedures that Awardees to use in selecting upazilas, unions and communities in which to work will be unique to the individual Awardee, but should be evidence-based, using data collected through surveys and/or rapid appraisals and indicators that that are known to correlate with food access and utilization as well as vulnerability to natural disasters.

BOX I: PRIORITY OUTCOMES AND ACTIVITIES FOR THE BANGLADESH TITLE II PROGRAM

The Title II program should give priority to activities expected to:

- *Increase the incomes of poor and extremely poor households, by*
 - Broadening the focus to include farm and non-farm and direct and indirect options
 - Adopting a market driven strategy
 - Assessing markets and developing market linkages
 - Transferring information on improved practices and technologies
 - Developing and strengthening value chains
 - Working with clients in groups to facilitate technology transfer and marketing
 - Linking with other service providers along the value chain
 - Making more effective use of asset transfers
 - Using a business development lens
 - Taking gender issues into account in the design and implementation of IG programs

- *Reduce chronic malnutrition among children under five, by*
 - Preventing malnutrition among children under two
 - Improving Infant Young Child Feeding (IYCF) practices for children under two
 - Preventing and treating childhood illness
 - Improving detection and referral of children under five with severe acute malnutrition (SAM).
 - Improving maternal nutrition and health
 - Improving nutritional status and nutrition awareness among single and newly married adolescent girls
 - Improving hygiene practices and access to safe drinking water and sanitation facilities
 - Employing effective behavioral change and communication interventions
 - Addressing gender issues in the design, implementation and targeting of nutrition interventions

- *Reduce the vulnerability of poor communities and households to natural disasters, by*
 - Improving community organization and planning
 - Increasing/protecting community and household assets
 - Improving early warning and disaster response systems
 - Developing/maintaining the disaster response capacity of Awardees and partners

To be effective, many of the activities to reduce the vulnerability of communities to natural disasters will have to involve and take into account all members of the community, the non-poor, the poor and extremely poor, as well as women and others with special needs. All households with children under two years of age and pregnant and lactating women also need to be given priority for nutrition activities, because of the long term negative effects of chronic child malnutrition and the high prevalence of stunting among children under five. On the other hand, Awardees will need to make special efforts to insure that members of extremely poor households – especially

women -- are able to participate in their income generating (IG) programs by making adaptations in their design and implementation. Programs that involve food for work and asset and/or cash transfers need to directly target the poorer, more food insecure households and individuals.

Other key design considerations include: finding the right balance between food and cash, integrating programs at the community level, and developing sustainability and exit strategies. It is strongly recommended that Awardees implement the prevention of malnutrition under two approach (PM2A). This is an approach to prevent malnutrition among children under age two. PM2A is a package of health and nutrition interventions targeted to children based on their age instead of their nutritional status. With PM2A, children and their mothers receive the interventions before the children become undernourished rather than after they are identified as undernourished, as is often done in food-assisted maternal and child health and nutrition (MCHN) programs. The current Title II programs in Bangladesh have a relatively high percentage of total resources being monetized. In the next round of MYAPs, USAID intends to give greater priority to programs that give more emphasis to the direct use of food in preventive nutrition programs as well as in infrastructure development programs. USAID recognizes, that a significant amount of cash resources will continue to be needed to pay for the expertise, technical assistance and training that are required to ensure that programs will have a measurable and sustainable impact on the underlying causes of poverty and malnutrition in the target areas over the longer term.

Although the current Title II programs have addressed some issues of gender equity¹, the principles of gender equity need to be integrated more explicitly and proactively into future programs. Men's and women's needs and constraints differ, and they will not always be affected in the same way by project interventions. Adding a gender² lens to these programs means understanding and taking these differences into account in the design and implementation of the Title II programs. Mainstreaming gender into a program should facilitate and deepen program impact, and along the way promote gender equity. As such, integrating gender equity in programming is context-specific and centers on understanding the social context in the program area sufficiently to transform the enabling environment at the community level so that men and women can dialogue, participate and gain equitably from program efforts in food security and nutrition. Other cross-cutting issues – risk and vulnerability, building local capacity, and environment – are also discussed in **Section 5.2.5**.

Organizations that want to partner with USAID/Bangladesh in the implementation of a MYAP will need to explore opportunities and mechanisms for collaborating and joint programming to ensure the efficient use of resources. Prospective Title II Awardees are also encouraged to demonstrate how their programs will build on the comparative advantages of the Title II program and take maximum advantage of synergies and complementarities with other programs, including USAID/ Bangladesh and USAID

¹ **Gender equity** considers the differences in women's and men's lives and recognizes that different approaches may be needed to produce outcomes that are equitable. (**Gender equality** refers to women and men being treated the same way. However, equal treatment will not produce equitable results, because women and men have different life experiences).

² **Gender** refers to the **social constructs** that define men and women's roles and how they are socialized. **Sex** refers to the **biological** difference between men and women.

centrally funded projects. In developing their proposals Awardees should explore ways to partner and collaborate with other organizations active in Bangladesh, including other donors and local nongovernmental organizations (NGOs), universities, research organizations, Government of Bangladesh (GOB) ministries and local governments and the private sector. Prospective Awardees should also indicate how their programs align with and support GOB policies, including its National Food Policy Plan of Action (NFP PoA), the National Nutrition Plan (NPAN), the Poverty Reduction Strategy Paper (PRSP) and the National Disaster Management Programme (NDMP).

OBJECTIVES OF THE PROGRAMMING STRATEGY

The purpose of the United States Agency for International Development (USAID) Food Security Country Framework (FSCF) for Bangladesh is to provide programming guidance to current and potential USAID/Bangladesh Mission food security partners on the development of Title II-funded multi-year assistance programs (MYAPs) for the period 2010-2014 in Bangladesh and to improve program and resource integration.

The Strategy uses USAID's definition of food security, risk and vulnerability as a basis for describing the current food security situation in the country, identifying who are the food insecure, where they are located, why they are food insecure and what actions are necessary to reduce their food insecurity. The document also describes the institutional context in which the USAID/Bangladesh FSCF will be implemented, in terms of existing United States Government (USG) and Government of Bangladesh (GOB) strategies, policies and programs and those of other donors.

The audience for this framework is Title II Awardees, nongovernmental organizations (NGOs), institutions, donors, GOB entities working in food security in Bangladesh and USAID staff in Bangladesh and Washington. The Bangladesh FSCF is based on a review of the literature and current data on food insecurity in Bangladesh, field visits to USAID/Bangladesh food security partner projects and key informant interviews with staff from USAID/Bangladesh, USAID/Washington, the GOB, NGOs and other institutions that are stakeholders in food security programming in the country.

I. DEFINITION OF FOOD SECURITY

In 1992, USAID's Policy Determination 19 established the following definition for food security: *"Food security exists when all people at all times have both physical and economic access to sufficient food to meet their dietary needs for a productive and healthy life."*³ The definition focuses on three distinct but inter-related elements, all three of which are essential to achieving food security:

- **Food availability:** having sufficient quantities of food from household production, other domestic output, commercial imports or food assistance,
- **Food access:** having adequate resources to obtain appropriate foods for a nutritious diet, which depends on available income, distribution of income in the household and food prices, and
- **Food utilization:** proper biological use of food, requiring a diet with sufficient energy and essential nutrients, potable water and adequate sanitation, as well as knowledge of food storage, processing, basic nutrition and child care and illness management.

This document uses the above definition of food security, with the addition of the concepts of risk and vulnerability,⁴ as a framework to describe the context and determinants of food insecurity in Bangladesh and the programmatic actions necessary to reduce food insecurity in the country.

2. OVERVIEW OF THE COUNTRY CONTEXT

Bangladesh made many important gains in the last fifteen to twenty years in terms of economic and social indicators. Although still a poor country, with a per capita income of only \$470 in 2007,⁵ Bangladesh has established a credible record of sustained growth within a stable macroeconomic framework. For a country at a relatively low level of development Bangladesh has also managed to achieve some major successes in improving several key social indicators and graduating into the medium human development group using the United Nation Development Programme (UNDP) rankings.

³ USAID April 1992, 1.

⁴ The concept of risk, which is implicit in the USAID definition of food security, was added to the conceptual framework that underlies the Office of Food for Peace (FFP) Strategic Plan for 2006-1010 as a fourth pillar (See Annex 1 for the FFP Strategic Framework for 2006-2010 and Annex 2 for the FFP Expanded Conceptual Framework for Understanding Food Insecurity). The concept of vulnerability is also addressed in the FFP Strategic Plan in the sense that food security can be lost as well as gained and is defined as the inability to manage risk. FFP nd, 20.

⁵ World Bank estimate using the Atlas method.

TABLE I: BASIC STATISTICS FOR BANGLADESH

INDICATOR	VALUE	RANK / # OF COUNTRIES
Population		
Total population (in millions) ⁶	156	8
Percent of total population under 19 years (%) ⁷	47	
Percent of population rural (%) ⁵	75	
Gross domestic product		
Gross Domestic Product per capita (US\$) PPP ⁸	\$1,155	153/179
Contribution of agriculture to GDP (%) ⁹	25	
Per capita income	\$470	
Poverty		
Human Poverty Index (%) ⁶	36.9	130/179
Population living below national poverty line ¹⁰ (%)	40	
Population living in extreme poverty (%)	25	
Malnutrition¹⁰		
Prevalence of underweight in children under-five (%)	41	
Prevalence of stunting in children under-five (%)	43	
Prevalence of wasting in children under five (%)	17	
Percent of population undernourished (%)	30	
Human development		
Human Development Index ⁶	0.524	147/179
Gender development Index ⁶	0.539	109/179
Education		
Adult Literacy Rate (% ages 15 and above) ⁶	52.5	134/179
School enrolment ratio (female as % of male) ⁶	104.1	81/179
Gross primary school enrolment (%) ¹¹	91	
Percent children attending primary school (female as % of male) ⁹	95/88	
Gross secondary school enrolment (%) ⁹	43	
Percent attending secondary school (female as % of male) ⁹	45/53	
Age at marriage and first birth¹²		
Median age of woman at first marriage (years) (Among 20 – 49 year olds)	15.3	
Median age of women at first birth (years) (Among 20 – 49 year olds)	18.2	
Percent of women aged 20-24 married by age 18 (%)	66.2	
Percent of adolescent girls (aged 15-19) who are pregnant or have given birth ¹³	42	

⁶ CIA July 2009. Estimate for 2007.

⁷ WFP nd.

⁸ UNDP nd.

⁹ IMF November 2005.

¹⁰ World Bank October 2008. As of 2005.

¹¹ Education indicators taken from: UNESCO nd.

¹² NIPORT, Mitra and Associates, and ORC Macro International 2009.

¹³ 42 percent of married adolescent girls.

INDICATOR	VALUE	RANK / # OF COUNTRIES
Life expectancy, fertility, & mortality¹⁴		
Life Expectancy at birth (in years)	63.5	130/179
Total fertility rate (births per woman)	2.7	
Maternal Mortality rate (per 100,000 births) 2001 ¹⁵	320	
Under-5 Mortality rate (per 1000 live births)	65	
Infant mortality rate (per 1000 live births)	52	
HIV prevalence¹⁶		
Adult HIV prevalence rate (%)	< 0.1	
Water and sanitation¹⁷		
Percent of households with access to potable water (%)	97	
Percent households with access to sanitary facilities (5)	25.3	

A growing economy. Respectable economic growth that began in the early 1990s continued into the new millennium, when it averaged over 5 percent per year between 2000 and 2005 with most of the growth coming from the industrial and service sectors. Industrial growth averaged 8 percent per year in the last six years, despite inadequate infrastructure – natural gas and electricity in particular. Services also grew at 6 percent in recent years, benefiting from a continued inflow of remittances. Agriculture grew, but at a slower rate (4 percent), and output varied largely due to weather-related shocks. Despite the financial crises in 2008 -09 and the global recession, overall GDP growth is projected to be around 5.5 percent in 2009 and agricultural production is projected to set an historic productivity record.¹⁷

Progress in reducing poverty. Bangladesh represents a success story among developing countries. The prevalence of poverty, which was 57 percent at the beginning of the 1990s, declined to 49 percent in 2000 and 40 percent in 2005. The reductions in extreme poverty were even more substantial, falling from 41 percent in 1991-92 to 25 percent in 2005. These declines were enough to reduce the numbers of people living in poverty by 8.3 million people between 2000 and 2005 and the numbers living in extreme poverty by nearly 6 million. Growth in consumption fueled by robust economic growth was the dominant force in reducing poverty. Relative inequality as measured by the national Gini index of per capita real consumption showed no change between 2000 and 2005. The urban Gini fell and the rural Gini increased over this period, but these changes were quite small (from 0.27 to 0.28 for rural areas, for example). (See following section on food access for a further discussion of the food security implications of poverty and extreme poverty).¹⁸

Impressive gains in other indicators of well-being. Bangladesh is on course to meet the year 2015 Millennium Development Goals (MDGs) for infant and child mortality and has already met the MDG for gender¹⁹ parity in primary and secondary

¹⁴ All values in this section except MMR from NIPORT, Mitra and Associates, and ORC Macro International 2009.

¹⁵ NIPORT, ORC Macro, Johns Hopkins University, and ICDDRDB 2003.

¹⁶ UNAIDS Country Profile Bangladesh, 2008.

¹⁷ World Bank April 2009.

¹⁸ World Bank October 2008.

¹⁹ *Gender* refers to the *social constructs* that define men and women's roles and how they are socialized. *Sex* refers to the *biological* difference between men and women.

schooling. The infant mortality rate declined from 153 deaths per 1,000 live births in the mid-1970s to 52 in 2006, and the under-five mortality rate declined from 250 deaths per 1,000 live births to 65 over this same period.²⁰ These gains are partly due to a persistently high coverage of high impact child health interventions such as immunizations, vitamin A supplementation and the use of oral rehydration therapy (ORT) during episodes of diarrhea. The gross primary enrollment rate has increased from 75.6 percent in 1991 to 102.3 percent in 2005, and gender parity has been achieved at both primary and secondary levels. Impressive improvements in access to sanitation and in the quality of housing since 2000, particularly in rural areas, also reflect broad-based gains in the standard of living for the poor.²¹

Natural disasters, an ever present risk. Bangladesh is one of the most disaster-prone countries in the world. The OFDA/CRED International Disaster Database registered 170 events during the period 1975-2000, including floods cyclones, droughts, earthquakes and epidemics. There is also evidence from the international disaster data base of the Louvain Catholic University of Brussels that the frequency of natural disasters within what are now the boundaries of Bangladesh has been increasing in recent years. The death toll from cyclones and floods are among the highest, but floods have been much more devastating than cyclones in terms of the numbers of people affected and the amount of property damage. These costs can be high to the country as a whole as well as to individual communities and households. The International Monetary Fund (IMF) estimated, for example, that the losses due to the 2004 floods were over US\$ 2.2 billion and that it could have taken the Bangladesh economy two years just to get back to the pre-flood level of Gross Domestic Product (GDP).²²

The burden of coping with recent shocks. Bangladesh was hit by three natural disasters in 2007 – two major floods and a devastating cyclone – within a few months of each other. The steep rise in food prices in 2007-08, including the main staple, rice, was another significant shock, which revealed the risk posed by global price volatility for a net food importing country like Bangladesh. All four of these shocks had adverse effects on the economy as a whole and contributed to worsening poverty and food insecurity for many poor and even middle class households. In 2009, weak consumer spending in the developed countries and a steep decline in global trade could have an increasingly adverse effect on the Bangladesh economy with clothing exports and remittances, two of the most important sources of economic growth, vulnerable to a global recession.

Climate change. Bangladesh is one of the most vulnerable countries in the world to the effects of global climate change (GCC). It is the largest delta in the world located at the end of the second largest river system – the Ganges-Meghna-Brahmaputra – and is subject to a series of climatic mega events. The country is the size of Iowa, with a morphology that resembles the Louisiana delta. With only a 6 percent gradient from north to south, the country is 90 percent flood plain and half the country floods regularly. Floods, tropical cyclones, storm surges and droughts – climate events that already have major adverse affects on the Bangladesh economy as a whole as well as on people's livelihoods, food security and health – are expected to become more frequent

²⁰ NIPORT, Mitra and Associates, and ORC Macro International 2009. Infant and under-five mortality had been higher for girls than for boys prior to 2004 – a pattern that has been observed in other South Asian countries where strong preference for sons is thought to result in relative nutritional and medical neglect of female children. However, these differences by sex no longer exist.

²¹ World Bank October 2008.

²² IMF November 2005.

and severe as a result of GCC. An additional 14 percent rise in the sea level, associated with GCC, will inundate and salinize vast proportions of the low lying coastal areas and result in the displacement of millions of people.²³

Rapid urbanization and the urban rural continuum. Bangladesh, which had a population of over 156 million in 2007, is urbanizing rapidly. The dramatic expansion of all weather roads, which began in the later 1980s, has contributed to a new degree of connectivity between the urban and rural areas. Rural households are more connected with markets and have more income earning options available than in the past. Migration and remittances have also emerged as dominant factors in household dynamics. The destinations and duration vary, with people moving to other rural as well as urban areas and to both close and far off destinations. Until now, urbanization has been a force for poverty reduction, with urban poverty declining faster than rural poverty. However, growing disparities in living standards within the major cities and the problem of urban poverty more generally is emerging as an important policy concern.

The continuing importance of agriculture. The contribution of the agricultural sector to the overall economy has been declining, but the sector is still very important, making up approximately 25 percent of GDP (crops 14 percent, forestry 2 percent, livestock and poultry 3 percent and fisheries 6 percent). The agricultural sector also generates two thirds of total employment and contributes a quarter of total export earnings. If one takes into account the contribution of the rural non-farm sector, the rural economy as a whole contributes more than 60 percent of total GDP. Three quarters of the population and 85 percent of the poor still live and earn their livelihoods in rural areas. Not surprisingly, the GOB has identified agriculture and rural development as the number one priority sector for rapid poverty reduction.

Changes in the importance of land. Traditionally land was an important source of both wealth and income and power and status in rural Bangladesh. Arable land is scarce, given the size of the population, and the country is losing arable land at roughly 1 percent per year, partly as a result of growing urbanization. This loss of arable land, coupled with a growing population has resulted in a rapid reduction of farm size and an increasing fragmentation of land holdings. The unequal distribution of land is the major source of rural income inequality, and the number of effectively landless continues to increase. A consensus seems to have emerged that a radical redistribution of land is not possible or feasible, partly because of the absolute scarcity of land and the limited administrative capacity to carry out a far reaching land reform. The 2005 PRSP argued that “land is no longer the principal source of power in rural Bangladesh and that it no longer serves to limit the economic opportunities of the poor.” Others argue that land continues to be a source of conflict, control and power, and that the repression of minorities in Bangladesh revolves around land access and ownership.

The dynamic nature of livelihoods and labor markets. Livelihoods in rural areas are adapting to take advantage of the new opportunities afforded by improved infrastructure and communications. The reality today is that rural households are as likely to be involved in non-agricultural activities as they are in farming and, increasingly, they derive incomes from multiple sources. This means that human, social and financial assets are fast becoming as important as access to natural assets such as land and water once were. The greatest expansion has been in the service sector, with the number of small shops in villages having increasing substantially and many more people working in

²³ USAID/Bangladesh nd.

tailoring and other craft enterprises, rickshaw pulling and petty trading in rural villages and local bazaars. Income and remittances from migration has replaced agriculture as the major source of household incomes in many places, and the phenomenon of “multi-locational households,” in which household members may temporarily reside away from the village in order to secure desirable work – is becoming common. Migrating in order to secure seasonal agricultural work is especially important for poor men and women from the poorer areas of the country. The improved linkages to the national and global economy have also provided a range of new livelihood possibilities for village women. This includes employment in the ready-made garment industry (RMG),²⁴ manufacturing of jute handicrafts for overseas markets, tobacco processing and employment by NGOs as health and family planning (FP) and family welfare visitors. Rural women still tend to be relegated to the lower paid, unskilled jobs, however, with economic stresses pushing many into agricultural wage labor and as laborers on income generation projects.²⁵

Gender equity²⁶ fundamental to improving food security, maternal and child nutrition in particular.

In rural Bangladesh, men and women’s roles and responsibilities differ in contributing towards household food security. Men are farmers and daily wage laborers while women provide labor to family farm activities, post-harvest food processing and work as daily wage laborers. However women continue to earn less than half the wages men earn, limiting their contribution to household food security; women lack control over their income, have limited mobility, require permission to work as wage laborers, and if they can work, they have limited choice in the type of work, low skills, fewer days of work, and more seasonal work compared to men. These same issues affect men but to a lesser degree, and they have greater autonomy in deciding upon income earning activities. The social practice of early marriage that affects over 70 percent of adolescent girls in Bangladesh precipitates adolescent pregnancy that is a significant risk factor for adverse nutrition outcomes. Married adolescent girls often come into marriage malnourished and are more malnourished than their older peers and this further contributes to the intergenerational cycle of malnutrition. Over 42 percent of married adolescent girls are pregnant or have a child between the ages of 15-19 years. The prevalence of malnutrition and sub-optimal infant feeding practices are significantly undermined by women’s lack of decision making power that is particularly low among adolescent mothers but increases gradually with age.

Women’s’ rights and roles. Women in Bangladesh have won some important first round victories against gender-based inequalities and discrimination. Female gains in primary and secondary education, access to birth control measures and microcredit compare favorably with the situation in other developing countries. However, entrenched patriarchal attitudes still keep many social and political activities off-limits to women. Many public spaces remain unfriendly to women, including roads, public transportation, government offices, police stations, courts and market places. Social

²⁴ The RMG industry absorbed 1.5 million workers during the last decade and more than 90 percent of these were women migrants from rural areas.

²⁵ Toufique and Turton 2003.

²⁶ **Gender equity** considers the differences in women's and men's lives and recognizes that different approaches may be needed to produce outcomes that are equitable.

(**Gender equality** refers to women and men being treated the same way. However, equal treatment will not produce equitable results, because women and men have different life experiences.)

attitudes also put a low priority on women's health, and although women's participation in the economy is much more acceptable now, their productivity tends to be low and they remain concentrated in lower paying jobs.

Family Planning: past accomplishments and current stagnation. The total fertility rate (TFR) - the number of births expected per woman over her lifetime - has dropped from a high of 6.7 in 1970's to 2.7 in 2007. There was a decline of 50 percent in the 1970's and 1980's after which the TFR stagnated at 3.3 for a decade and then began to decline again after 2000. The contraceptive prevalence rate (CPR) is 55.8 percent (modern methods CPR is 47.5 percent), a number that has not changed much since the late 1990's. The discontinuation rate is 56.5 percent. This rate has increased 14 percentage points since the 2004 Bangladesh Demographic and Health Survey (BDHS). The public sector provides contraceptives, free of charge, to half of the population; the majority of these acceptors come from the poorest quintile. According to Bangladesh's 2008 Poverty Reduction Strategy Paper (PRSP),²⁷ if a sustainable decline in fertility is to be achieved – requiring moving fertility to below replacement levels - more emphasis needs to be placed on reducing barriers to the uptake of long-acting and permanent family planning methods (LAPM). Community level behavior change communications strategies need to be reinvested in, along with targeting underperforming regions of the country and areas where women have limited mobility.²⁸

Maternal health, a continuing challenge despite important progress. The maternal mortality rate (MMR) declined 44 percent over ten years going from 570 per 100,000 live births in 1990 to 320 deaths in 2001. With the exception of the high coverage for tetanus toxoid immunization (90 percent), maternal health services have maintained a very low level of coverage. Only 52 percent of women received antenatal care (ANC) from a medically trained health provider, 18 percent of deliveries were attended by medically trained health providers; 15 percent delivered in health facilities; and 21 percent received postnatal care within the first week after giving birth. The nutritional status of women has improved somewhat but remains poor. The rate of malnutrition among women of reproductive age (WRA) (defined as Body Mass Index [BMI] < 18.5) has dropped from 34 percent in 2004 to 30 percent in 2007. The practices of child and adolescent marriage and early pregnancy contribute to poor maternal and child health. The median age of first marriage is 15 years for women and 24.7 years for men.²⁹

HIV prevalence is low but risky behaviors are a source of concern. Bangladesh's HIV (Human Immunodeficiency Virus) epidemic is concentrated in most at risk population groups, including injecting drug users, women and men commercial sex workers, and their clients. The Joint United Nations Programme on HIV/AIDS (UNAIDS) estimated that in 2007 a total of 12,000 people were living with HIV in Bangladesh of whom 2,000 were women. UNAIDS also estimated 500 deaths from AIDS in 2007. Among the risk factors of concern for the spread of HIV in Bangladesh are: a significant but concealed sex industry; low levels of condom use; increasing prevalence of injecting drug use and sharing of needles; and rising HIV prevalence levels

²⁷ GOB 2008.

²⁸ NIPORT, Mitra and Associates, and ORC Macro International 2009.

²⁹ Ibid 2007.

among injection drug users³⁰. In general, HIV-related knowledge is low. Only 6 percent of women and 14 percent of men have a comprehensive knowledge about HIV. Only 14 percent of ever-married women and 41 percent of ever-married men know all three means of preventing HIV (abstaining from sex, being faithful to one partner and using a condom).³¹

Governments and governance. Successive Bangladeshi governments have been committed to poverty reduction and meeting the MDGs. The country has also shown slow but steady gains in public accountability, with successive free elections, a rapidly growing and active civil society and a relatively free media. The state has encouraged the emergence of a vigorous private sector through sound macroeconomic management and trade liberalization. Governments have also made room for and forged partnerships with NGOs, which have made substantial contributions to the country's development gains. However, a number of weaknesses, including a highly centralized state and bureaucracy, a weak civil service, weak governance, inadequate revenues and weak public financial management, undermine the effectiveness of pro-poor spending policies and constrain the effective delivery of essential services.

3. FOOD SECURITY SITUATION IN BANGLADESH

This section begins with an overview of food insecurity at the national level in Bangladesh. It describes the main food security problems related to food availability, access and utilization and the risks and vulnerabilities that affect food security. It also discusses where these problems are concentrated geographically in Bangladesh.

3.1 FOOD INSECURITY AT THE NATIONAL LEVEL

Despite some improvements during the 1990's and in the beginning of the new millennium, Bangladesh remains a food insecure country with improvements needed in food availability, access and utilization.

3.1.1 Food Availability

3.1.1.1 *Aggregate Food Supplies*

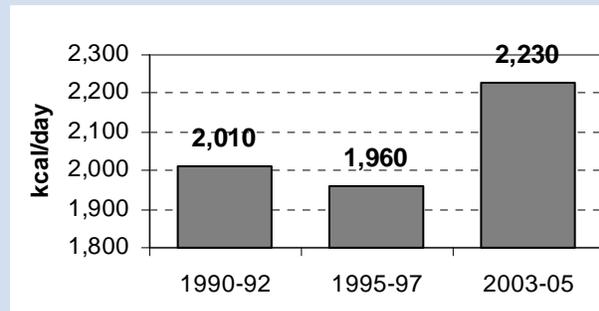
According to the Food and Agriculture Organization of the United Nations (FAO), food supplies at the country level have increased from 2,010 calories per person per day in 1990-92 to 2,230 in 2003-05. This reflects changes in food production; imports, both commercial and food aid; exports and stocks. This is an improvement and means that the average amount of calories available in the country for human consumption is significantly above the minimum average daily requirements, which FAO estimates are 1,805 calories per person per day. Given the high level of inequality in Bangladesh, the amount of food actually available to poor people is likely to be significantly below these averages. This average is also lower than the other countries in South Asia, such as India (2,360), Pakistan (2,340), Nepal (2,430) and Sri Lanka (2,360).

³⁰ UNAIDS, "Report on the global AIDS epidemic," 2008.

www.unaids.org/en/KnowledgeCentre/HIVData/GlobalReport/2008/

³¹ NIPORT, Mitra and Associates, and ORC Macro International 2009.

FIGURE 1. FOOD SUPPLY PER PERSON

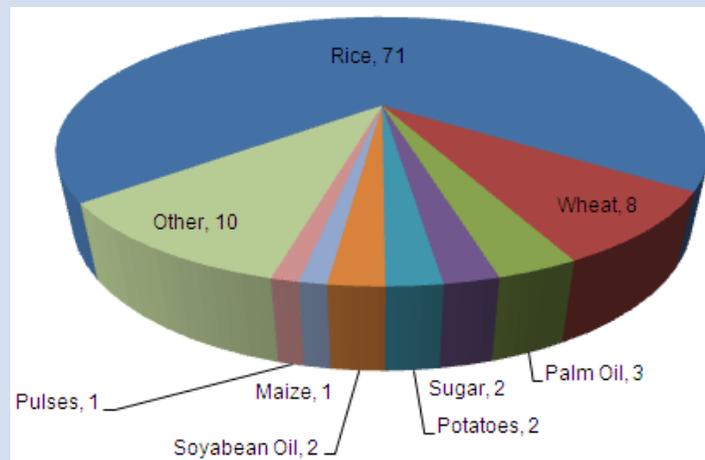


Source: FAO 2009. [see references]

3.1.1.2 Dominance of Rice in Consumption and Production

Rice, which accounts for 71 percent of the calories consumed in the country, dominates the national diet. It is the basic staple for the urban as well as the rural population, contributing to 63 percent of the calorie intake of urban consumers, based on household income and expenditure survey data, and over 71 percent for rural consumers. The percentages are much higher for the poor. The high consumption of cereals and low intake of pulses and animal-based proteins contributes to a high level of anemia and other micro-nutrient deficiencies.

FIGURE 2. COMPOSITION OF THE NATIONAL DIET (% SHARE DAILY ENERGY, FAO, 2003-2005)



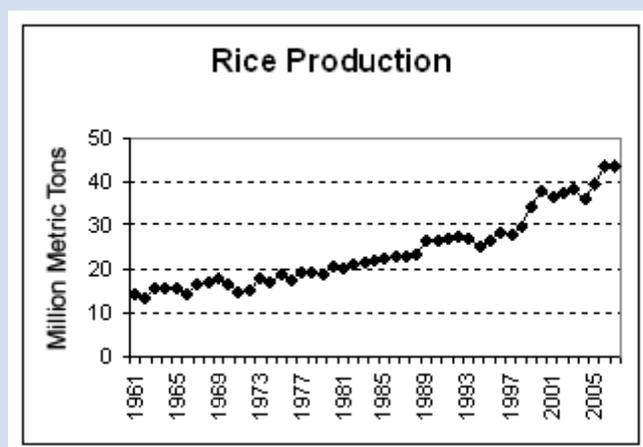
Source: FAO 2008. <http://www.fao.org/economic/ess/food-security-statistics/en/>.

Rice is also the dominant agricultural crop, occupying more than three fourths of the total cropped area. The area devoted to rice has expanded since the late 1990s while the area devoted to other crops including pulses, oilseeds, wheat and jute has declined. Rice production responded positively to the introduction of the green revolution

varieties and the expansion of the area under irrigation beginning in the late 1960s and early 1970s. Production more than doubled since the early 1980s, even though the amount of land available for cultivation has steadily declined. These increases have been attributed to significant policy shifts toward increased private sector involvement in input distribution, liberalization of equipment imports, deregulation, rationalization of the rice subsidy, and restructuring of the agricultural research-extension linkages.

Growth in rice production has slowed in recent years, however, and rice production and the crop sector more generally suffers from low productivity. The main reasons include a decline in soil fertility due to the unbalanced use of fertilizers, expansion of crop cultivation to more unfavorable and dispersed locations, and low investment in seed/fertilizer/irrigation technology. There are significant gaps between yields achieved by experiment stations and farmers in different regions. To close the yield gaps, increased investment is needed for the development of improved crop varieties, seed quality, soil health, pest management, agronomic practices, flood control, irrigation and water management. The GOB's focus is on intensifying rice production in order to meet the consumption needs of its people. The hope is that this framework will also result in the releasing of more land for the production of higher valued crops. Approaches that are being promoted to intensify rice production include strengthening rice research to generate new high yield varieties and hybrid varieties, minimizing the yield gap through better extension and management practices, and increasing the availability and more efficient use of fertilizer, water and energy.

FIGURE 3. RICE PRODUCTION



Source: FAO 2008. <http://www.fao.org/economic/ess/food-security-statistics/en/>.

Farmers in Bangladesh face a number of constraints, including low profitability, lack of storage facilities, difficulty in purchasing inputs due to a lack of liquidity, and numerous problems related to water management. The latter includes inequality of access to tube wells, a shortage of electricity to run irrigation pumps and the overuse of water, with some farmers using too much water, because it is available to them free of charge. Access to water has also become a problem in some areas due to a decline in the water

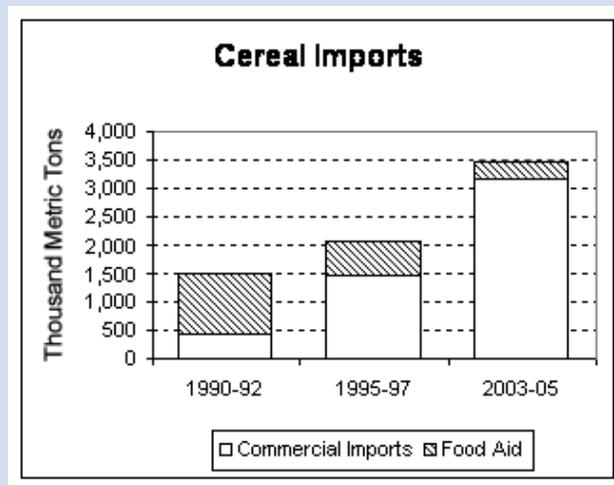
table,³² increasing the urgency for improving the efficiency of water use at the field level. The indiscriminate use of pesticides is also becoming a more serious problem, adding more urgency to the need to develop an effective integrated pest management (IPM) program.

More diversity is needed in consumption to improve the nutritional status of the Bangladeshi population. Diversification in the crop sector would also be desirable from a land/environmental sustainability perspective and would help create faster growing and more vibrant rural economy.

3.1.1.3 Imports and Food Aid

The upsurge in cereal production, rice production in particular, has enabled Bangladesh to reduce the import gap. Bangladesh's imports of rice, although growing, still represented less than 1 percent of its total production in 2003-05. Wheat imports, on the other hand, have been increasing in importance and in 2003-05 represented 187 percent of domestic wheat production. Food aid imports represented only 1 percent of total food consumption in 2003-05 and less than 9 percent of total cereal imports. Since domestic production is likely to continue to be highly variable, as a result of the country's vulnerability to natural disasters, cereal imports will also continue to be useful as a mechanism for stabilizing food availability.

FIGURE 4. CEREAL IMPORTS



Source: FAO 2008. <http://www.fao.org/economic/ess/food-security-statistics/en>

³² According to the Ministry of Agriculture, millions of people who used to use more than 3.5 million shallow tube wells now have no access to water.

3.1.2 Food Access

3.1.2.1 Poverty

Lack of access to food due to poverty is the root cause of food insecurity in Bangladesh. Food supplies may be adequate, but people will still be food insecure if they lack the purchasing power needed to access an adequate diet. For all its progress Bangladesh remains a poor country, with an estimated 56 million people living in poverty in 2005, 35 million among whom were below the lower or extreme poverty line. These people by definition are too poor to be able to afford an adequate diet and other basic necessities.³³

TABLE 2. POVERTY AND EXTREME POVERTY (PERCENT)

	1991-1992	1995-1996	2000	2005
Poverty	56.8	50.1	48.9	40.0
Extreme Poverty	41.3	35.1	34.3	25.1

Source: World Bank, "Poverty Assessment," 2008.

As indicated earlier, Bangladesh has had some successes in reducing poverty, since the beginning of the 1990s. The national headcount rate of poverty declined from 56.8 percent in 1991-92 to 48.9 percent in 2001 and to 40 percent in 2005. This means that poverty declined at an average annual rate of 1.9 percent between 1991-92 and 2000 and 3.6 percent between 2000 and 2005. The prevalence of extreme poverty has fallen even faster, from 41.3 percent in 1991-92 to 34.3 percent in 2000 and 25.1 percent in 2005, implying an average annual rate of decline of 5.9 percent and 5.4 percent in the two time periods respectively. In other words, the rate of extreme poverty has declined at a faster rate than the overall rate of poverty has. These declines were enough to reduce the numbers of people living in poverty by 8.3 million people between 2000 and 2005 and the numbers living in extreme poverty by nearly 6 million.

TABLE 3. DEPTH AND SEVERITY OF POVERTY

	POVERTY GAP		SQUARED POVERTY GAP	
	2000	2005	2000	2005
National	12.8	9.0	4.6	2.9
Urban	9.0	6.5	3.3	2.1
Rural	13.7	9.8	4.9	3.1

Source: World Bank, "Poverty Assessment," 2008.

³³ The Cost of Basic Needs (CBN) poverty lines, which are estimated by the Bangladesh Bureau of Statistics (BBS) and the World Bank using Household Income and Expenditure Survey (HIES) data represent the level of per capita expenditure at which a household can be expected to meet its food and other basic needs. . This is measured by: (1) estimating a food poverty line as the costs of a fixed bundle of food items that will provide 2,122 kcal/day/person and (2) adding an "allowance" for non-food consumption to the food poverty line. . To determine the lower poverty line (extreme poverty), the non-food allowance is the average non-food expenditures of households whose total consumption is equal to the food poverty line, whereas for the upper poverty line (poverty), the non-food allowance is the average non-food expenditure of households whose food consumption was equal to the food poverty line.

However, 40 percent of the population being poor and 25 percent being extremely poor is still much too high from a public welfare point of view. It also means that the prevalence of poverty remains higher in Bangladesh than in some of its neighbors in South Asia, such as Bhutan with 31.7 percent (2004), India with 27.5 percent (2004-05) and Sri Lanka with 22.7 percent (2002).

The depth (poverty gap) and severity (squared poverty gap) of poverty also showed significant improvements, falling by 30 and 37 percent respectively between 2000 and 2005. These trends suggest significant improvements among those living below the poverty line. A decline in the poverty gap indicates that the average consumption of the poor has improved, while a decline in the squared poverty gap implies a more equitable distribution of consumption among the poor. These improvements also occurred at similar rates for urban and rural poor. That is, the poverty gap declined by 28 and 29 percent for urban and rural areas respectively and the squared poverty gap by 36 and 37 percent.

Factors that help explain some of the poverty reduction that took place between 2000 and 2005 include a reduction in the average household size, which fell sharply during this period mainly due to a decline in the number of children which reduced the dependency ratio. The national average household size declined from 5.18 to 4.85 and the dependency ratio declined from 0.77 to 0.69, with the declines in household size and dependency ratio for poor households similar to those of the entire population. The proportion of household heads with secondary education levels or above rose from 27 percent in 2000 to 31 percent in 2005. Returns to agricultural labor, farming and land ownership improved significantly for rural households as did returns to non-agricultural daily labor and self-employment for urban households.

The World Bank has estimated that the 2007-08 food price increases could have eroded some of the poverty reduction gains and slowed the rate of poverty reduction and that the economic slowdown projected for FY09 and FY10 might have a similar effect. The World Bank had estimated that the rice price increase could have led to an increase in poverty of around 3 percentage points for that year and that the poverty rate might decline by only 4.3 to 4.5 percentage points between 2005 and 2010 as a result of the projected economic slowdown instead of the 5 percentage point decline that was projected in the absence of the slow down. There are caveats to this conclusion, however. The first set of projections did not take into account the behavioral changes in consumption (such as substitutions between commodities) that may have occurred between 2005 and 2008, for example, and the impact of the GOB's assistance scheme that were adopted in response to the food price shock. The second set of projections does not take into account the recent declines in food and fuel prices that have occurred as a result of the global financial crisis and recession. The decline in GDP, which is another result of the global recession, and the fall in food and fuel prices will have opposing effects on poverty, making it harder to estimate what the actual effects on poverty reduction are likely to be.³⁴

³⁴ World Bank, "Semi-Annual Economic Update," 2009.

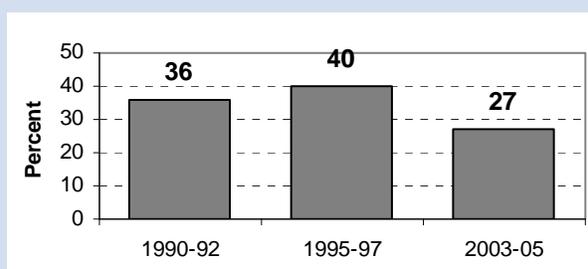
3.1.2.2 The Undernourished

These trends in poverty are also reflected in the numbers and percent of the Bangladesh population that are undernourished.³⁵ According to FAO's estimates, the percent of the population that is undernourished fell from 36 to 27 percent between 1990-92 and 2003-05, a 9 percentage point decline.

The numbers of people who are undernourished have also declined, according to FAO's estimates, but because of the increases in population since the beginning of the 1990s, the actual numbers of undernourished have only declined by 1.5 million.

Bangladesh has also made some progress in terms of the depth of hunger in the country. This is a new measure from FAO, which indicates by how much food-deprived people fall short of minimum food needs in terms of dietary energy.³⁶ The intensity of food deprivation is low when it is less than 200 kilocalories (kcal) per person per day and high when it is higher than 300 kilocalories per person per day. In Bangladesh, the intensity of hunger on the part of food deprived people was 320 calories per person per day but dropped to 290 calories in 2003-05.

FIGURE 5. PROPORTION OF UNDERNOURISHED



Source: FAO 2008. <http://www.fao.org/economic/ess/food-security-statistics/en/>.

³⁵ This FAO-developed indicator measures the extent to which the total amount of food energy available in a country is below the minimum required for maintaining a healthy life and carrying out light physical activity. It is calculated based on estimates of the per capita dietary energy supply available in a country, assumptions about the distribution of food supplies across households, and a minimum energy requirement threshold.

³⁶ It is measured as the difference between the minimum dietary energy and the average dietary energy intake of the undernourished population (food-deprived).

FIGURE 6. NUMBERS OF UNDERNOURISHED

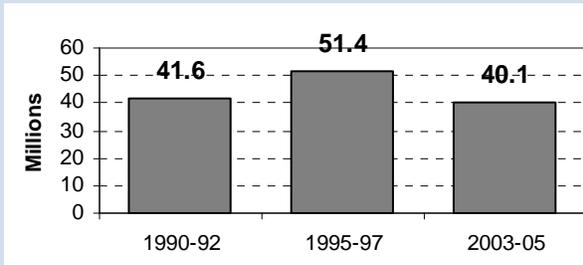
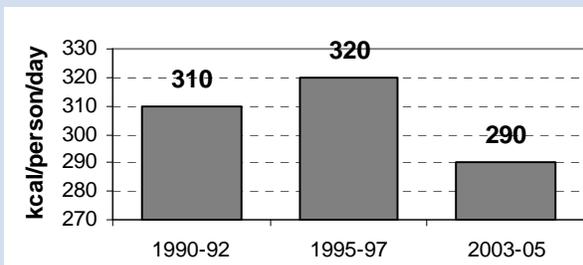


FIGURE 7. INTENSITY OF HUNGER



Source: FAO 2008. <http://www.fao.org/economic/ess/food-security-statistics/en/>.

3.1.2.3 Characteristics of the Poor

The poor in Bangladesh have a number of distinct characteristics. The likelihood of poverty is higher when a household has a large number of dependents, has low levels of education, or is headed by a female whose husband does not send home remittances. In rural areas, owning agricultural land raises household per capita consumption progressively with land size. Over 45 percent of rural households are landless, however, and almost 57 percent of these households fell below the poverty line in 2005. The functionally landless, who represent almost 16 percent of the rural population, did slightly better, that is, only 49 percent fell under the poverty line in 2005 (see **Table 3**). A household whose head works as a daily wage laborer is more likely to be poor (72 percent) than any other occupational category. In rural areas 19 percent of all households fall into this category (see **Table 4**). Urban households are less likely to be poor, if the head is engaged in some form of non-farm self-employment or if they own some form of business. Poor households are also less likely to receive domestic or foreign remittances.

TABLE 4. TRENDS IN POVERTY AND LANDOWNERSHIP IN RURAL AREAS

LAND SIZE	POVERTY RATE (%)		POPULATION SHARE (%)	
	2000	2005	2000	2005
Landless <0.05 acre	63.5	56.8	48.0	45.8
Functionally landless 0.05-0.5 acre	59.7	48.8	13.0	15.9
Marginal 0.5-1.5 acres	47.2	35.1	17.5	18.8
Small 1.5-2.5 acres	35.4	23.7	9.2	8.8
Medium/large 2.5 acres or more	20.7	12.8	12.4	10.7

Source: World Bank, "Poverty Assessment," 2008.

TABLE 5. POVERTY RATE AND POPULATION SHARE BY OCCUPATION OF HEAD OF HOUSEHOLD IN 2005

OCCUPATION OF HEAD OF HOUSEHOLD	POVERTY RATE (%)			POPULATION SHARE (%)		
	RURAL	URBAN	TOTAL	RURAL	URBAN	TOTAL
Self employed: agriculture	33	27	33	29	6	23
Self employed: non agriculture	38	23	33	17	31	20
Salaried employee	27	17	22	10	31	15
Daily wage: agriculture	72	72	72	19	5	16
Daily wage: non-agriculture	60	55	59	12	15	13

Source: World Bank, "Poverty Assessment," 2008.

Landlessness, low education and employment as a daily wage laborer are the most significant factors influencing the likelihood of a household to be extremely poor. The extreme poverty rate is nearly 40 percent for landless households and declines progressively by land ownership to 6 percent for those owning more than 2.5 acres. Seventy eight per cent of the extremely poor live in households where the head has no education. Nearly 60 percent of the extremely poor rely on daily wage labor as their major source of income. In urban areas, the extremely poor face other problems, including being more likely to live in inadequate housing and face a high risk of eviction, poor living conditions, limited access to basic services, difficult employment conditions, particularly for women, and social problems in poor urban communities. Although the extremely poor in rural areas are likely to face many of these problems, crowding in the urban areas and high living costs create conditions that are especially detrimental to the quality of life of the poor.

Only ten percent of the households in Bangladesh are female headed. Among urban households, female-headed households are significantly more likely to be poor, while this correlation is insignificant for rural households. The correlation between poverty and gender is also affected by whether a household is de facto or de jure female headed. In the 2005 household income and expenditure surveys (HIES), roughly a third of the female-headed households were married, 60 percent were widowed and about 7 percent were separated or divorced. The female household heads that are married are likely to have husbands who are migrant workers. The poverty rate is just 16 percent

among households headed by married women, compared to 48 percent among households headed by women who are divorced or separated and 37 percent among households headed by widows.

3.1.2.4 Movements In and Out of Poverty

While the prevalence of poverty has declined overall, data from panel surveys indicate that there have been winner, loser and break even households, with the gross fluctuations in and out of poverty larger than the net changes in poverty ratios. Households that have moved out of poverty tend to be faster at accumulating human, physical and financial assets. They are better at diversifying their sources of income, adopting new technologies for rice, for example and allocating more land to other higher value crops. They are also more likely to migrate and to look for income sources outside of agriculture, including engaging in trade and service activities and non-agricultural labor in the transport, construction and industrial sectors. Major factors that trigger a household's descent into poverty include illness of a family member, loss of land and assets due to erosion or severe flooding, and personal insecurity and financial shocks resulting from the marriage of a daughter or sister and dowry payments. (Vulnerabilities at the household level are also discussed in the later section on "Risks and Vulnerabilities.") In other words, combining different exit routes is critical for the escape from poverty in Bangladesh, but not all poverty groups can afford to follow these multiple routes. The failure of some households to successfully combine different routes out of poverty can be attributed to the high level of initial poverty and/or because of adverse turns and twists in the economic and social circumstances of these households.³⁷

3.1.3 Food Utilization

3.1.3.1 Recent Trends in Nutrition

Bangladesh saw remarkable improvements in nutrition between 1990 and 2005.³⁸ Between 2004 and 2007, stunting among children declined from 51 to 43 percent and underweight decreased from 43 to 41 percent.³⁹ The percentage of children age 6-9 months who were breastfeeding and received complementary foods increased from 28 percent in 1997 to 74 percent in 2007. Eighty-eight percent of children under age five received a vitamin A supplement in the past six months.

Disparity in malnutrition by sex has declined over the past decade from a situation in which girls were more likely to be malnourished than boys, to the present situation in which there is no notable difference in the prevalence of malnutrition among boys and girls.⁴⁰ The nutritional status and micronutrient intake of mothers improved since 2004. Malnutrition among ever-married women aged 15-49 (defined as BMI <18.5) declined from 52 to 30 percent between 1997 and 2007. Malnutrition among adolescent ever-

³⁷ Sen and Hulme May 2004.

³⁸ Helen Keller International (HKI), "Trends in child malnutrition, 1990 to 2005," Nutritional Surveillance Project, Bulletin No.19, August 2006.

³⁹ NIPORT, Mitra and Associates, and ORC Macro International 2009. The 2004 data have been recalculated using the new World Health Organization (WHO) Child Growth Standards to show comparable results.

⁴⁰ NIPORT, Mitra and Associates, and ORC Macro International 2009.

married women aged 15-19 also declined from 40 to 35 over the same period. The proportion of women who received a dose of vitamin A within two months of giving birth also increased from 15 percent in 2004 to 20 percent in 2007.

Anemia is a severe problem in Bangladesh. In 2004, 68 percent of children under age five were anemic, with the highest prevalence among the 6-11 month olds (92 percent). Approximately 40 percent of adolescent girls and 31 percent of adolescent boys were anemic as well as 46 percent of non-pregnant and 39 percent of pregnant women. In comparison to a similar survey conducted in 2001, the prevalence of anemia has increased among children under five, adolescent boys and girls and non-pregnant women. Prevalence declined among pregnant women. .⁴¹

3.1.3.2 Child Malnutrition

The problem of child malnutrition in Bangladesh is still a serious one, however, in spite of the gains referred to earlier,⁴² over 43 percent of children under five are still stunted (too short for their age) in 2007, which is above the 40 percent prevalence for stunting that World Health Organization (WHO) classifies as being very high.⁴³ Equally worrisome is the fact that the number of children wasted increased from 15 percent in 2004 to 17 percent in 2007, a rate that is above the 15 percent threshold for a humanitarian emergency by WHO standards. Because of its large population, these high rates translate into a large number of malnourished children, over 7.7 million children are estimated to be stunted and over 3.1 million children are wasted. Malnutrition indicators are likely to have worsened with the 2007 price hike and food crisis. In fact, a nationally representative nutrition survey by Bangladesh Rural Advancement Committee (BRAC)⁴⁴ found an increase in child underweight and wasting of 54% and 26% respectively following the price crisis. The (nationally representative) Household Food Security and Nutrition Assessment (HFSNA) 2009 carried out by the World Food Programme (WFP), United Nations Children’s Fund (UNICEF) and Institute of Public Health Nutrition (IPHN) also found that the stunting level had increased since the 2007 levels (from 43% to 49%).

TABLE 6. CHANGES IN THE PROPORTION OF CHILDREN UNDER FIVE MALNOURISHED

	2004	2007
Stunting (Height-for-age <2 SD)	51	43
Underweight (Weight-for-age <2 SD)	43	41
Wasting (Weight-for height <2 SD)	15	17

Source: Bangladesh Demographic and Health Surveys (BDHS), 2004 and 2007.

⁴¹ World Food Programme (WFP), “Food Security Atlas for Bangladesh,” 2009.

<http://www.foodsecurityatlas.org/bgd/country> (accessed August 5, 2009)

⁴² USAID nd, 89. The nutritional status of children less than five years of age, as measured by either stunting (height-for-age Z score < -2 SD) or underweight (weight-for-age Z score < -2 SD), is one of the best indicators of food utilization and also a good indicator of the overall level of development in a country.

⁴³ WHO Technical Report Series, “Physical Status: the use and interpretation of anthropometry,” 1995, p. 208-212.

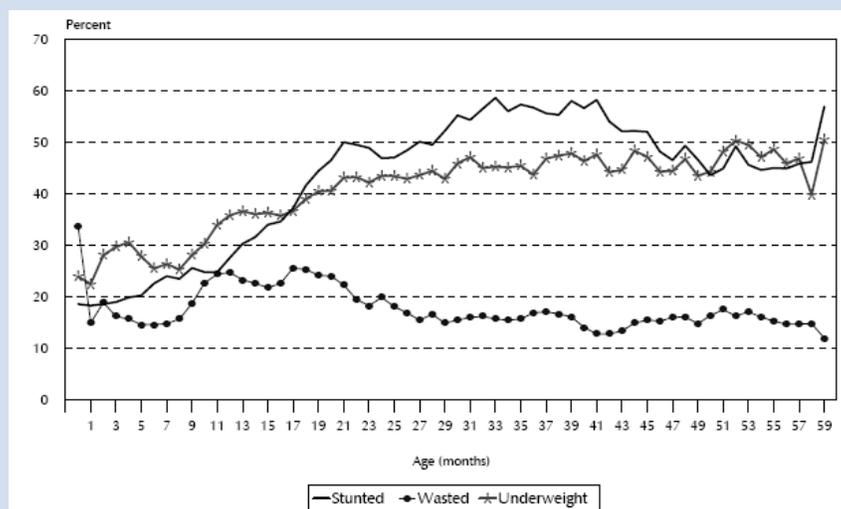
⁴⁴ Sulaiman, Parveen, and Das January 2009.

Malnutrition contributes to two-thirds of childhood deaths in Bangladesh.⁴⁵ Children who are wasted are at immediate threat of dying, but stunting is also a serious problem, because it has long-term adverse effects on these children, on their cognitive development, their ability to learn and their health and productivity in adult hood.⁴⁶ And, this has serious implications for Bangladesh’s future economic, social and political development.

The fetal stage though two years of age is the period of most rapid growth and a critical time in child development. At this age, children are most vulnerable to growth faltering, which is most often caused by illness, infection and sub-optimal feeding practices. In Bangladesh, malnutrition begins to increase during the first few months of life, intensifies gradually throughout the first two years and reaches a plateau at age two to three as is indicated in **Figure 8**.

Because stunting is frequently irreversible, especially after the age of two when the pace of growth slows, it is important to intervene to support children’s health and nutrition before they become stunted. Several studies have shown that stunting can be reduced by targeting nutrition interventions during the first two years of life.⁴⁷ Evidence from randomized controlled trials and a group of observational studies also suggest that nutrition interventions such as supplementary feeding are more effective in improving child growth and preventing growth faltering in younger children than in older children.⁴⁸ In other words, the window of opportunity to improve nutritional status begins at conception and continues through the first two years of a child’s life.

FIGURE 8. PERCENTAGE OF CHILDREN AGED 0-59 MONTHS WHO ARE MALNOURISHED, BANGLADESH, 2007



Source: BDHS, 2007.

⁴⁵ Pelletier DL et al., “The effects of malnutrition on child mortality in developing countries,” WHO Bulletin, .73:443-448

⁴⁶ Grantham-McGregor et al. 2007; Hoddinott et al. 2008; Victora et al. 2008.

⁴⁷ Ruel et al. 2008.

⁴⁸ Ibid.

3.1.3.3 Factors that Influence Child Malnutrition

Maternal nutritional status is a strong determinant of child malnutrition in Bangladesh. Children of malnourished mothers are more likely to be malnourished than children of mothers with normal nutrition status. A study conducted in Bangladesh found that maternal wasting (mid-upper arm circumference [MUAC] <22.5 cm) during pregnancy was associated with an increased risk of low birth weight.⁴⁹ In Bangladesh, nearly one-third of women are underweight and over half are anemic. The prevalence of low birth weight babies is 36 percent. This is one of the highest in the world and is more than twice the 15 percent threshold that indicates a public health problem.⁵⁰ In other words, poor nutritional status of Bangladeshi women leads to lower birth weight babies, a higher probability of child malnutrition, and continues the cycle of malnutrition across generations. Maternal malnutrition is commonly perceived by health professionals and mothers to have a large effect on lactation. While a few studies have found that milk from malnourished women has lower fat levels, methodological problems make it difficult to document reductions in the quality and production levels of breast milk among malnourished women. However, most lactating women will later become pregnant again, thus, if a mother's nutritional status is poor during lactation, this may increase the risk of malnutrition for the breastfed child and may also increase the risk of low birth weight for the subsequent sibling⁵¹.

Poor rates of exclusive breastfeeding and poor infant and young child feeding (IYCF) practices contribute to these high levels of child malnutrition. Feeding practices play a pivotal role in determining the optimal development of infants. WHO recommends exclusive breastfeeding for children 0-5 months; appropriate feeding for children 6-23 months including: continued breastfeeding, feeding solid/semi-solid food a minimum number of times per day, feeding minimum number of food groups per day, continued feeding during and after illness, feeding appropriate quantities of food, providing food with appropriate consistency, and feeding nutrient-dense foods;⁵² Poor breastfeeding and infant feeding practices have adverse consequences for the health and nutritional status of children. This, in turn, has consequences for their mental and physical development. Only 42 percent of children were exclusively breastfed from zero to five months and only 41.5 percent of children between six and 23 months were fed according to the three priority IYCF (receiving breast milk, the proper variety of food and the proper frequency of feeding appropriate to the age of the child).⁵³ This situation has changed very little over the past decade.

Evidence that the percent of children stunted decreases as household incomes increase indicates that poverty, or lack of access to food, is also an important determining factor for child malnutrition in Bangladesh. According to the 2007 BDHS survey, for example, 54 percent of children from families in the lowest wealth quintile were stunted compared to only 26 percent of children from families in the highest wealth quintile. The fact that stunting and wasting are still so high among families in the highest wealth

⁴⁹ Rah et al. February 2006.

⁵⁰ Hossain, Naher and Shahabuddin 2004, 106; Benson 2004, 8; Salam, Haseen, Yusuf and Torlesse nd.

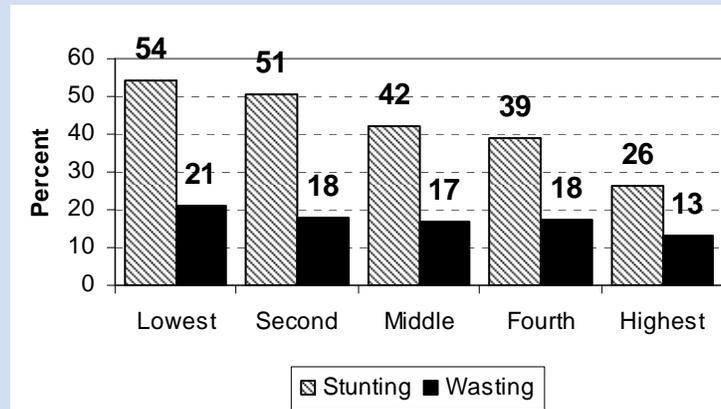
⁵¹ Greiner 1994.

⁵² WHO and PAHO 2004.

⁵³ NIPORT, Mitra and Associates, and ORC Macro International 2009.

quintile also suggests that mere access to food does not eliminate malnutrition and argues for the importance of improved IYCF practices. The fact that stunting and wasting are still so high among families in the highest wealth quintile also suggests that mere access to food does not eliminate malnutrition and argues for the importance of improved IYCF practices.

FIGURE 9. PERCENT CHILDREN WITH MODERATE MALNUTRITION BY WEALTH QUINTILE



Source: BDHS, 2007.

3.1.3.4 Gender and Nutrition

Gender inequity is thought to have a much stronger impact on child malnutrition in South Asia than in other regions. A woman's lack of decision-making power in the home relative to her husband's has a strong correlation to the malnutrition of her child in South Asia.⁵⁴ In Bangladesh, the mother often has very limited control over factors that influence her own nutrition and that of her child. In traditional communities, it is generally the men who shop for groceries and make the decisions as to how money will be spent rather than the woman. Decisions about diet and feeding practices are often made by the mother-in-law. The fact that a woman often is not permitted to leave her home without permission from her husband limits her care-seeking activities in case of her own or her child's illness. It is a common practice for men and boys in the household to eat first and then women and girls.

The prevalence of domestic violence is high in Bangladesh. In 2007, 24 percent of currently-married women aged 15-49 reported having experienced either physical or sexual violence by their husband during the previous 12 months and 53 percent reported having experienced such violence at some point in the past.⁵⁵ In addition to physical injuries and psychological distress, domestic violence is associated with lower access to maternal health services. Women of all ages who accepted justifications for wife-beating (a proxy for domestic violence commonly used in the DHS) were half as

⁵⁴ Ramalingaswami, Jonsson and Rohde 1996.

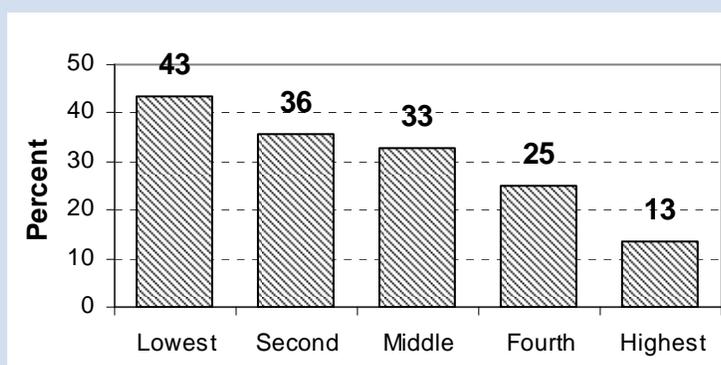
⁵⁵ NIPORT, Mitra and Associates, and ORC Macro International 2009.

likely to receive delivery assistance from a medically trained provider and postnatal care within the first two days after delivery as were women who accepted no justifications for wife-beating. In other settings, domestic violence has shown to be associated with increased risk of infant and child mortality⁵⁶ and chronic malnutrition in children and women.⁵⁷

The practices of child and adolescent marriage and early pregnancy contribute to poor maternal and child health. Because an adolescent girl is likely to be married to a man who is several years her senior, she tends to have less decision-making power than her husband. Young married women (aged 15-19) are much less likely to report participating in decisions about their own or their children's health care than married women in general (aged 15-49.) Malnutrition, measured by a BMI < 18.5, among ever-married women aged 15-19 is 35 percent, higher than any other group of ever-married women. This means that more than one third of young mothers are likely to be malnourished entering and during pregnancy.

Results from the 2007 BDHS survey show that the percent of women suffering from malnutrition (defined as BMI < 18.5) declines markedly between the poorest and wealthiest households, indicating that poverty is a strong determinant of maternal malnutrition (see **Figure 10**). Forty three percent of women from households in the lowest wealth quintile suffered from malnutrition compared with 13 percent of women from households in the highest wealth quintile. However, the fact that the rate of malnutrition remains quite high even in higher wealth quintiles (25 percent of women in the second highest quintile) suggests that, in addition to food access, dietary practices in the household also have a strong influence on maternal nutrition.

FIGURE 10. PERCENT WOMEN MALNOURISHED (BMI < 18.5) BY WEALTH QUINTILE



Source: BDHS, 2007.

⁵⁶ Ahmed, Koenig, and Stephenson 2005.

⁵⁷ Ackerson and Subramanian March 2008.

3.2 GEOGRAPHIC DISTRIBUTION OF FOOD INSECURITY

Underlying the national story, which is one of progress in some key areas, are disparities among income and occupational groups, gender and regions. This section focuses on the regional disparities in food availability, access and utilization.

3.2.1 Food Availability

Whether sufficient food is available in a country depends on domestic production, imports, commercial and food assistance, exports and the availability and size of stocks. Rice, the basic staple, is grown all over the country. However, over 60 percent of the rural population is landless (with less than 0.05 acres) or functionally landless (0.05 to 0.5 acres) in Bangladesh and earn much of their income through their labor on other people's farms or other types of daily labor. Most Bangladeshis also depend on the market to meet much of their food needs. So differences in food consumption among regions depends more on differences in opportunities to earn an adequate living than it does on the amount of food produced in the region.

There are regional disparities in agro-ecological conditions, socio-economic conditions and exposure to risk that lead to regional differences in food production and the availability of job opportunities. A discussion of some of the more food insecure areas in Bangladesh follows:⁵⁸

The Northwest. (A) The northwest region is a slightly sloped plain in the northern part of the Rajshahi Division at the foot of the Himalayas. This is a food surplus production area, where agriculture is the principal source of employment. The soils are good, and there is a good road network that makes it easier to transport surplus production to markets. Most of the land is used to grow rice, usually two crops a year. Most of the wheat is grown here, also some cash crops, including tobacco and potatoes. Despite these favorable conditions, a large percentage of the population is food insecure due to access problems stemming from unequal land distribution and relatively low agricultural wages. The area is also adversely affected by natural disasters, including flash flooding during the monsoon season and drought in the southern part of the region. (See the following section on Risk and Vulnerability for a further discussion of the effects of natural disasters on food security.)

FIGURE 11. FOOD AVAILABILITY IN BANGLADESH



⁵⁸ The following discussion depends heavily on information from the WFP's 2005 and 2009 Food Security Atlases.

The Northern Chars. (B) These are sand islands located in the northern part of the country primarily around the Brahmaputra and Jamuna rivers. The soils are very sandy, only a few crops are grown during the winter months, including rice, wheat, chilies and peanuts, and crop yields are low. The communication and transport systems are poor, and people and goods travel primarily by river, especially during the rainy season. Most people are functionally landless, and sharecrop the land of absentee land owners, often paying half their crop in rent. Employment options are limited during the non-agricultural season, and many remain jobless. Since the chars are located on the banks of the two rivers, they are prone to flooding, which can destroy crops, livelihoods and homes. The chars grow in size when the rivers deposit more silt and shrink due to water erosion. Chars eventually erode sufficiently that their residents are forced to find another area to settle, which means that the whole area is in a constant state of instability.

The Drought Zone. (C) The drought zone is concentrated in the western most parts of Nawabjanj, Rajshahi and Noagaon Districts, just north of the Padma River. Rice is the main crop, irrigation is limited, options to expand the area under irrigation are expensive and productivity is low. The weather in this part of the country tends to be very hot in the summer and the area experiences a relatively long dry season. The combination of high temperatures and low annual rainfall has a devastating effect on agricultural production and threatens both small-scale farmers and laborers. There are a few wealthy land owners and a large number of poor agricultural laborers. The wage rates are relatively low, and during the non-agricultural season a substantial number of people migrate to Dhaka looking for better employment opportunities.

The Sylhet Haor Basin. (D) The Haor is a low-lying area in northern Bangladesh that is underwater for nearly half the year. Fishing is the main industry during the rainy season, and rice is grown during the winter season (November to April) when the waters recede. The population is scattered, and people live on small patches of raised land in the mist of water logged fields. Roads are few in number and many are submerged during the monsoon. Most parts of the Haor are only accessible by water during the rainy seasons, and it can take many hours to reach the remote regions. Most households are sharecroppers, who pay much of their income in rent. During the rainy season, many men migrate to work as laborers in areas with aman rice crops.⁵⁹ Those who remain often work as day laborers for the larger fishing industries. Residents also have limited access to schools, health facilities and markets. Flash floods at the end of the dry season can damage the sole rice crop, and severe storms can affect crop production and destroy marginal housing.

The Coastal Belt. (E) This was the former granary of Bangladesh, however, siltation, sand deposits and the intrusion of salt water has limited the potential for agricultural production. Lack of irrigation and access to fertilizers and modern equipment also limits

⁵⁹ Rice is grown in three seasons: aus (mid March to mid August), aman (mid June to November) and boro (Mid December to mid June). Aman (the monsoon rain-fed crop) used to be the major rice crop, but it has been replaced in importance by boro rice, which is irrigated. The increase in boro rice production has come at the expense of wheat, which is often grown on the same land at the same time as boro.

production, and a lot of land lies fallow. Flooding makes most of the roads impassable much of the year, and moving people and goods to market by river is difficult and expensive. Agriculture is still the main occupation, however, and more than half the people are functionally landless and rely on selling their labor to wealthy farmers. Fishing is also a seasonal occupation for many, but other opportunities for employment are limited. Many families have migrated, and during the non-agricultural season, many men migrate to Dhaka and other urban centers to find employment, typically returning in time for the rice harvest in December. The poor infrastructure and relatively low concentration of service providers makes it difficult for people to access basic services. Water erosion is a major problem, as are tidal waves and cyclones (See following section on Risks and Vulnerabilities for additional information on cyclones and flooding).

The Chittagong Hill Tracts. (F) This is a hilly, forested area in southeast Bangladesh that is distinct from the rest of the country. Twelve tribal groups live in this area in addition to the non-tribal population. A Peace Agreement was signed in 1997, following more than two decades of politically motivated armed conflict, and the region continues to be characterized by chronic physical insecurity and instability with a large number of internally displaced people in need of resettlement. Much of the population is located in very remote areas, making access to markets and basic services difficult. Most of the people that live in the area are agricultural laborers, and the lack of access to cultivable land and the lack of job opportunities during the non-agricultural season means that many households are poor and food insecure.

3.2.1 Food Access

3.2.2.1 Urban Rural Differences

The geographical location of a household clearly influences its likelihood of being poor. The prevalence of poverty remains much higher in rural areas, 43.8 percent in 2005 compared to 28 percent, as does the prevalence of extreme poverty (28.6 percent compared to 14.6 percent). There are also rural urban differences in terms of the rate of reduction of poverty and extreme poverty. Rural poverty has declined, at an average annual rate of 1.6 percent between 1991-92 and 2000 and 3.6 percent between 2000 and 2005. The rate of reduction of urban poverty was higher during both periods, 2.5 percent during the first period and 3.9 percent during the second period. An increase in returns to occupations that predominate in urban areas, increases in remittances and a larger decline in family size have contributed to the larger fall in urban poverty. This is in contrast to the improvements that have taken place in the depth (poverty gap) and severity (squared poverty gap) of poverty in the urban and rural areas of the country, which were fairly similar between 2000 and 2005. In other words, there was little difference in the rate of improvement in the average consumption levels of the poor (poverty gap) or in the equitable distribution of consumption among the poor (squared poverty gap) between urban and rural areas between 2000 and 2005.

TABLE 7. POVERTY AND EXTREME POVERTY BY URBAN AND RURAL AREAS (PERCENT)

	1991-92	1995-96	2000	2005
POVERTY				
Rural	58.7	54.5	52.3	43.8
Urban	42.7	27.8	35.2	28.4
EXTREME POVERTY				
Rural	43.7	39.4	37.9	28.6
Urban	23.6	13.7	20.0	14.6

Source: BBS, Household Income and Expenditure Survey, 2005.

3.2.2.2 Regional Differences

Regional inequality has been significant in Bangladesh, but until the early 1990s the big differences in income and poverty were between the greater Dhaka region and the rest of the country. Since 2000, the rate of poverty reduction has been faster in the eastern part of the country in areas that have easier access to the cities of Dhaka and Chittagong than areas that are west of the Brahmaputra River or south of the Ganges River. The largest decline in poverty took place in Dhaka, Chittagong and Sylhet, while Barisal and Khulna saw little change. Dhaka and Chittagong divisions, with just over half the country's population in 2000, contributed 79 percent to the reduction in national poverty. Between 2000 and 2005, the samples for the Household Income and Expenditure surveys from most of the eastern districts showed significant reductions in poverty, with the highest reductions occurring in the districts that were among the poorest in 2000.

TABLE 8: POVERTY RATES BY DIVISION (PERCENT)

DIVISION	2000	2005
Barisal	53	52
Chittagong	46	34
Dhaka	47	32
Khulna	45	46
Rajshahi	57	51
Sylhet	42	34

Source: BBS, Household Income and Expenditure Survey, 2005.

3.2.2.3 Distribution of the Poor and Extremely Poor by Sub-district (Upazila)

The maps on the following pages, which were produced by WFP as part of its food security mapping exercises, project the risks of poverty and extreme poverty down to the sub-district (upazila) level.⁶⁰ According to these maps, the rates of poverty and extreme poverty are highest in the districts in the northwest, the coastal belt, and the

⁶⁰ These maps were developed in cooperation with the World Bank and the BBS using small areas estimate techniques and data from the 2005 Household Income and Expenditure Survey and the 2001 population census.

districts of Mymensingh, Jamalpur and Jessore. Districts with more than one million people living in extreme poverty include Sirajganj, Naogaon, Bogra, Mymensingh and Chittagong.

FIGURE 12. PROPORTION OF POPULATION EXTREME POOR 2005

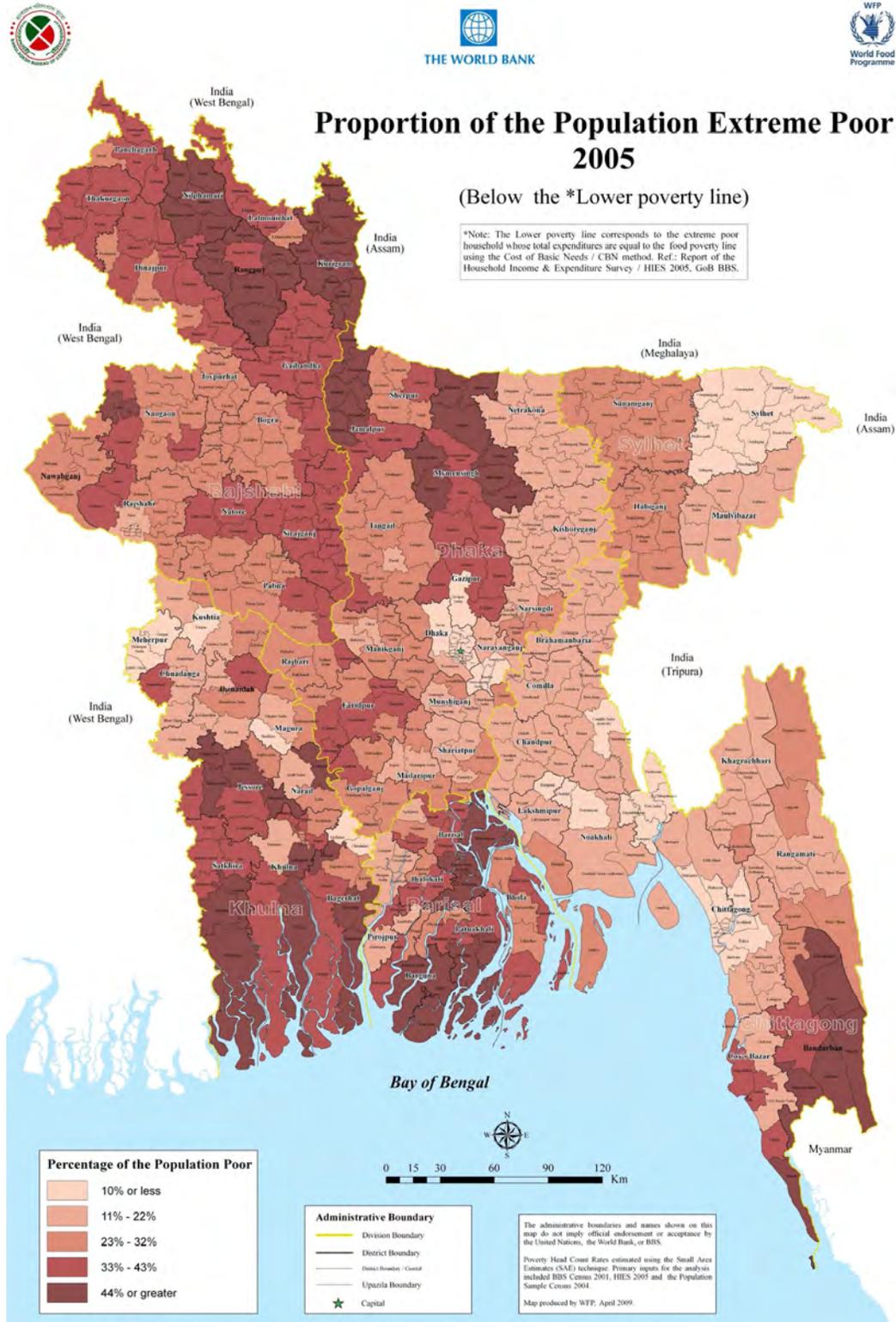
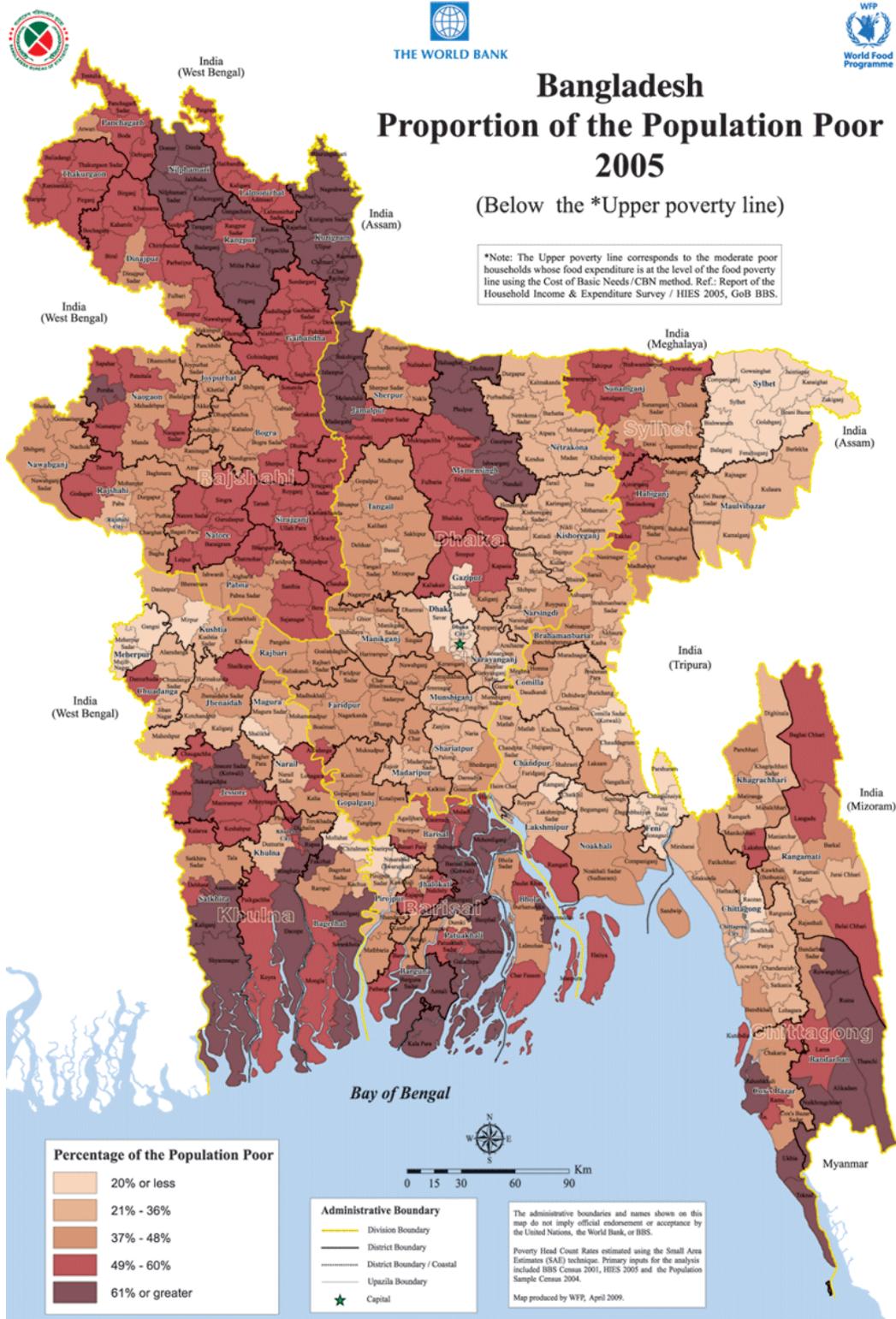


FIGURE 13. BANGLADESH PROPORTION OF THE POPULATION POOR 2005



3.2.3 Food Utilization

3.2.3.1 Malnutrition

Stunting rates are higher in rural areas than in urban areas (45 percent and 36 percent respectively). Stunting also varies by division with the highest rate of stunting in Barisal (46.9 percent) and the lowest in Khulna (35 percent) (See Table 4). Interestingly, while malnutrition is generally understood as being closely associated with poverty, the poorest division (Rajshahi) does not have the highest stunting rate nor does the least poor division (Chittagong) have the lowest stunting rate. The rate of maternal malnutrition also varies by division somewhat; Sylhet has the highest rate of 39 percent.

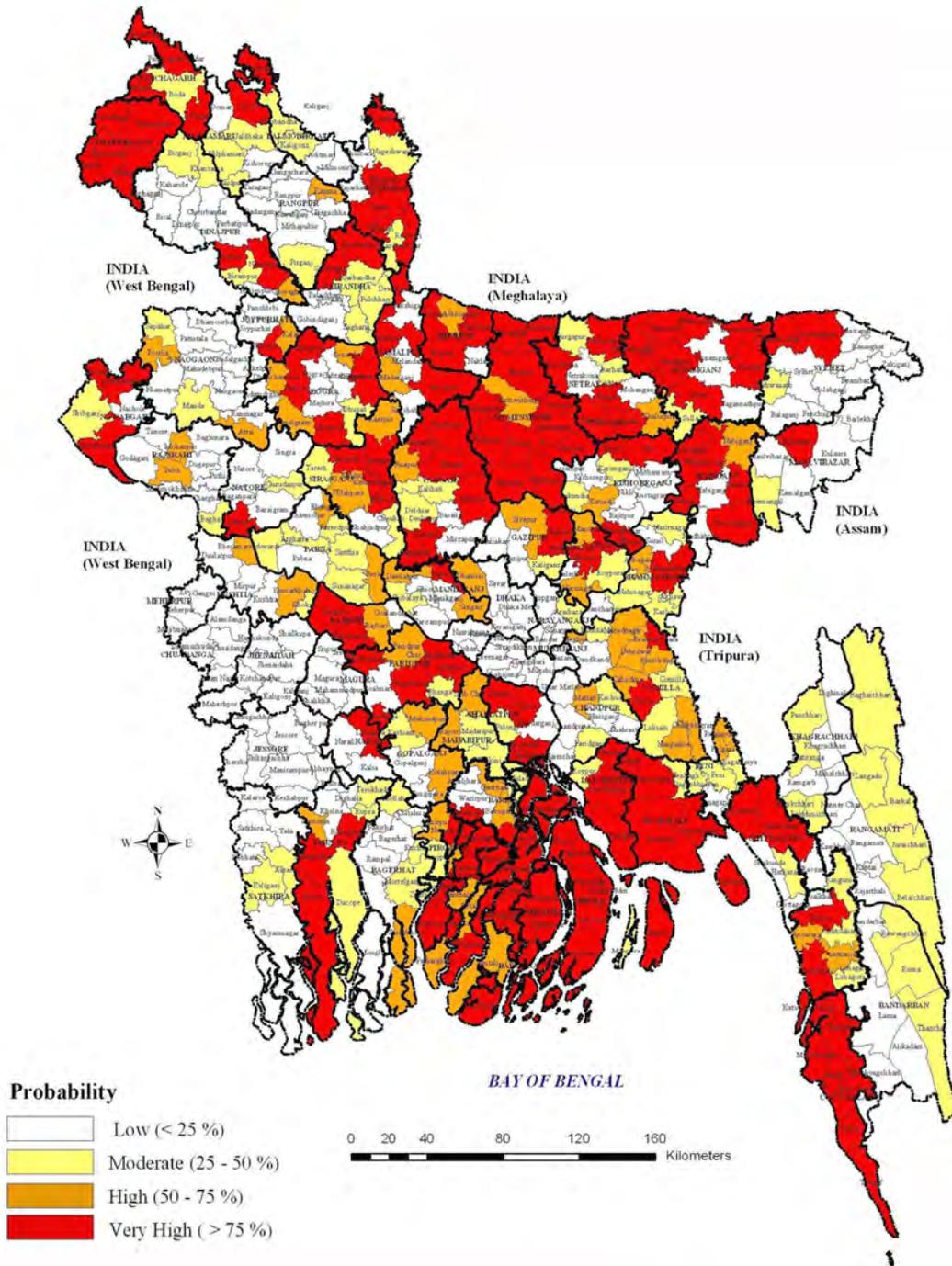
As part of its food security mapping exercise, WFP also produced a map which projects the risk of stunting down to the sub-district (upazila) level using data from 2001 (See map on following page). According to this analysis, stunting is more prevalent in the northern part of the country and in the coastal areas in the south and southeast.

TABLE 9. GEOGRAPHIC DISTRIBUTION OF MALNUTRITION AND RELATED FACTORS

GEOGRAPHIC LOCATION	PERCENT OF CHILDREN UNDER FIVE STUNTED (< -2SD)	PERCENT OF WOMEN 15-49 YEARS MALNOURISHED (BMI<18.5)	PERCENT OF CHILDREN 6-23 MONTHS FED WITH ALL THREE IYCF PRACTICES	PERCENT OF CHILDREN UNDER FIVE BORN <24 MONTHS AFTER PREVIOUS SIBLING	PERCENT OF CHILDREN 12-23 MONTHS FULLY VACCINATED
National	43.2	29.7	41.5	15.1	81.9
Urban	36.4	19.6	45.8	13.8	86.3
Rural	45.0	32.6	40.3	15.4	80.5
Division					
Barisal	46.9	33.9	35.7	14.4	90.2
Chittagong	45.5	28.3	33.5	17.6	77.2
Dhaka	44.0	28.1	40.9	13.9	82.4
Khulna	34.6	25.2	43.0	9.4	88.9
Rajshahi	41.8	31.5	55.2	11.4	85.6
Sylhet	44.7	39.3	30.0	26.1	70.8

Source: DHS 2007

FIGURE 14. MAP OF PROBABILITY OF HIGH PREVALENCE OF STUNTING (CHILDREN UNDER FIVE, RATE > 50 %)



Source: Planning Commission, Bangladesh Bureau of Statistics and WFP's *The Food Security Atlas of Bangladesh*, 2004.

3.2.3.2 Key Behaviors

Feeding practices, as indicated earlier, play a pivotal role in determining the optimal development of infants. The low national rate of exclusive breastfeeding (42 percent) varies little by division. The mean duration of breastfeeding is high (32.5 months) and in all divisions it exceeds the recommended two year minimum. In Bangladesh only 42 percent of children between six and 23 months were fed according to the three priority IYCF practices (receiving breast milk, the proper variety of food and the proper frequency of feeding appropriate to the age of the child). This rate varies little between urban and rural households, but there is a notable variation by division. Sylhet had the poorest rate (30 percent) and Rajshahi the best (55 percent).

The birth interval, defined as the length of time between two successive live births, provides insight into FP outcomes and has bearing on maternal and child health. Short birth intervals are associated with an increased risk of death for mother and child. Studies have shown that children born less than 24 months after a previous sibling risk poorer health. Short birth intervals also threaten maternal health. In Bangladesh, children born less than 24 months after the birth of a prior sibling showed an increased risk of stunting by nine percentage points over the national mean. While the percent of children born less than 24 months after a previous sibling did not vary much between urban and rural areas, there was a notable difference by division. Khulna had the lowest percent (9 percent); while Sylhet had 26 percent (almost three times that of Khulna).

3.2.3.3 Access to Health Services

In addition to access to adequate food, proper breastfeeding and IYCF practices, optimal health and nutrition of children under five requires access to adequate health services, proper illness management, water and sanitation facilities and adequate birth spacing.

According to the 2004 BDHS, health and FP services are available to a majority of women in Bangladesh. Almost 90 percent of the women surveyed lived in villages where satellite clinics are held. Among these women, 83 percent live in villages with clinics that provide FP commodities. In areas covered by satellite clinics, almost all women can get child immunization services and vitamin A supplies. Urban women are much more likely to have a pharmacy or shop nearby, compared with rural women. Ninety-two percent of ever-married women live in areas where child immunization is available within one kilometer (km), while 76 percent of women can get an Oral Rehydration Solution (ORS) packet within one km.

ANC from a trained provider is important to monitor the status of a pregnancy and to diagnose and treat problems during pregnancy that could harm the health of the mother or child. In 2007, 52 percent of women received care from a medically trained provider. Coverage was greater in urban than in rural areas (71 and 46 percent respectively). ANC coverage also varied by division, with the highest coverage in Khulna and the lowest in Barisal (63 and 44 percent respectively).

Geographic access did not seem to be an important factor in this low coverage. When asked why they did not receive ANC, about 72 percent of the women reported that the check up was not needed. Another one in four did not seek ANC because it was too expensive. Only four percent cited distance as a barrier.

Immunization of children less than one year of age against the six major vaccine preventable diseases (tuberculosis, diphtheria, pertussis, tetanus, poliomyelitis, and measles) is one of the most cost-effective programs to reduce infant and child morbidity, mortality and malnutrition. Vaccination coverage at the national level is 82 percent. While vaccination coverage does not vary notably between urban and rural areas, there are some marked differences in coverage by division. Barisal has the highest coverage and Sylhet has the lowest (90 and 71 percent respectively).

Poverty remains a significant barrier to health services. For example, the high disparity in access to ANC and adequate care during child delivery between the lowest and highest wealth quintiles, seen in 2004, still exists.⁶¹ The percentage of all women accessing ANC went from 56 to 60 percent between 2004 and 2007. However the disparity between the percentage of women from the lowest and highest wealth quintiles (calculated as the difference between the highest and lowest quintiles) declined only slightly from 47 percentage points in 2004 to 44 percentage points in 2007. The percentage of women giving birth attended by a medically trained provider has increased in the aggregate from 13 to 18 between 2004 and 2007. However, the disparity in rates between women in the highest and lowest wealth quintiles actually grew from 37 percent in 2004 to 46 percent in 2007.

3.2.3.4 Access to Clean Water and Sanitation

Access to clean water and sanitation facilities, and their proper use, is central to the prevention of diarrhea and other water-borne diseases. Children with diarrhea are more likely to become malnourished; and children who are malnourished are more susceptible to getting and dying from diarrhea. Improved access to safe drinking water and sanitation facilities and improved hygiene practices are central to reducing the incidence of diarrhea. Such improvements can reduce diarrheal disease by 30-50 percent.

In spite of recent progress, access to clean drinking water and sanitation remains insufficient. The availability of safe drinking water continues to be inadequate, especially in rural areas. Drinking water becomes scarce during the dry season and is often polluted during the rainy season. Arsenic contamination has drastically reduced safe water availability in urban and rural areas. Since the initiation of the coordinated sanitation campaign, also called the "Community-Led Total Sanitation (CLTS) Approach" in 2003 and the GOB declaration of the target of 100 percent sanitation coverage by 2010, there has been much progress in sanitation coverage. Between 2005 and 2007, for example, nearly five million latrines were installed.⁶² However, important gaps remain.

⁶¹ All data in this paragraph and in both tables are taken from NIPORT, Mitra and Associates, and ORC Macro International 2005 and NIPORT, Mitra and Associates, and ORC Macro International 2009.

⁶² IMF November 2005, 168-9.

Thirty-seven percent of urban households and 22 percent of rural households have access to improved sanitation facilities. These rates do not vary much by division.⁶³

Poverty remains the primary barrier to clean water and sanitation. Between 2000 and 2005, the percentage of households with access to a safe toilet increased from 52 percent to 69 percent. At the same time, the differences between poor and non-poor remain significant. In 2005, households who did not have access to improved sanitation facilities were nearly twice as likely to be poor than those who did⁶⁴.

Proper water and sanitation practices are also central to disease prevention. A USAID child survival project in Rajshahi (run by Concern Worldwide) found that only 16 percent of mothers of children aged 0-23 months reported to wash their hands with soap and water at appropriate times. Another child survival project in Dhaka, Netrokona and Panchagar (run by Christian Reformed World Relief Committee) found that only between 15 and 53 percent of mothers of 0-23 month olds had soap readily available for hand washing. A recent study conducted by BRAC ⁶⁵ found that only 31 percent of adults reported using a sanitary latrine, 28 percent defecated in open areas, and only 39 percent of households stored drinking water in a covered container at home.

3.2.4 Risks and Vulnerabilities

3.2.4.1 Natural Disasters

Bangladesh, as was discussed earlier, is especially vulnerable to natural disasters and to the effects of floods and cyclones in particular. Every year, floods, cyclones, erosion and droughts cause extensive damage to crops, houses, livestock, household and community assets, which can lead to illness and death. Disasters hamper physical access to food, food stocks and crops are destroyed, and markets are temporarily dysfunctional which can lead to an increase in the price of essential foods. Natural disasters directly affect household food security status by undermining their asset base and, indirectly, through a loss of employment opportunities, an increase in health expenditure and an increase in necessary food expenditure.

Natural disasters in Bangladesh have their roots in the nature of the terrain, the physical geographic features, the long coastline and the tropical climate. The increasing density of the population, which is also causing ecological damage, increases the vulnerability of some areas. The critical areas include coastal areas, char lands, haors and other low-lying areas subject to frequent flooding. The coastal areas are vulnerable to cyclones and tidal waves. Chars are unstable lands, unprotected by embankments that form and erode in the major rivers of Bangladesh. It is estimated that around five million people live on char lands throughout the country. The people living on chars are constantly exposed to flooding and erosion and are considered among the most vulnerable to natural disasters such as flooding and cyclones. The haor areas, which are located in the

⁶³ NIPORT, Mitra and Associates, and ORC Macro International 2009. Improved sanitation facilities are defined as any one of the following facilities that is not shared with another household: a pit latrine with a slab or a flush or pour flush facility piped to either a sewer system, a septic tank or to a pit latrine.

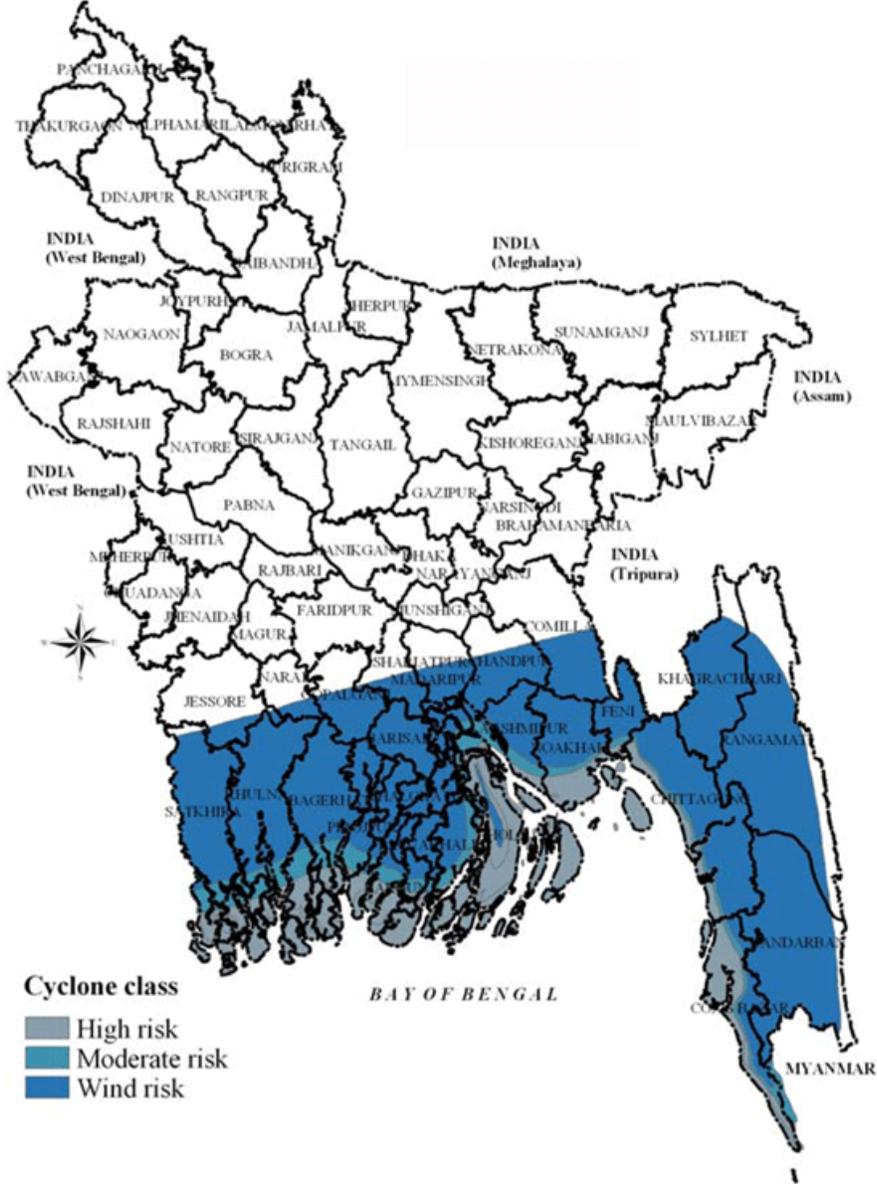
⁶⁴ World Bank 2008.

⁶⁵ BRAC 2008.

north central part of the country, are flooded six months of the year which limits the crop intensity. Flood plains can also be found in many parts of the country. Since flooding is a recurrent problem, people have developed coping strategies that limit the impact of the floods on their livelihoods if they have the time and capital to prepare.

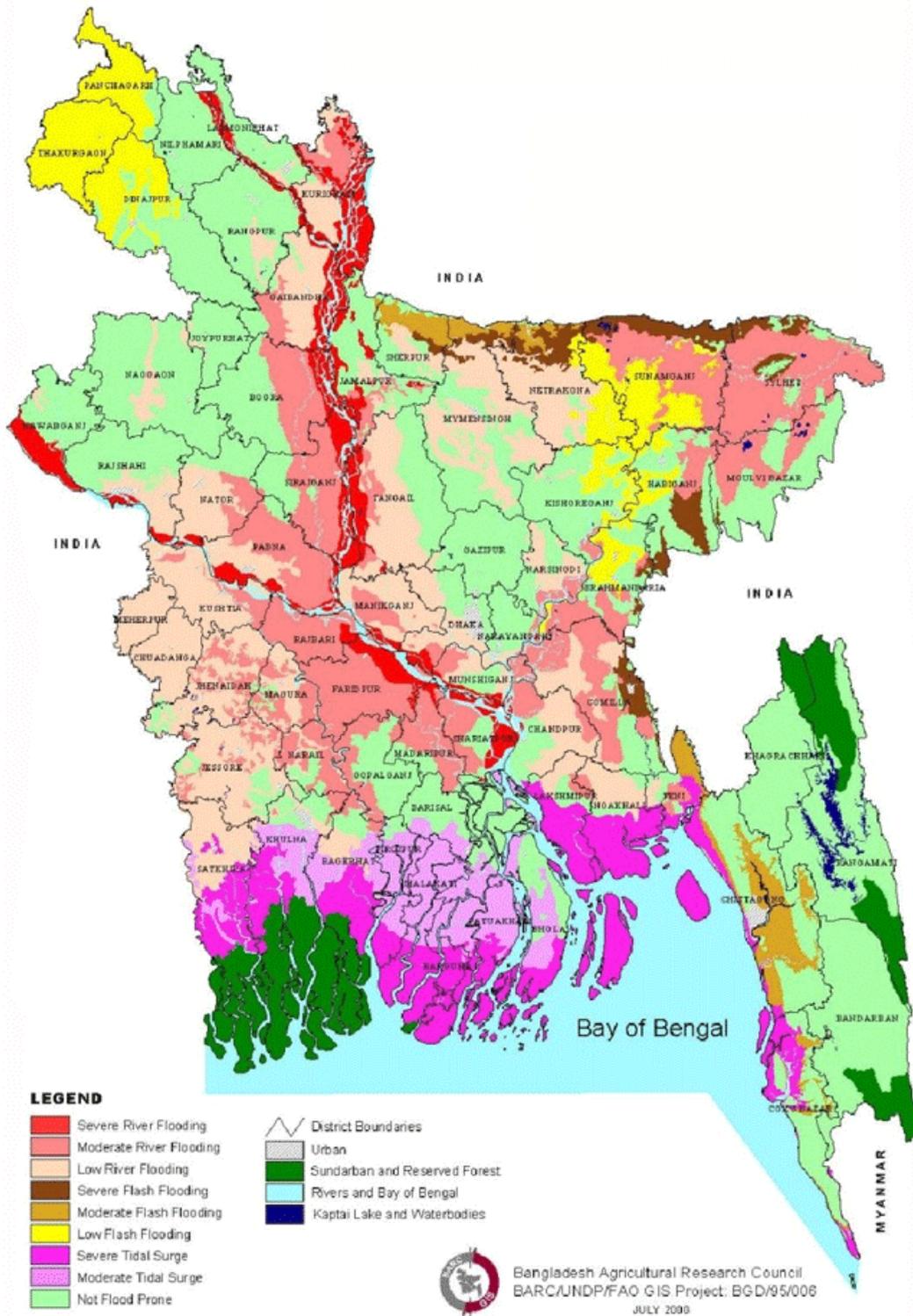
Often it is the poor who are most vulnerable to disasters, and it is the poor who take longest to recover. The poor are often more likely to be among those who are killed, because they are least likely to be prepared for these events, and they are more likely to be living in the cyclone and flood prone areas of Bangladesh. Death of an income earning member of a poor family is a particularly difficult setback to overcome, and may drive poor families deeper into poverty. Women are also likely to be more adversely affected by disasters, because of their responsibilities and everyday activities and because they are confined to their homes and are less mobile than men and thus more vulnerable. Women are also vulnerable to sexual harassment in pre and post disaster situations. Indigenous and minority communities may also be more adversely affected by disasters due to their geographical isolation, community and service infrastructure that is below national standards, and unique cultural and communication issues.

FIGURE 15. MAP OF RISK OF CYCLONES IN BANGLADESH



Source: Planning Commission, Bangladesh Bureau of Statistics and WFP's *The Food Security Atlas of Bangladesh*, 2004.

FIGURE 16. MAP OF FLOOD PRONE AREAS IN BANGLADESH



Source: Bangladesh Agricultural Research Council, BARC/UNDP/FAO GIS Project, July 2000.

3.2.4.2 Vulnerability at the Household Level

Households in Bangladesh face a variety of risks which can, individually or in combination, force them into poverty. The types of risks faced by Bangladeshi households generally fall into three categories: environmental (floods, cyclones, drought, crop and animal diseases and pests, land degradation and crowding), socio-economic (eviction from land, theft, dowry, debt repayments, loss of a job) and human resource related (death, illness, lack of education). Some risks, such as an illness or death of the main income earner, affect individual households. Others such as floods, increases in food prices, and political events can affect whole communities and can overwhelm social coping strategies based upon support within families and communities. Medical expenses due to illness, death of the main income earner and damage from natural disasters are the main source of risks for poor households.⁶⁶ Vulnerability can be lessened by reducing exposure to risks and increasing households' ability to cope with shocks, but responses depend on the scope and severity of damage.

Food vulnerability is manifested in two ways: inadequate access to food throughout the year and acute food shortage on a seasonal basis. Food security indicators developed by Murshed et al. (2008) study show that 7 percent of households faced acute distress in accessing food on regular basis, while up to 30 percent of households encountered such conditions sometimes, marking the latter group as potentially highly food vulnerable. Besides, 12-15 percent of households had chronic under-consumption and "worry about food access frequently," while up to 30 percent of households confronted such food vulnerability sometimes. A recent International Rice Research Institute (IRRI) synthesis of the Food Security for Sustainable Household Livelihoods (FoSHoL) Programme shows that more than two-thirds of landless and marginal agriculture-dependent, resource-poor households faced food crisis in the months of *Ashshin*, *Kartik*, *Choitro* and *Boishakh*⁶⁷ when they had to reduce the number of meals and quantity and quality of foods. Some households ate reduced portions/ fewer meals throughout the year.

4. STRATEGIES, POLICIES AND PROGRAMS RELATED TO REDUCING FOOD INSECURITY IN BANGLADESH

This section provides a summary of the strategies, policies and programs that have been adopted by the GOB, USAID and other development actors to address food security in Bangladesh. (Further information regarding these strategies, policies and programs can be found in **Table 14**). USAID/Bangladesh and its partners will complement and build on these approaches and interventions in the design and implementation of their Title II programs.

⁶⁶ PMS 1999.

⁶⁷ *Ashshin* corresponds to September-October in the Gregorian calendar. *Kartik* to October-November, *Choitro* to March-April, and *Boishakh* to April-May.

4.1 GOB POLICIES, PLANS AND PROGRAMS

4.1.1 Poverty Reduction Strategies

Successive Bangladeshi governments have been committed to poverty reduction and meeting the MDGs. These commitments have been documented in several PRSPs which have provided the main umbrella for guiding and coordinating the GOB's efforts toward overcoming poverty and achieving the MDGs. In developing the first PRSP (*Unlocking the Potential: National Strategy for Accelerated Poverty Reduction (2004/05-2006/07)*) particular attention was paid to food security concerns related to food availability, access and utilization. Food security was identified as a key goal under the PRSP strategic block on "Critical sectors for pro-poor economic growth," for example. Under this block, the PRSP also underscored the importance of strengthening and consolidating on-going nutrition and fortification efforts. Nutrition concerns were also addressed more comprehensively in the health sector strategy (Strategic Block IV – Human Development – Health). The PRSP also gave prominence to issues related to food safety, food quality, healthcare, and safe water and sanitation for all, with special emphasis on children's needs. The policy thrust of the PRSP with respect to food availability and access was on ensuring an affordable food supply through efficiency gains in agricultural production, distribution and trade as well as enhancing the purchasing power of the poor through expanding and diversifying income opportunities in the farm and non-farm sectors. In the main body of the report, priority was given to technology development and creating an enabling environment for the private sector along with efforts to improve the coverage and effectiveness of social safety nets. The current PRSP (*Moving Ahead: National Strategy for Accelerated Poverty Reduction II (2008/09-2010/11)*) also gives prominence to food security recognizing that it is "a core issue in the struggle against poverty," but cites the National Food Policy and the National Policy for Food and Nutrition Policy (documents that were formulated after the first PRSP was adopted) as the documents that will guide GOB actions.

TABLE 10. OBJECTIVES AND STRATEGIC LINES OF ACTION IDENTIFIED IN THE 2006 NATIONAL FOOD POLICY AND THE 2008 NATIONAL FOOD POLICY PLAN OF ACTION

	OBJECTIVES/STRATEGIC LINES OF ACTIONS
Objective 1	<p>Adequate and stable supply of safe and nutritious food</p> <ul style="list-style-type: none"> • Efficient and sustainable increases in food production • Efficient food markets • Non-distortionary food grain market interventions for price stabilization
Objective 2	<p>Increased purchasing power and access to food</p> <ul style="list-style-type: none"> • Transitory shock management • Effective implementation of targeted food assistance programs • Employment generating income growth
Objective 3	<p>Adequate nutrition for all individuals, especially women and children</p> <ul style="list-style-type: none"> • Long-term national plan for ensuring balanced food in building a healthy nation • Supply of sufficient nutritious food for vulnerable groups • Balanced diet containing adequate micronutrients • Safe drinking water and improved sanitation • Safe quality food supply • Adequate health status

4.1.2 Sector Policies and Plans

The 2006 National Food Policy (NFP) and the 2008 National Food Policy Plan of Action (NFP PoA) provide a further elaboration of the GOB's food security objectives and the steps that it plans to take to improve the food security situation in the country. Both documents were developed by the Ministry of Food and Disaster Management (MFDM) after a thorough review of the other policy frameworks and action plans that address the food security challenges in the country and in close coordination with relevant GOB ministries and agencies and non-government stakeholders. Both documents also follow the lead taken in the GOB's Comprehensive Food Security Report of 2000 in adopting a more comprehensive view of food security. This more comprehensive approach, which was also adopted by the first and second PRSPs, is in contrast to the 1988 National Food Policy, which was focused almost exclusively on increasing food production and maintaining an adequate balance between aggregate supply and total requirements. The 2006 NFP has three core objectives which address the three elements of food security – food availability, access and utilization -- and twelve more specific objectives/strategic lines of action (see **Table 9**). The National Food Policy Plan of Action (NFP PoA) takes these core objectives and sub-objectives and develops in more detail the priority actions that need to be taken in each of the key intervention areas in the short, medium and long term over the life of the Plan (2008-2015). The NFP PoA also identifies the actors responsible for each of these priority actions and provides a framework for monitoring NFP PoA performance, including identifying targets, indicators and means of verification.

The GOB has also adopted a number of other policies and plans that are relevant to and affect the various dimensions of food security. This includes the NAP (1999); the Actionable Policy Brief (APB) (2006); the National Plan for Disaster Management (NPDMD) (2007-2015); the National Health Policy (NHP) (2000); the National Strategy for Infant Young Child Feeding (NSIYCF); the National Food and Nutrition Policy (NFNP) (1997); and the National Plan of Action for Nutrition (NPAN) (1997).

4.1.3 Key Programs Affecting Food Access and Utilization

The GOB is also implementing several programs – the National Nutrition Programme (NNP) and a series of social safety net programs – that play an important role in addressing food access and utilization problems in the short to medium run.

The NNP was established in 2001 with World Bank funding for ten years as a continuation of the Bank's Bangladesh Integrated Nutrition Project (BINP). The goal of the NNP, which is run by the Ministry of Health and Family Welfare (MOH), is to achieve sustainable improvements in the nutritional status of the population (particularly children and women) through the adoption of new behaviors and the appropriate use of nutrition services which are increasingly managed by local communities. The area-based community nutrition (ABCN) component of the NNP includes: weight monitoring and promotion of proper weight gain among pregnant women; growth monitoring and promotion for under-two year old children; supplementary feeding for malnourished children under the age of two or whose growth is faltering and of malnourished pregnant women; iron-folate supplementation to pregnant women and adolescent girls; vitamin A supplementation to post-partum mothers; organizing weekly educational meetings with newly-wed couples, pregnant and lactating women, adolescents, fathers/

mothers-in-law and husbands of pregnant women; nutrition counseling, home visits and referrals. The NNP has been implemented in 105 upazilas in Bangladesh and is being expanded to cover 162 upazilas.

The GOB has also been implementing a large number (27 by some accounts) of social safety net programs which provide cash and/or food transfers to various categories of vulnerable groups. (See **Table 14** for information on a number of the larger programs,) This includes people who are functionally landless; women-headed households where the women are widowed, deserted or destitute; day laborers and temporary workers; the old and disabled; the marginalized poor living in geographically disadvantaged areas; and victims of natural disasters. The programs are implemented by a number of ministries, including the Ministry of Social Welfare, the Ministry of Food and Disaster Management, the Ministry of Women's and Children's Affairs, and in the case of conditional cash transfer programs in education, the Ministry of Primary and Mass Education and the Ministry of Education. Some of the transfers are made if the household/individual meets the targeting criteria, some are also contingent on meeting additional conditions, such as attending a training course, for example, and some are made in exchange for work performed.

Social safety net programs have been getting increasing attention from the GOB as well as the NGO community, at the same time that there has been a shift in the approach to safety nets from a charity to a right-based development approach. Although large in number, the 2005 PRSP estimated that the resources that were being spent on these programs represented less than 1 percent of GDP and a little over 4 percent of public expenditures. Their coverage is also relatively low, i.e., the programs, which are expanded in times of natural disasters, are estimated to reach only 4 to 5 million people under normal conditions. This means that even if these programs were perfectly targeted, less than 10 percent of the poor would be covered. Since targeting is not perfect and there are also leakages, the 2005 PRSP estimated that only 6 to 7 percent of the poor were actually being covered. The 2005 PRSP also identified a number of other weaknesses in the safety net programs, including lack of coverage of specific socially excluded and marginalized groups (cobblers, sweepers and fishermen, for example) and new vulnerabilities (due to increased globalization, for example); insensitivity to geographic and agro-ecological specific poverty; inadequacy of the amount of the transfer; inadequacy of the poverty criterion; inadequate understanding of the gender dimensions of poverty; gender specific risks and insecurity in the labor market.

BOX 2: NATIONAL NUTRITION PROGRAMME (NNP) OBJECTIVES FOR 2011

- Reduce severe underweight in children under two to 5 percent and moderate underweight to 30 percent.
- Increase the prevalence of proper weight gain during pregnancy to 50 percent.
- Reduce the incidence of low birth weight (LBW) to below 30 percent.
- Reduce the prevalence of anemia among adolescent girls and pregnant women by one third.
- Reduce the prevalence of iodine deficiency by 50 percent.

4.2 USG STRATEGIES AND PROGRAMS

4.2.1 Alignment with the US Foreign Assistance Framework

All US Government foreign assistance spending is supposed to be aligned with the five key objectives of the Foreign Assistance Framework, and its programs areas, program elements and program sub-elements. This is true for all the Bangladesh Mission's funded programs as well as the Title II development programs. The current alignment can be seen in **Table 10**, with the USAID programs funded by Development Assistance (DA) and Child Survival and Health (CSH) funds focused on *Governing Justly and Democratically*, *Investing in People*, *Economic Growth* and *Humanitarian Assistance* objectives and the Title II programs focused on the *Investing in People*, *Economic Growth* and *Humanitarian Assistance* objectives. USAID also has access to Economic Support Funds (ESF), which are being use for Cyclone Sidr reconstruction in the southern part of the country (Barguna, Barisal, Patuakhali and Khulna Districts). These funds are being programmed under the *Governing Justly and Democratically*, *Economic Growth* (agriculture and infrastructure) and *Humanitarian Assistance* (disaster assistance and mitigation) objectives.

TABLE II. ALIGNMENT OF THE CURRENT DA-, CSH- AND ESF-FUNDED AND TITLE II PROGRAMS WITH THE US FOREIGN ASSISTANCE FRAMEWORK

OBJECTIVES	PROGRAM AREAS AND PROGRAM ELEMENTS	
	PROGRAMS FUNDED BY OTHER ACCOUNTS	TITLE II PROGRAMS
Governing Justly and Democratically	<ul style="list-style-type: none"> • Rule of Law and Human Rights • Good Governance <ul style="list-style-type: none"> ○ Local government and decentralization • Political Competition and Consensus Building <ul style="list-style-type: none"> ○ Elections and political processes ○ Political parties • Civil Society <ul style="list-style-type: none"> ○ Civic participation 	
Investing in People	<ul style="list-style-type: none"> • Health <ul style="list-style-type: none"> ○ HIV/AIDS ○ Tuberculosis ○ Maternal and child health ○ Family planning and reproductive health ○ Avian influenza • Education <ul style="list-style-type: none"> ○ Basic education 	<ul style="list-style-type: none"> • Health <ul style="list-style-type: none"> ○ Maternal and child health and nutrition ○ Water supply and sanitation • Social Services and Protection for Vulnerable Populations <ul style="list-style-type: none"> ○ Social assistance
Economic Growth	<ul style="list-style-type: none"> • Infrastructure <ul style="list-style-type: none"> ○ Energy • Agriculture <ul style="list-style-type: none"> ○ Enabling environment ○ Agricultural sector productivity • Private sector competitiveness <ul style="list-style-type: none"> ○ Business enabling environment ○ Private sector productivity ○ Workforce development • Environment <ul style="list-style-type: none"> ○ Natural resources and biodiversity 	<ul style="list-style-type: none"> • Agriculture <ul style="list-style-type: none"> ○ Agricultural sector productivity • Economic Opportunity <ul style="list-style-type: none"> ○ Strengthen microenterprise productivity
Humanitarian Assistance	<ul style="list-style-type: none"> • Protection, Assistance and solutions • Disaster Readiness 	<ul style="list-style-type: none"> • Disaster Readiness <ul style="list-style-type: none"> ○ Assistance and recovery ○ Capacity building, preparedness and planning ○ Mitigation

4.2.2 USAID/Bangladesh Strategies and Programs

The USAID/Bangladesh's program includes: support for a democratic government, elected through free, fair and credible elections, and more transparent and accountable government; support for a better educated, healthier and more productive population; assistance to increase economic opportunities through equitable economic growth; and disaster mitigation.

The majority of the USAID's DA and CSH resources are being used in the health area, including for funding basic health and FP services through NGO health clinics that reach over 20 million people each year, primarily people who are poor and would not have access to health services otherwise. When this program was first started, the focus was on direct service delivery. Now, the program is introducing a new model of service delivery based on the concepts of franchising and fee for service (the Smiling Sun Franchise Program) in an attempt to develop an approach that has a greater likelihood of sustainability. Introducing the practice of paying even a small amount to receive a health service has been a challenge, but one that the USAID believes is necessary in order to maintain and expand the availability of health services and products and reduce reliance on donor funding. These clinics also provide pre- and post-pregnancy care for mothers and their newborns as well as offer safe delivery by trained birth attendants. USAID's health portfolio also includes prevention of HIV and tuberculosis and support to the Social Marketing Company (SMC). SMC, which is the world's largest social marketing company, produces 200 million ORS packets each year to treat diarrhea, which is one of the major causes of death of children under five in Bangladesh, and also markets micro-nutrient packets for children under five through 160,000 private outlets.

The more limited resources available to fund economic growth activities are focused on improving economic opportunities for poor and disadvantaged groups. These programs focus on expanding private sector business, improving access to electricity in rural areas and enhancing environmental management, but all are targeted to the most vulnerable populations in Bangladesh. USAID is also funding activities under the PRICE Project that are designed to increase the competitiveness of small and medium enterprises in three sectors with high potential for growth – shrimp and fish, horticulture and leather. USAID assistance will help strengthen the value chains, including by providing business management advice and technical assistance and training to key actors all along the value chain, from input suppliers, producers, processors and exporters. Training programs are also being targeted to youth, women and the rural poor to provide them with the skills necessary to be productive in the USAID assisted sectors. USAID has also been supporting efforts to improve food policy (including providing support to the Food Planning and Monitoring Unit (FPMU) in the Ministry of Food and Disaster Management, which was responsible for the development of the 2008 NFP PoA) and for increasing agricultural sector productivity, including through its Agricultural Biotechnology Support project and the South Asia Bio-Safety program. USAID is also supporting the development of an approach to the protection and restoration of Bangladesh's natural resources ((the Integrated Protected Area Community-management Program (IPAC)) that devolves environmental management to local communities at the same time that it promotes livelihood opportunities for the rural poor.

4.2.3 USAID/Food for Peace (FFP) 2006-2010 Strategic Plan

The FFP Strategic Plan is a key document. The definitions and concepts of food security that are laid out in the FFP Plan, its strategic objective and intermediate results, the underlying conceptual framework used and the target groups identified, are all reflected in the Bangladesh Food Security Country Framework. Some of the new directions in the FFP Strategic Plan are also reflected in the Bangladesh Food Security Country Framework, for example, the focus on food *insecurity* and the emphases given to reducing the risks of, and vulnerability to, food insecurity shocks (including natural, economic, social, health and political shocks) and protecting and building human and livelihood assets. (See **Annex 3** for the FFP Strategic Framework and **Annex 4** for the Expanded Conceptual Framework for Understanding Food Insecurity, which provides the theoretical underpinnings for the FFP Strategic Plan.)

The FFP Strategic Plan is designed to meet the needs of both the chronically food insecure, who suffer from persistent food insecurity over time, and the transitorily food insecure, who have a temporary inability to meet food needs or smooth consumption levels.⁶⁸ The strategic objective of the Plan is “*Food Insecurity in vulnerable populations reduced,*” and its two intermediate results are: IR 1: *Global leadership in reducing food insecurity enhanced* and IR 2: *Title II program impact in the field increased*. Key target groups under the Plan are those populations at risk of food insecurity because of their physiological status, socioeconomic status or physical security, and/or people whose ability to cope has been temporarily overcome by a shock.

4.2.4 The FY 2005-2009 Title II Development Assistance Program (DAP) in Bangladesh

The Title II program has been working in Bangladesh since before independence and is one of FFP’s larger programs. There are two Title II Development Assistance Programs (DAPs) in 2009 – CARE’s *Strengthening Household Abilities for Responding to Development Opportunities* (SHOUHARDO) program and Save the Children’s (SC) *Life and Livelihood* (“Jibon O Jibika” in Bangla) program. Both programs were evaluated mid-term, CARE in June 2007 and SC in September 2007.

Both CARE and SC use a food ration to support their Maternal Child Health and Nutrition (MCHN) programs. However, the strategies they use are different. SC targets all pregnant and lactating women and children under the age of two living in a community and uses food in the form of a small incentive ration to compensate participating women for the opportunity costs of attending growth monitoring and promotion and ANC. The ration itself is provided to all participants regardless of economic need or nutritional status. Rations are distributed monthly at specially designated times and places that do not coincide with other promotional activities. CARE, in contrast, focuses on children under two living in poor and extremely-poor households. CARE provides a supplemental ration to all pregnant and lactating women from the targeted households, using a ration designed to fill the estimated food gap for a family of five. Rations are distributed monthly during regular growth monitoring and promotion (GMP) sessions.

⁶⁸ “Smoothing” refers to any actions to even out or stabilize fluctuations in food consumption.

TABLE 12: BASIC CHARACTERISTICS OF THE TWO CURRENT TITLE II DEVELOPMENT PROGRAMS (2005-2009)

	CARE	SAVE THE CHILDREN
Program value	\$131 million over five years	\$49 million over five years
Program location	Southeast coastal areas (Chittagong) North central Haor areas (Kishoregonj) North char areas (Rangpur) Mid-char areas (Tangail)	South coastal areas (Barisal)
Program scale	4 divisions 18 districts 493 unions	1 division 3 districts
Target population	400,000 households 2 million individuals	202,500 children <2years 81,000 women

4.2.4.1 CARE

The CARE program has one overall goal -- *to sustainably reduce chronic and transitory food insecurity of 400,000 vulnerable households by 2009* – and four strategic objectives: (1) improved availability/economic access to food through strengthening livelihoods, entitlements and enhancing the accountability of services providers, (2) sustainable improvements in the health and nutrition of project participants, (3) enhanced empowerment of 400,000 women and girls from targeted vulnerable households, and (4) targeted communities and institutions are better able to prepare for, mitigate and respond to natural disasters. SHOUHARDO also addresses the underlying causes of food insecurity in the poorest regions of Bangladesh by explicitly emphasizing the importance of entitlement, empowerment and a rights-based focus in all program activities.

Widely-accepted poverty maps were used to identify the poorest and most vulnerable regions of the country. Within these regions, CARE staff conducted surveys to determine the poorest districts, upazilas, unions, villages and slums where the poor and extreme poor were targeted as program participants. The program, which operates in four regions, 18 districts, 493 Unions, 2,211 villages and 137 urban slums, is currently reaching over 412,000 households. CARE implements the program through 45 regional and local NGOs and also has agreements with 16 external partners to provide technical training. More information on the specific activities being carried out under each of the strategic objectives is provided below.

- **Livelihoods.** The program supports the formation of local Village Development Committees (VDC – rural areas) or Slum Development Committees (SDC – urban areas) with the aim of empowering local communities to engage in community-driven development and to create the conditions for a transformation in the traditional power structures that have marginalized and exploited the poorest segments of Bangladeshi society. Each participating VDC/SDC is responsible for facilitating the creation of a Community Action Plan (CAP), which serves as a blueprint for community-led development. This component also included a “menu” of activities from which VCD/SDC could select, including trainings in improved

agricultural techniques, livestock management, Income Generating Activities (IGA) (including the establishment of community savings groups and comprehensive homestead development), as well as Food for Work (FFW) and cash for work (CFW) activities which provide temporary employment for participating households and resulted in infrastructural improvements benefiting entire communities.

- **Health and nutrition.** Activities include improving access to information and services provided by government and non-government actors; delivering MCHN messages through courtyard sessions with pregnant/lactating mothers, fathers and mothers-in-law; and distributing supplemental household rations to poor and extremely poor families with malnourished children. This objective also encompassed improving access to clean water and sanitation as well as promoting improved household hygiene practices.
- **Empowerment of women and girls.** Activities include early childhood education, adult informal literacy, consciousness-building and dialogue around important social issues, group planning, participation of females in the formal educational structure, and the integration of poor women into the educational and political committees of the Union/Pourashava.
- **Disaster mitigation and response.** Activities include infrastructure development; training in early warning and disaster preparedness and response for Union Disaster Management Committees (UDMC), Pourashava Disaster Management Committees (PDMC) and volunteers at the ward and community level; support to the Network for Information, Response and Preparedness Activities on Disaster (NIRAPAD).

4.2.4.2 Save the Children

The SC program has one goal – *decreased household food insecurity in three districts of Bangladesh's Barisal Division* – and three strategic objectives: (1) by September 2009, food availability and purchasing power at the household level will have increased, (2) by September 2009, the health and nutrition of pregnant women and children under the age of two will have improved, and (3) by September 2009, target communities and households will be more resilient to shocks that threaten their livelihoods.

SC is implementing the Jibon o Jibika program in collaboration with Helen Keller International (HKI), the NGO Forum, the Cyclone Preparedness Programme (CPP) of the Bangladesh BRCS and 14 local NGO partners with offices in Barisal Division. SC is responsible for implementing the health and nutrition component of the maternal and child health objective and the disaster and preparedness objective working in collaboration with CPP. HKI is responsible for implementing the food availability and income objective and the NGO Forum for the water and sanitation component of the maternal and child health objective.

The program was designed to reach over 200,000 children less than two years of age and 81,000 women in three districts in the Division of Barisal in the south coastal area. Since this was SC's first Title II program in Bangladesh, it took some time to scale up the

program. More information on the specific activities being carried out under each of the strategic objectives is provided below.

- **Food availability and incomes.** Activities include training of women's Homestead Food Production (HFP) groups, men's small farmer groups and ultra-poor women's groups; establishment of Village Model Farms (VMF); support and training of VMF owners, selection, training and support of local technical specialists; improving linkages between communities, government and providers; support of Ministry of Agriculture (MOA) and Ministry of Livestock (MOL) extension services; provision of homestead food production and small farm inputs; provision of inputs to renew HFP activities following natural disasters; establishment and training of HFP and small farmer marketing groups and establishment of reliable market information systems.
- **Maternal and child health and nutrition.** Activities include mass communication campaigns; community-based education and counseling; supporting established MCHN outreach services and "Vitamin A Plus" campaigns; promoting community case management of acute respiratory infections and diarrhea; promoting community-based rehabilitation of malnourished children; supporting implementation of clinical Integrated Management of Childhood Illness (IMCI) in community facilities; supporting the supervision and oversight of local health providers; facilitating linkage between formal service providers and communities. SC's behavior change communication strategy was informed by formative research and was developed using the BEHAVE framework. This objective also encompassed hygiene education and improving access to clean water and sanitation, including by conducting needs assessments and promoting water source switching; rehabilitating non-functioning safe water points and installing new ones, and implementing demand driven sanitation programs.
- **Emergency preparedness and response.** Activities include supporting the development and/or updating of local vulnerability maps and community preparedness plans; supporting established BRCS early warning and response systems; rehabilitating local evacuation structures; improving agency responses to natural disasters by improving linkages and coordination between stakeholders; improving access to key emergency response supplies and logistics; establishing a well-trained team of emergency responders.

4.3 WORLD FOOD PROGRAMME (WFP)

The WFP has played an integral role in efforts to reduce food insecurity in Bangladesh since 1974, providing food resources during emergencies and encouraging development. WFP has offices in Dhaka, Mymensingh, Chittagong, Cox's Bazaar, Rangamati, Rangpur and Jessore. From 2007 to the present, WFP has implemented a country program, one Protracted Relief and Recovery Operation (PRRO) and two emergency operations (EMOP).

- **The 2007-2010 Country Program.** Its goal is to support the GOB to achieve the MDGs by improving ultra poor households' food security, nutritional well being and livelihoods. Activities focus on: vulnerable group development providing income-generation and social awareness training for "ultra poor" vulnerable women; community nutrition interventions, with priority to pregnant and lactating women,

adolescent girls and children under two; food-for-education targeting pre-primary and primary schoolchildren in highly food insecure areas; activities to enhance resilience such as food for training to develop skills in disaster preparedness and response; and strengthening national capacity to manage food-assistance and hunger-reduction programs.

TABLE 13. SUMMARY OF WORLD FOOD PROGRAMME BENEFICIARIES BY ACTIVITY 2007 – 2010

WFP ACTIVITIES	BENEFICIARIES
Vulnerable Group Development	1,157,690
Community Nutrition	23,004
School Feeding	550,000
Enhanced Resilience	186,170
Assistance to Refugees	23,862
Assistance to cyclone affected people	3,420,521
Vulnerable Groups Affected by High Food Prices and Natural Disasters	5,000,000

- **The PRRO** provides food assistance to approximately 22,000 refugees from Myanmar. Due to the continued need for humanitarian support, another phase of the PRRO with the same mode of operation and coverage was approved for these refugees for another two years beginning January 2009.
- **The EMOP “Food Assistance to Cyclone-Affected Population in Southern Bangladesh”** (November 2007 – February 2009). Its objectives were to meet the immediate food needs of the people in areas severely affected by Cyclone Sidr to maintain adequate food consumption and to prevent deterioration of the nutritional status of women and children while restoring livelihoods and rural community infrastructures in the affected areas through general food distribution, emergency school feeding, micro-nutrient powder initiative and food-for-work and cash-for-work involving the worst affected districts.
- **The EMOP “Emergency Safety Net for Vulnerable Groups Affected by High Food Prices and Natural Disasters in Bangladesh”** (November 2008 – July 2009). Its objectives are to provide emergency safety net assistance to five million people affected by high food prices for a period of nine months through targeted relief assistance, nutrition intervention, school feeding, employment generation and technical assistance to strengthen the capacity of the GOB to design and manage effective safety nets. Beneficiaries include pregnant and lactating mothers and adolescent girls who received wheat-soy blend (WSB) and households with children suffering from moderate acute malnutrition (6-24 months) who received a family ration of rice and pulses.

4.4 OTHER DEVELOPMENT PARTNERS

There are a large number of what the GOB refers to as development partners operating in Bangladesh, including other bilateral donors, multilateral donors, UN agencies, foundations and domestic and international NGOs. More information on some of the more important of these partners is provided below.

Coordination among the numerous donors in Bangladesh is good, with the World Bank taking the lead. There is also consistency and mutual reinforcement among donor strategies and programs and a shared understanding of the need to focus on poverty reduction as a common strategy. Several donors have also experimented with the development of “Joint Strategies.” The 2006-2009 Country Assistance Strategy (CAS), which focuses on improving the investment climate in Bangladesh and empowering the poor (with improved governance as a crosscutting theme), was jointly prepared by the World Bank, the Asian Development Bank (ADB), the United Kingdom’s Department for International Development (DFID) and the Japan International Cooperation Agency (JICA), for example. The Local Consultative Group is very active, as is the sub-group on Agriculture and Rural Development. There is also a Nutrition Working Group (NWG), currently chaired by UNICEF and Plan International that has been active since 2005, which includes members from UN agencies, international and national NGOs and individuals interested in nutritional development.

The United Kingdom is the largest of the bilateral donors, accounting for 20 percent of the Official Development Assistance currently being provided to Bangladesh. A focus on the extreme poor through poverty reduction and social protection programs continues to be an important part of the DFID development program. DFID’s Chars Livelihoods Program, which was started in 2005, is scheduled to run for eight years with 50 million British pounds in grant funding. Program components include: providing safe infrastructure (including flood protection, safe water and sanitation) and income generating assets (including livestock); training in health, sanitation, disaster preparedness, and social rights and responsibilities; providing cash for work and monthly stipends to the poorest households; and promoting microenterprise (including by providing microfinance and livestock services). The program, which is targeted to extremely poor (also food insecure) households – especially women and girls -- living in the remote chars in the northwest of Bangladesh, reached nearly 100 thousand households during its first phase. The second phase will begin in November 2009. DFID, in partnership with the GOB, has also allocated 65 million British pounds over eight years (2008-2016) to establish and operate a Challenge Fund for the Economic Empowerment of the Poorest. This program will focus on the poorest 10 percent of households that other initiatives are still trying to reach. The priority geographical areas for this program are impoverished and underserved areas vulnerable to disaster and climate change, including remote haors and coastal zones.

The World Bank is also a major donor to Bangladesh, providing over \$1 billion in concessional lending in FY 2009. All World Bank loans to Bangladesh are interest free International Development Association (IDA) credits. The Bank has supported the GOB’s rural development, education, social protection and health programs. Its current portfolio includes 26 active projects including the NNP. Two programs are important to the food utilization dimensions of food security – a \$288 million Health, Nutrition and Population Sector program, which includes nutrition and food security as one of its major themes, and a \$40 million rural Water Supply Program. The World Bank is also a major donor in the agricultural sector along with the Danish Government. Three major projects are currently underway in this sector: the \$120 million Agricultural Technology Transfer Program, which is co financed by the Dutch and the International

Fund for Agricultural Development (IFAD); a water management improvement program, which focuses on flood control and drainage schemes; and a \$109 million cyclone emergency program, which includes a component focused on the recovery and restoration of the agriculture, livestock and fisheries sub-sectors in the Cyclone Sidr affected areas. The Bank is also financing a \$100 million Social Investment Program focused on marginal wage laborers, share croppers and small-scale dairy, poultry and fish producers. These funds will be made available through a block grant program to village-level funds, which village organizations will be able to use to help beneficiaries meet consumption and/or investment needs, for example, or support self-operated micro finance programs. The World Bank has also supported policy reforms to accelerate economic growth and prepared and disseminated a number of analytical reports, including the 2008 Poverty Assessment.

The Asian Development Bank (ADB), which is also a partner in the joint CAS, has focused primarily on the energy, transport, education, urban health and water supply and sanitation sectors. In 2008, it provided a US\$200 million “Food Facility Loan to the GOB. This loan, which was made in response to the 2007/08 food price crisis, enabled the GOB to buy food for its public food distribution system. These monies enabled the GOB to double the size of its food stocks and helped stabilize the prices of basic staples.

A number of other UN specialized agencies are also active in Bangladesh in addition to the World Food Programme, whose program was discussed in the previous section. This includes the FAO and UNICEF. In addition to its normal country program, which includes a focus on issues related to increasing rice productivity, agricultural research and extension, plant breeding, IPM, natural resource management, farmer field schools, avian flu, irrigation, fertilizer usage and markets, and crop assessments and food safety, FAO is also the implementing agency for several important food security-related projects. This includes the USAID and European Commission-funded project that is providing support to the Food Planning and Monitoring Unit in the Ministry of Food and Disaster Management and the World Bank’s cyclone recovery program. Under the Bank’s program, FAO is receiving \$16 million to work on crops (the introduction of new, salt tolerant rice varieties; tube wells for irrigation; integrated pest management (PM) technologies; fertilizer availability and distribution), dairy (the introduction of more productive animals and improvements in animal health and nutrition), and fisheries (the rehabilitation of fish ponds and the introduction of new technologies).

UNICEF supports efforts to: improve community and household care seeking behaviors for sick children and neonates; implement the Expanded Program on Immunization (EPI); strengthen emergency obstetric care facilities that are linked to improved referral and community mobilization for birth planning and preparedness; improve antenatal and postnatal services and create awareness about the danger signs during pregnancy, delivery and post partum; promote salt iodization, vitamin A supplementation, iron-folate supplementation and deworming; and promote behavior change for improved nutrition of children and women, including the promotion of breastfeeding and improved infant and young child feeding practices. UNICEF is also involved in the largest intensive hygiene, sanitation and water quality improvement project ever attempted in a developing country. The Sanitation, Hygiene Education and Water Supply in Bangladesh

(SHEWA-B) project aims to reach 30 million people in five years (2007-2011). UNICEF also addresses the arsenic contamination of groundwater by testing more than 1 million tube wells, with blanket testing in 45 upazilas; providing alternative safe water in 68 upazilas and public information and awareness campaigns on arsenic mitigation.

Three other key groups include the BRAC, Alive and Thrive and Grameen Bank. BRAC operates in over 70,000 villages and 2,000 slums to reach three quarters of the population of Bangladesh with an integrated package of services. BRAC's five core programs include: economic development, health, education, social development and human rights and legal services. BRAC is active in relief and recovery efforts from natural disasters such as Cyclone Sidr in 2007 and Cyclone Aila in 2009. BRAC's program for economic development includes: providing microfinance loans to small groups of women; strengthening the livelihoods of ultra poor households through asset transfer, training, health services, subsistence allowances and microfinance loans; and supporting the engagement of low-income women in the agricultural sectors of poultry, livestock, fisheries, silk production, crop farming and agro forestry. Efforts in health center on a program of 30,000 community health volunteers as well as maternal child health services and sanitation services, hygiene education and safe water services. BRAC also operates 30 health centers across the country. BRAC partners with local NGOs and community-based organizations to implement its programs, and runs a number of social enterprises. Alive and Thrive is a consortium managed by the Academy for Educational Development (AED), funded by the Gates Foundation and implemented in Bangladesh by BRAC with the goal of improving the nutrition of children under the age of two. Its objectives include improved IYCF practices at the household level; increased supply, demand and use of healthy complementary foods and micronutrient powder for children; and an improved environment for proper IYCF practices at the national and community levels. The project will operate in Bangladesh until November of 2013 and intends to improve feeding practices for 3.5 million children in 90 rural upazilas located in 36 districts through BRAC's 30,000 community health volunteers. Grameen Bank (GB) provides microfinance services to 7.9 million borrowers, 97 percent of whom are women. Grameen Bank operates 2,557 branches and provides services in over 84,000 villages. GB has a special program targeting ultra-poor beggars and provides small loans for microenterprise development, housing and education.

TABLE 14. EXAMPLES OF MAJOR ACTORS INVOLVED IN FOOD SECURITY IN BANGLADESH

MAJOR ACTORS	TECHNICAL AREAS OF ACTIVITY		
	LIVELIHOODS AND INCOME GENERATION	MATERNAL AND CHILD HEALTH AND NUTRITION	DISASTER PREPAREDNESS AND RESPONSE
NON-GOVERNMENTAL ORGANIZATIONS			
CARE Bangladesh	X	X	X
Save the Children (SC) US	X	X	X
Save the Children UK		X	X
Helen Keller International (HKI)		X	
World Vision	X	X	X
Bangladesh Breastfeeding Foundation (BBF)		X	
Bangladesh Rural Advancement Committee (BRAC)	X	X	X
Plan-Bangladesh		X	
International Center for Diarrhoeal Diseases Research, Bangladesh (ICDDR, B)		X	
Gates Foundation		X	
Action Aid Bangladesh	X		X
OXFAM Bangladesh	X		X
CONCERN Worldwide Bangladesh	X	X	X
CONCERN Universal Bangladesh		X	X
Muslim Aid	X		X
Islamic Relief USA Bangladesh		X	X
CARITAS Bangladesh	X		X
UN AGENCIES			
Food and Agriculture Organization (FAO)	X		X
International Fund for Agricultural Development (IFAD)			
World Food Programme (WFP)	X	X	X
United Nations Children's Fund (UNICEF)		X	
GOVERNMENT OF BANGLADESH			
Comprehensive Disaster Management Programme (CDMP)			X
National Nutrition Programme (NNP)		X	
Institute of Child and Mother Health		X	
BI-LATERAL DONORS			
DIFID	X	X	X
EC	X	X	X
DANIDA	X		X
AusAID	X	X	X
JICA	X	X	X
USAID	X	X	X
CIDA		X	X
MULTI-LATERAL DONORS			
Asian Development Bank	X	X	X
World Bank	X	X	X

TABLE 15. SUMMARY OF STRATEGIES AND PROGRAMS RELEVANT TO ACHIEVING FOOD SECURITY IN BANGLADESH COUNTRY FRAMEWORK TO REDUCE FOOD INSECURITY

STRATEGY/POLICY/ PROGRAM	DATES	OBJECTIVES AND INTERVENTIONS	RESPONSIBLE
Government of Bangladesh			
National Food Policy Plan of Action (NFP PoA)	2008-2015	Developed by the MFDM in 2008, in coordination with 11 partner ministries//divisions, the NFP PoA builds on the core elements and strategic lines of action identified in the NFP developing in more detail the priority actions that need to be taken in each of the key intervention areas in the short, medium and long term. The NFP PoA also identifies the actors responsible for each of these priority actions and provides a framework for monitoring NFP PoA performance, including identifying targets, indicators and means of verification. Areas of intervention include: <u>Objective 1</u> -- agricultural research and extension; use and management of water resources; supply and sustainable use of agricultural inputs; agricultural diversification; agricultural credit and insurance; physical market infrastructure development; agricultural marketing and trade; policy/regulatory environment; early warning system development; producer price support; public stock management/price stabilization. <u>Objective 2</u> -- agricultural disaster management; emergency food distribution from public stocks; enabling environment for private food trade and stocks; effectiveness of targeted food security programs and other safety nets; income generation for women and the disabled; agro-based/agro-processing/SME development; market driven education, skills and human development. <u>Objective 3</u> – long-term planning for balanced food; balanced and nutritious food for vulnerable people; nutrition education on dietary diversification; food supplementation and fortification; safe drinking water and improved sanitation; safe, quality food supply; women and children health; promotion and protection of breastfeeding and complementary feeding.	GOB
Poverty Reduction Strategy (PRSP) II (Moving Ahead: National Strategy for Accelerated Poverty Reduction II)	2008/09-2010/11	Prepared as a sequel to the first PRSP this strategy “strives to accelerate poverty reduction through concerted government efforts, private sector development and effective participation of NGO’s and the civil society.” This PRSP includes five blocks and five supporting strategies. The blocks are: (1) macro-economic environment for pro-poor growth, (2) critical areas of focus for pro-poor economic growth, (3) essential infrastructure for pro-poor economic growth, (4) social protection for the vulnerable and (5) human development. The five strategies are similar to those identified in the previous PRSP but with greater emphasis given to “Tackling Climate Change” under the “Caring for the Environment” strategy and the importance of “Enhancing productivity and efficiency through science and technology” recognized by its addition as a separate (5th) strategy. This Strategy also includes a “Policy Matrix on Food Security.”	GOB

National Policy for Women's Advancement (NPWA)	2008	Aims to eliminate all forms of discrimination against women by empowering them to become equal partners of development. Overall goal for women's empowerment includes: (1) promoting and protecting women's human rights; (2) eradicating the persistent burden of poverty on women; (3) eliminating discrimination against women; (4) enhancing women's participation in main stream economic activities; (5) creating opportunities for education and marketable skills training to enable them to participate and be competitive in all economic activities; (6i) Incorporating women's needs and concerns in all sectoral plans and programs; (7) promoting an enabling environment at the work-place: setting up day care centers for the children of working mothers, career women hostels, safe accommodation for working women; (8) providing safe custody for women and children victims of trafficking and desertion, and creating an enabling environment for their integration in the mainstream of society; (9) ensuring women's empowerment in the field of politics and decision making; (10) taking action to acknowledge women's contribution in social and economic spheres; (11) ensuring women's social security against all vulnerability and risks in the state, society and family; (12) eliminating all forms' of violation and exploitation against women; (13) developing women's capacity through health and nutrition care; (14) facilitating women's participation in all the national and international bodies; (15) strengthening the existing institutional capacity for coordination and monitoring of women's advancement; (16) taking action through advocacy and campaigns to depict positive images of women; (17) protect women from the adverse effects of environmental degradation and climate change; (18) take special measures for skills development of women workers engaged in the export-oriented sectors; (19) incorporate gender equality concerns in all trade-related negotiations and activities; and (20) ensure gender sensitive growth with regional balance.	GOB
National Plan for Disaster Management (NPDM)	2007-2015	Developed by the MFDm to guide the design and implementation of disaster management policies and programs. The vision for disaster management in Bangladesh is to reduce the vulnerability of people, the poor in particular. To the effects of natural, environmental and human induced hazards to a manageable and acceptable level. The plan is designed to strengthen the capacity of the Bangladesh disaster management system in improving its response and recovery management at all levels. It also encourages approaches that adopt a paradigm shift from conventional response and relief practices to a more comprehensive risk reduction culture. The Plan will be implemented through a wide range of stakeholders, including national and local government agencies, donors, NGOs UN agencies, academia, technical institutions and the private sector.	GOB
National Food Policy (NFP)	2006	Developed by the Ministry of Food and Disaster Management (MFDm), the NFP includes three major objectives and 12 more specific objectives/strategic lines of action. The three core objectives relate to the three dimensions of food security : (1) Adequate and stable supply of safe and nutritious food, (availability) (2) increased purchasing power and access to food by the people (access), and (3) Adequate nutrition for all individuals (utilization). (See Table 9 for more information on these objectives and strategic lines of action.)	GOB

National Strategy for Infant and Young Child Feeding (NSIYCF)	2006 -- 2010	Adopted with the overall goal of improving the nutritional status, growth and development, health, and survival of infants and young children in Bangladesh through optimal infant and young child feeding practices. Specific objectives to be achieved by 2010 are to: (1) increase the rate of early initiation of breastfeeding from 24 to 50 percent; (2) increase the rate of exclusive breastfeeding (EBF) until six months from 42 to 60 percent; (3) maintain the rate of continued breastfeeding through 23 months at 90 percent; and (4) increase the rate of proper complementary feeding of children aged six to nine months to 50 percent. Four strategies are proposed: (1) legislation, policy and standards; (2) health system support; (3) community-based support; and (4) support in exceptionally difficult circumstances (including supporting HIV positive mothers to select infant feeding options, ensuring optimal IYCF during emergencies and developing the capacity among the health system, community and family to manage malnutrition, including severe acute malnutrition.	National Strategy for Infant and Young Child Feeding (NSIYCF)
Actionable Policy Brief (Agriculture) (APB)	2005	Developed by the Ministry of Agriculture (MOA) for the crop sub-sector, focuses on increasing agricultural commercialization and competitiveness. Identifies a set of short-term and medium-term priorities in eight intervention areas: quality seed development, fertilizers, land, minor irrigation, mechanization, marketing and agribusiness, agricultural research and extension. An Action Plan for implementing the APB was finalized in 2006 provides a set of detailed intervention in all the APB areas except fertilizers and land.	GOB
Poverty Reduction Strategy (PRSP) I (Unlocking the Potential: National Strategy for Poverty Reduction)	2004/05-2006/07	Adopted in October 2005, this first PRSP provides a comprehensive framework for poverty reduction, which includes four blocks: (1) enhancing pro-poor growth; (2) boosting critical sectors for pro-poor economic growth; (3) devising effective safety net and targeted programs; and (4) ensuring social development. To maximize impacts on poverty reduction, strategies developed under these key blocks were planned to be complemented and supported by four cross-cutting blocks: (1) ensuring participation; social inclusion and empowerment; (2) promoting good governance by ensuring transparency, accountability and rule of law; (3) providing services efficiently and effectively, especially to the poor; and (4) caring for the environment and long-term sustainable development.	GOB
National Nutrition Programme (NNP)	2001 -- 2011	Established in 2001 with World Bank funding as a continuation of the Bangladesh Integrated Nutrition Project (BINP), the NNP is run by the Ministry of Health and Family Welfare. Its goal is to achieve sustainable improvements in the nutritional status of the population (particularly children and women) through the adoption of new behaviors and the appropriate use of nutrition services which are increasingly managed by local communities (See Box 1 for more details on its 2011 goals).	GOB
National Health Policy (NHP)	2000	Adopted by the Ministry of Health and Family Welfare with the goal of ensuring that necessary basic medical services reach people of all strata to develop the health and nutrition status of the Bangladeshi people as stipulated the Constitution. Food security related components include prioritizing the expansion of primary health care and maternal and child health services at the upazila and union level and establishing and operating nutrition and health education units in each upazila, to ensure coverage of all villages with nutrition and health education services.	GOB

National Agricultural Policy (NAP)	1999	Developed by the MOA, the overarching goal is “to make the nation self-sufficient in food through increasing the production of all crops, including cereals, and ensure a dependable food security system for all. The Policy contains 18 specific objectives and related program areas, with most of them centered on the challenges to increasing food production. Priority programs include those dealing with agricultural inputs, research, extension, credit, development of marketing/storage and transportation systems, development of agro processing and agro-based industries, education and training, and contingency management to combat natural disasters, Improved nutrition is also recognized in the context of the need to increase the production and supplies of more nutritious food crops. A new agricultural policy was in the process of being up-dated in the Spring of 2009 with a draft in the final stages of revision.	GOB
National Food and Nutrition Policy (NFNP)	1997	Developed by the Ministry of Health and Family Welfare (MOH), it broadened the 1988 National Food Policy from an almost exclusive focus on agricultural production to one including food diversification, health and nutrition as key areas of intervention. The Implementation strategy is divided into four major sectors: (1) food, agriculture, fisheries, livestock, and forestry for increased production, proper distribution, and food security; (2) health, family welfare, and environment for primary health care, caring practices, disease control, sanitation, and hygiene; (3) nutrition education and communication for the creation of awareness at different levels with formal and non-formal education; and (4) community development and social welfare for poverty alleviation, income generation, and economic growth.	GOB
National Plan for Action for Nutrition (NPAN)	1997	Developed in 1997 to implement the NFNP, the NPAN goal is to improve the nutritional status of the people of Bangladesh to the extent that malnutrition should no longer be a public health problem by the year 2010. Objectives include: developing human resources in nutrition; promoting nutrition education at the community and household levels; promoting dietary diversity; improving food access at the household level; promoting breastfeeding; control of infectious diseases; reducing micronutrient deficiencies; and promoting nutrition advocacy and community participation.	GOB
Social Safety Net Programs		Food for Work (FFW) -- Purpose: (1) employment generation and (2) developing and maintaining rural infrastructure. Implementing agencies: (1) local government engineering division, (2) Ministry of Social Welfare, and (3) Ministry of Water Resources. Source of funds: GOB, ADB, WFP. Targeting criteria: (1) people who are functionally landless, (2) people who lack productive resources, (3) women headed households where women are widowed, deserted and destitute, (4) day labor or temporary workers, (5) people with income less than taka 300 per month. Nature and value of the benefit: entitlement depends on amount of work done. Planned coverage: 1 million beneficiaries per year.	GOB
		Cash for Work (CFW) – same as above	

	<p>Vulnerable Group Feeding (VGF) -- Purpose: provide food and other emergency assistance to disaster victims. Implementing agency: Ministry of Food and Disaster Management (MFDM). Source of funding: GOB and development partners. Targeting criteria: disaster/calamity victims. Nature and value of benefit: entitlement depends on the amount of work done. Planned coverage: 240,000 beneficiaries per year.</p>	GOB
	<p>Gratuitous Relief (GR) – Purpose: Provide food and other short-tem emergency assistance to disaster victims. Implementing agency: MFDM. Source of funding: GOB and development partners. Targeting criteria: disaster/calamity victims. Nature and value of benefit: entitlement depends on amount of work done.</p>	GOB
	<p>Vulnerable Group Development (VGD). Purpose: (1) developing life skills for women though training, motivating savings and providing scope for accessing credit and (2) building social awareness on disaster management and nutrition through training in groups. Implementing agencies: Ministry of Women and Children Affairs and Directorate of Relief and Rehabilitation. Source of funding: GOB, WFPO, EC, Canada, Australia. Targeting criteria: (1) households with not more than 0.15 acres of land, (2) households with incomes less than taka 300 and dependent on seasonal wage employment, (3) women of reproductive (18-49) age, (4) day laborer or temporary worker, and (5) households with little or no productive assets. Nature and value of the benefit: (1) 30 kg of wheat per month, (2) training totaling about 150 hours, and (3) on graduation beneficiaries can access BRAC credit. Planned coverage: about 500,000 beneficiaries per year.</p>	GOB
	<p>Fund for the Mitigation of Risk of Natural Disaster. Purpose: help mitigate suffering of disaster victims and provide loans of set up small businesses. Implementing agency: MFDM. Source of funding: GOB. Targeting criteria: disaster/calamity victims. Nature and value of benefits: entitlement depends on actual need. Planned coverage: about 100,000 beneficiaries per year.</p>	GOB
	<p>Test Relief (Rural Infrastructure Maintenance Programme (RIMP)) – Purpose: employment generation for people in poverty stricken areas during rainy season and developing and maintaining rural infrastructure. Implementing agency: Ministry of Food and Natural Disaster and development partners. Sources of funds: GOB and some development partners. Targeting criteria: is generally targeted to locations where poverty is severe. Nature and value of benefit: 5-6 kg of wheat per day worked. Planned coverage: about 100,000 beneficiaries per year.</p>	GOB
	<p>Rural Maintenance Programme (RMP) – Purpose: (1) empowerment of women and (2) maintaining rural infrastructure. Implementing agencies: local government engineering departments and CARE. Source of funding: GOB, EC, CUDA, Union Parishads. Targeting criteria: (1) households own less than 0.3 acres of land, (2) female headed households where the head of the households is between 18-35 years of age, (3) widowed or separated at least one year with priority to those with more dependents, (4) households with no other income and not participating in other targeted programs. Nature and value of benefits: taka 51 pre day. Planned coverage: about 42,000 participants per day.</p>	GOB

		Primary Education Stipend Project (PEPS) – Purpose: (1) increasing the number of primary schools enrollments from poor families, (2) increasing school attendance and reducing dropouts, (3) increasing primary school competition rate and (4) reducing child labor and poverty. Implementing agency: Ministry of Primary and Mass Education. Source of funds: GOB. Targeting criteria: (1) children from female-headed households where the head of household is widowed, deserted, and destitute, (2) children from day labor headed households, (3) family of low income professionals (e.g., fishing, pottery, blacksmithing, weaving and cobbling), and (4) landless or households that own not more than 0.5 acres of land. Nature and value of the benefit: (1) taka 100 for single student family, (2) taka 125 for family with more than one child and (3) benefit conditional on meeting attendance and examination criteria. Planned coverage: over 5.3 million beneficiaries per year.	GOB
		Allowances to the Widowed, Deserted and Destitute Women. Purpose: minimizing the problems faced by distressed women. Implementing agency: Ministry of Women and Children Affairs. Source of funding: GOB. Targeting criteria: (1) women either widowed, deserted, or destitute, (2) number of beneficiaries is identified based on the category of the Union. Nature and value of benefit: (1) taka 180 per month, (2) cash is transferred by the public banks. Planned coverage: about 700,000 beneficiaries per year.	GOB
		Old Age Allowances – Purpose: livelihood support to the elderly poor. Implementing agency: Department of Social Services, Ministry of Social Welfare. Source of funding: GOB. Targeting criteria: (1) at least 65 years old, (2) income equal to taka 2,000 or less, (3) must have worked in formal sector, (4) number of beneficiaries is determined on the basis of the category of the union, (5) fifty percent of the beneficiaries are women and 50 percent are men. Nature and value of benefits: 1) taka 180 per month, (2) cash is transferred by the public banks. Planned coverage: about 1.5 million beneficiaries per year.	GOB

US Government			
USAID/FFP Strategic Plan	2006-2010	Strategic Objective: Food insecurity in vulnerable populations reduced; IR1: Global leadership in reducing food insecurity enhanced and IR2: Title II program impact in the field increased, through protecting and enhancing human capabilities, livelihood capacities and community resiliency and capacity to influence factors that affect food security.	FFP
USAID/Bangladesh Country Program		Focus on: Governing Justly and Democratically. Investing in People – includes funds for basic health services that reach approximately 20 million people each year that would not otherwise have access to health care; plus programs directed to reproductive health services, HIV/AIDS care, treatment and prevention; water and sanitation; and early childhood education. Economic Growth – includes workforce training and skills development, especially for unemployed youth, women and the landless rural poor; private sector development; expanding access to economic and social infrastructure through changes in policy and law; improving food policy; expanding agricultural productivity; and supporting sustainable natural resources management that contribute to incomes generation. Humanitarian Assistance – includes support for disaster mitigation and readiness programs.	USAID/ Bangladesh

5. COUNTRY FRAMEWORK TO REDUCE FOOD INSECURITY

5.1 ROLE OF MISSION PROGRAMS FUNDED BY OTHER ACCOUNTS IN SUPPORTING IMPROVEMENTS IN FOOD SECURITY

Current Mission programs that focus on expanding economic opportunities for the poor and increasing access to health services help improve the food security conditions in the country, contributing to improved food availability, access and utilization. Many of the Mission's programs that are funded by other accounts have a national level focus, which is an area where the Mission bilateral programs have an advantage in comparison to the Title II programs, which are most effective at a more local level. Missions also have an important role to play in helping improve the enabling environment in the country, which is one of the key contributing results recognized in the FFP Strategic Plan. The USAID and European Commission (EC) funded National Food Policy Capacity Strengthening Program, which is being implemented by FAO, supported the development of the GOB's new NFP PoA for 2008-2015 and has played an important role in helping increase the capacity of the GOB to develop and implement sound food security policies. This Plan, which includes specific objectives related to improved food availability, access and utilization, is meant to serve as a comprehensive framework for guiding the GOB food security interventions and as a reference for aligning the interventions of its development partners with GOB priorities.

Other Mission activities that contribute more directly to improving food security, some of which the Title II program can benefit from directly, include activities supporting improvements in food availability (a history of support to the country's agricultural research institutions, including the current support in the area of biotechnology), access (support to the development of value chains accessible to the poor, in the aquaculture and horticulture sectors in particular) and utilization (improvements in the quality and delivery of health services). The Mission's governance program also works with more than 250 elected local governments on disaster preparedness, risk mitigation and disaster response, which helps reduce vulnerability to food insecurity. As the Mission moves forward with the development of a new agricultural-based food security strategy and new strategy for its health program, other activities are likely to be added to the Mission's program that will contribute to an improvement in food security in the country and other opportunities for collaboration and the development of greater synergies and integration between the Title II programs and the rest of the Mission's portfolio.

5.2 ROLE OF THE TITLE II MYAP IN ADDRESSING FOOD INSECURITY

5.2.1 Objectives and Desired Outcomes

The overall strategic objective for the 2010-2014 Title II MYAP in Bangladesh should be *“to reduce food insecurity among vulnerable rural populations in Bangladesh.”* In Bangladesh this includes the poor, who by definition do not have sufficient income to purchase an

adequate diet and other basic necessities and pregnant and lactating women and children less than two years of age. (Also see following section on targeting for a further discussion of the priority vulnerable groups and how they will be targeted.) This formulation puts the emphasis where it should be – on those populations in the country that are already food insecure or vulnerable to food insecurity. The rates of poverty and extreme poverty are higher in rural areas than in urban areas and there are still many more poor and extremely poor living in rural areas than in urban areas. The same is true for chronic malnutrition. The rates of stunting are higher in rural areas and there are more stunted children living in rural areas than in urban areas. This formulation is also consistent with the strategic objective that was adopted by FFP for the period 2006-2010 (see FFP Strategic Framework in **Annex I**).

Bangladesh has been urbanizing rapidly, and until recently migration to urban areas has been seen as a force for poverty reduction, with urban poverty declining faster than rural poverty. However, there is evidence of growing disparities in living standards in urban areas and that the urban poor are underserved by the existing safety net system. For this reason, Awardees may want to include a small component in their program proposals located in an urban slum(s). Awardees will have to justify the inclusion of such a component on the basis of food security indicators and arguments and should monitor and evaluate these programs separately to better assess their effectiveness and impact on malnutrition in settings that can be very different, with different opportunities and constraints, for example, than those prevailing in the rural areas.

The Title II programs in Bangladesh should be designed to contribute to food access and utilization and to reducing the vulnerability of the individuals, households and communities targeted by the program. Availability, access and utilization are the three elements necessary to achieving food security, which are identified in USAID's definition of food security, and all three are important in the Bangladesh context. However, the constraints to increasing food availability, which include national-level policy and research and extension institutions, are probably better addressed by and through the broader USAID programs. Plus, it is the lack of access to food, or lack of purchasing power, that is the priority problem affecting the food insecure households that are targeted by the Title II programs. These programs will also have to focus on ways to reduce the vulnerability of poor and food insecure households and communities to natural disasters, including floods and cyclones.

Program success at the impact level should be measured in terms reducing child malnutrition (both height-for-age and weight-for age in children less than five years of age). FFP considers this to be a measure of the success of the entire program as well as activities directed more specifically to improving the health and nutritional status of program beneficiaries. When Title II programs include a food access dimension, which will be required of the Bangladesh programs, FFP also requires Title II Awardees to track changes in measures of household consumption (number of months of adequate food provisioning and a household dietary diversity score).

5.2.2 Program Priorities

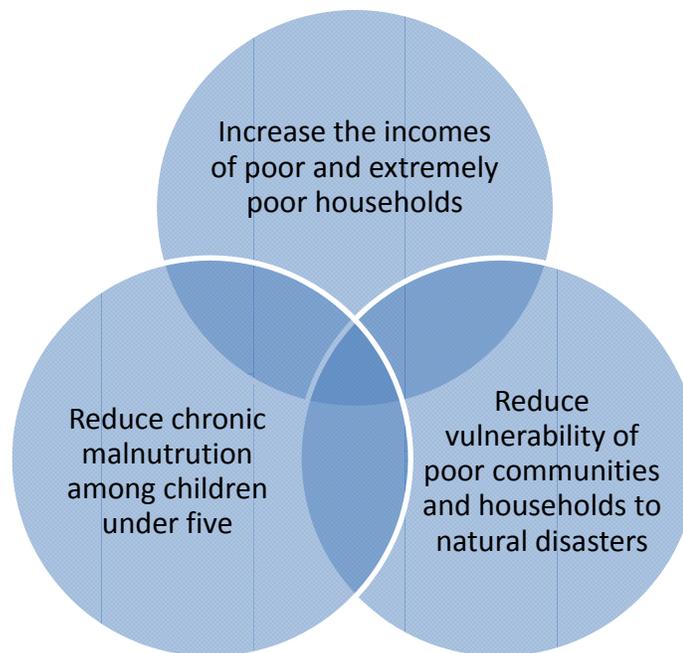
The Title II program in Bangladesh should give priority to activities expected to:

- Increase the incomes of poor and extremely poor households.
- Reduce chronic malnutrition among children under five.
- Reduce the vulnerability of poor communities and households to natural disasters.

Priority activities within each of these outcome areas (IG chronic malnutrition, and vulnerability to natural disasters) are identified and discussed in the following sections. These priorities reflect the various assessments of the nature and extent of the food security problems in Bangladesh and the priorities and focus of the GOB, USAID/Bangladesh and FFP, discussed in the previous sections. They also build on the knowledge and experience of other programs and donors, including those of past and current Title II cooperating sponsors.

The three circles in the following conceptual framework represent the three sets of priority program activities. They are drawn as overlapping in an attempt to portray the interrelationships that exist among these objectives (e.g., better nourished children grow up to be more productive adults, for example, and increases in incomes enable households to access better diets and health care) and the need for interactions among these activities on the part of the program staff and at the community level, to create synergies and increase program impact (See further discussion on the importance of program integration in the later section on “Integrating Programs at the Community Level”).

FIGURE 17. CONCEPTUAL FRAMEWORK FOR THE BANGLADESH TITLE II DEVELOPMENT PROGRAM



5.2.2.1 Increasing the Incomes of Poor and Extremely Poor Rural Households

Lack of access or poverty is the root cause of food insecurity in Bangladesh. So, finding effective ways to increase the incomes of poor and extremely poor is essential to reducing food insecurity in Bangladesh. In many countries, the most promising options for the rural poor, at least in the short to medium term, are likely to be ones that can be implemented on their own land. This is not necessarily the case in Bangladesh where the rural poor have such limited access to land and because so many of the poorest are dependent on daily wage labor in farm and non-farm activities as their major source of income. In Bangladesh, the rural households that have been successful in moving out of poverty have diversified into a number of more profitable activities and occupations, adopting more productive rice varieties and technology packages, allocating more land to higher valued crops and labor to other more profitable non-crop, agricultural activities and moving into non-agricultural activities including jobs in transport, construction and industry. To be successful, the Title II Awardees will need to develop the same type of multifaceted IG strategy that their clients – the rural poor and extremely poor – are adopting.

Broadening the focus to include farm and non-farm and direct and indirect options

In Bangladesh, in other words, Awardees are going to have to consider including several different types of approaches to working with their client groups in their IG programs. Some households will be able to benefit from options that will enable them to derive more value from what limited land they do have, adopting improved rice varieties and production practices, for example, or more likely, moving into higher valued horticultural crops or other higher valued agricultural activities such as poultry, livestock feeding and aquaculture. In these cases, Awardees will be able to work with their client households directly, which is the typical approach used in Title II IG programs. Other households will need access to better paying jobs and/or other income earning opportunities, however, and, finding effective ways to assist these households is likely to require more experimentation and creativity. This is also likely to include finding acceptable ways of working and collaborating with other actors, including other USAID projects that are focused on the development of small and medium enterprises as well as private sector businesses. What will make sense will depend on the physical environment in a given area, the production possibilities, marketing opportunities and availability of other organizations to partner with, including private sector firms as well as other service providers. Awardees, in other words, may need to develop programs that include a combination of farm and non-farm activities and direct and indirect approaches for impacting on their target group – the poor and extremely poor.

In designing and implementing their IG programs, Awardees will have to find the right balance between activities that involve significant numbers of poor and extremely poor but that also have the potential to produce a significant impact on their household incomes (i.e., with the possibility of having transformational impacts). In other words, the Title II programs in Bangladesh need to move beyond programs that help poor people make marginal amounts of money by periodically selling a few eggs or vegetables to other poor people. These types of programs can provide some help to the

beneficiary households, but they will not be able to move even small numbers of the Title II client households out of poverty.

The types of IG programs that are needed in Bangladesh will require considerable hands-on expertise in marketing and business management and development in order to succeed. Since the programs could end up focusing on a range of agricultural products and value added activities, Awardees will also have to be able to access technical expertise in a variety of fields, including agronomy, pest management, farm budgeting, animal health and nutrition, packaging and processing.. Some of this expertise may need to be on staff, but much of the more specialized expertise could be accessed through partnerships with other organizations, including other USAID project implementers, local universities and NGOs as well as the private sector. There is a considerable amount of expertise available in Bangladesh, more than in most other countries in which the Title II programs operate, that Awardees can make much more effective use of. (Also see discussion in the sections on Value Chains, Improved Practices and Technologies, and Linking with Other Service Providers.)

Adopting a market driven strategy

To be successful in helping the poor increase their incomes, the Title II IG programs will need to be market driven, i.e., decisions about what products to focus on need to start with an assessment of the markets for a variety of products and not just whether the Title II clients already do or could produce the product. Implementing a market-led strategy that will benefit the poor will not be easy. One of the biggest problems the poor face in Bangladesh is their lack of assets, little land and little education. On the positive side, the country's domestic market is large, the economy has been growing, as has the middle class and Bangladeshi entrepreneurs, including smaller producers, have had some successes in producing for export markets. The country also has an active private sector that Awardees could potentially partner with. Focusing on market opportunities, analyzing and working on value chains and facilitating links with the private sector has produced results in improving incomes for poor people in other countries ⁶⁹ and has promise for producing results in Bangladesh.

Assessing markets and developing market linkages

Assessing market opportunities for products that the Title II client households may be able to supply should be one of the first steps taken in developing an IG program, and it should be an on-going process. The focus in Bangladesh should be on higher valued products for which there is a growing demand. The Title II Awardees need to think beyond food staples to higher valued markets, including markets for vegetables, tropical fruit, spices, poultry, cattle feeding, milk and aquaculture production. If past experience in Bangladesh is any example, promising markets probably also exist for a range of agricultural-based, valued added products, including a variety of handicrafts, paper bag

⁶⁹ The "Income Generation Findings" Section in the Bolivia Title II Final Evaluation provides considerable information on the market driven/value chain strengthening approach that the four Cooperating Sponsors – the Adventist Development Relief Organization (ADRA), CARE, Food for the Hungry International (FHI) and Save the Children US – used in the design and implementation of their IG programs and the successes that they had in terms of increasing sales and household incomes. Roberta van Haeften, et. al, "The Final Evaluation of the FY2002-2008 Bolivia Title II Development Assistance Program, Washington, D.C., April 2009.

and bamboo shipping baskets and coir rope. Awardees will also need to think beyond local markets to regional, national and international markets.

It is not enough to provide poor households with additional information and training on better production practices or even to provide them with new seeds or a few animals, which is the approach that has been taken by a number of donors in Bangladesh. Much more needs to be done to help people identify and better link to markets, and this is particularly the case for products that are higher in value and face a growing demand. Activities that have been successful elsewhere include helping clients with information on the specific needs of the more promising markets, including information on preferred varieties, quality, packaging, etc.; teaching their clients how to conduct their own market assessments; facilitating linkages with buyers, including the development of new types of arrangements that can give poor households more security such as producing under contract; and helping develop new products and brands.

Developing and strengthening value chains

To succeed in their IG objectives, Awardees will also have to begin to work with and contribute to strengthening the value chains for the specific products that they decide to focus on.⁷⁰ This should start with an analysis of the value chains for the more promising products. These analyses will help Awardees identify potential buyers, but are also important as a means of identifying key constraints and the steps that will need to take to address the constraints to moving products from the producers to the ultimate consumers. In other words, these analyses will help the Awardees identify where the bottlenecks are, which should help Awardees better understand where their expertise and assistance could be most helpful, as well as what other assistance is needed and what other organizations they should think about partnering with to help make these chains function more effectively, for the poor in particular.

A number of organizations active in Bangladesh are already concerned with the development/strengthening of value chains and making them work better for the poor. The USAID Price Project, for example, is focusing on the value chains for aquaculture, horticulture and leather. Although its objective is to have an impact on poor producers, its resources are limited, and there may be opportunities for the Title II Awardees to collaborate with Price including, by organizing their own producers and helping them take advantage of the technical expertise that Price has access to and to link them to some of the markets and buyers that Price has identified. IFAD has six loan-funded projects that include activities designed to improve the access of rural producers to

⁷⁰ A value chain (or value chain analysis) is a concept taken from business management. The term “chain” refers to the series of activities that a product goes through from pre production and production through harvesting, processing and all the other activities that take place until the product reaches the final consumer and the term “value” refers to the additional value that gets added to the product at each stage of the chain. If done correctly, a value chain analysis identifies the key stages in the value chain and provides detailed and important information for each stage of the chain about: the key actors, the roles (functions) that each of these actors play (or could play), and the major opportunities, constraints and bottlenecks (current and potential). Each value chain is unique, although some bottlenecks may be similar across chains and some actors will play similar roles in a number of chains. Key actors are likely to include: input suppliers (fertilizer, seeds, and machinery); technical assistance providers, including government agencies; transporters; universities and other research and training organizations; business service providers; transporters; agro-industrial firms; exporters; wholesalers; and retailers, including supermarkets.

markets, several of which include support to the development of value chains, including for poultry and horticulture products, and the ADB is funding a market linkages program in the northwest of the country. CARE, in another part of its program, is also working on value chains, including on the strengthening of the dairy value chain in the north and northwest of Bangladesh with funding from the Bill and Melinda Gates Foundation. BRAC has also been successful in developing value chains for milk and handicrafts, although its approach, which involved the development of a dairy processing plant in the first case and the creation of a chain of retail handicraft stores, is not one that is possible or appropriate for most other organizations.

Where the Title II Awardees have a comparative advantage is in working with large numbers of small producers, helping organize them, train them and link them to others in the value chain, including input suppliers, buyers and other service providers. This is an important function, because it can significantly reduce the transactions costs to other actors in the chain that are entailed in working with large numbers of small producers on an individual basis. Experience in Bangladesh and elsewhere indicates that most buyers and processors do not have the capacity to do the initial organization and technical assistance and training that is required, but most are willing and able to continue working with these groups once the initial organization and linkage work has been done. One the other hand, where USAID Mission projects often have a comparative advantage and one that Awardees may be able to take advantage of, is working further up the value chain, with medium and larger processors, buyers and exporters, for example, and working on some of the systemic constraints to the development of a value chain related to infrastructure, regulations and policies.

Transferring information on improved practices and technologies

Transferring information on new/improved practices and technologies is likely to be an important part of any IG program that decides to work on higher valued products, including crops, livestock or fish. Agricultural productivity is low in Bangladesh, and poor households need access to information about new and more productive farming practices and more productive technologies, plus technical assistance and training in post harvest technologies and practices. Improved technologies are already available for many of the products that appear to have higher market potential, including for horticulture products, poultry, livestock and dairy and aquaculture. In some cases, Awardees may decide to collaborate or partner with other organizations, including other specialized NGOs that already have the technical expertise that is needed. In other cases it may make more sense for Awardees to access the technologies from other organizations, including, other donor projects, universities and research institutions, and do the extension work with their own staff. Universities, which are another source of technical expertise, could also be involved in providing technical training for staff, for example, and to develop cadres of village level experts. University students might also be enlisted, as part of a work/study program, for example, to provide technical assistance to Awardee clients on technical agricultural and business development and management subjects. The focus here is on activities that will help increase production and productivity, but to be successful in raising household incomes, these activities need to be focused on products for which there are real and growing markets.

Working with clients in groups to facilitate technology transfer and marketing

The rationale for working with poor and extremely poor households in groups is strong. There is no question that it is easier to work with a group of people rather than having to deliver each message and service individually. There are also economies of scale in selling as a group, which can benefit both sellers and buyers. The development community is not as clear about the answers to the questions related to how much organization work has to be done up front and how formal these groups have to become to be effective. The Title II IG programs in Bolivia found that these types of IG programs are more likely to succeed if people see some concrete financial benefits in terms of increases in sales and incomes early on in the program. They have also found that people become more interested in organizing once they begin to see and better understand how becoming more organized can help them expand and sustain these benefits. This motivates them much more than any theoretical arguments about the benefits of producer and marketing associations.

Linking with other service providers along the value chain

In developing and helping to strengthen their priority value chains, Awardees should actively look for other organizations that could help provide services to their clients. This could include other NGOs, government units and private sector firms, including input suppliers, processors and buyers. These organizations might already have some or all of the knowledge and expertise that is needed, or might need some additional strengthening. There are many micro finance organizations in Bangladesh, for example, that Awardees might be able to partner with to help their clients get access to credit. Larger buyers and processors can often be sources of what are referred to as embedded services to their suppliers, including small producers, which can include seeds, feed, market information, technical assistance and credit. Technical staff also exist in some of the local government offices with needed expertise, in animal health and nutrition, for example, which Awardees can help their clients to access. A major advantage of working more closely with many of these organizations is that they would be able to continue to provide these services once the Title II programs end.

Making more effective use of asset transfers

An argument can be made that many of Awardees' clients are so poor that a transfer of assets in the form of seeds, livestock and/or equipment is warranted as the only action that will help them get out of the poverty trap that they find themselves in. This is the argument that is being made by a number in the Bangladesh donor community. The position that is taken in this FSCF is that there is a stronger rationale for asset transfers in the aftermath of a natural disaster, as part of a program to replace assets that were lost and/or damaged, for example. This FSCF does recognize that there will be cases in Bangladesh in which extremely poor households could be caught in poverty trap, which they will find difficult to emerge from in the absence of an asset transfer. However, the Title II multiyear programs are primarily development programs, and Awardees should be shifting to a stronger IG and business development orientation. Asset transfers should be limited to cases where the beneficiaries are linked into one of the Awardees' value chain programs. That is, the assistance that is provided to these beneficiaries should continue to include training related to the asset and how best to take care of it,

if it is a chicken or a cow, for example. However, in the future, this assistance should also be designed to help beneficiaries use this asset to earn income and include specific assistance in linking to markets and making sales.

Using a business development lens

The IG component should be viewed as a business development program, whether the focus is on the poor households as a micro business enterprise or a small or medium business. This means that the Awardees need to develop a basic understanding of the likely costs and returns that can be expected from the activities that they are promoting to their clients. And, they need to be thinking about how to help their clients over time develop a better understanding of their own household economics. If their programs involve working with small and medium business enterprises and/or the development and strengthening of producers and marketing associations, Awardees should also provide assistance with the development of business plans and help in understanding the importance of becoming and remaining profitable and competitive. Awardees will need to have some basic economic and business management skills on their staff, but could access the additional expertise needed for some of the more specific analytical work and to provide technical assistance to their clients through partnering with local universities, and business schools..

Taking gender issues into account in the design and implementation of IG programs

In identifying and developing income earning opportunities for the poor and extremely poor households, Awardees will need to consider how to insure that poor rural women are able to participate in these programs. Involving women in income generation programs also helps to empower women and more of the income that they earn is likely to be spent on improving the family diet, for example. However, these programs should not be viewed as just women's programs or even primarily women's programs. The vast majority of adult women in Bangladesh are married, and this relationship brings them benefits as well as places constraints on their behavior. Programs that help increase the incomes of male members of a poor household should also bring benefits to other members of the household, including the women and children. This means that programs that help create more jobs and other income earning opportunities for men in rural areas, for example, should also be considered for inclusion in a Title II IG program. These programs could also help increase the incomes of poor and extremely poor families and improve their quality of life, including by eliminating the necessity of having so many male members migrating elsewhere for work.

In fact, increasingly there is evidence to suggest that a strong emphasis on women can carry adverse consequences for women and their families. Women in Bangladesh are pressured by their families to participate in IG activities because of the widespread knowledge that women are favored in IG programs. The more critical aspect of gender considerations in designing and implementing IG programs in this context is a sound understanding of the local context and the gender relations dynamics to inform and transform the enabling environment at the community level, so that men and women gain equitable access to IG activities.

5.2.2.2 Reducing Chronic Malnutrition among Children under Five

With 43 percent of pre-school children in Bangladesh stunted, reducing chronic malnutrition among children under age five must be the overarching health and nutrition objective for the Bangladesh Food Security Country Framework. To achieve this objective, activities should focus primarily on children from the fetal stage through age two and pregnant and lactating women. The strategy itself should be community-based with activities designed to (1) prevent malnutrition among children under two (2) improve IYCF practices; (3) reduce childhood illnesses among children under two; (4) improve maternal nutrition; (5) improve nutrition status and nutrition awareness among single and newly married adolescent girls and their families; (6) improve hygiene practices and access to safe drinking water and sanitation facilities. To be effective, these programs will also have to employ the two priority strategies of adopting effective behavior change communication approaches and addressing gender issues as they pertain to maternal and child malnutrition. To be effective, these programs will also have to adopt effective behavior change communication approaches and address gender issues as they pertain to maternal and child malnutrition. These programs should also include activities that will help increase the demand for and availability of quality ANC, FP and care for diarrhea, ARI, malaria, acute malnutrition among children under five, immunization services and water and sanitation services. To be able to implement this type of program successfully, Awardees will need to have qualified staff with expertise in maternal and child nutrition. Where possible, these programs should also be linked with maternal and child health and nutrition services such as GOB services at the union- and upazila-level, services funded by USAID and other donors and/or implemented by other actors.

Preventing malnutrition among children under two

It is strongly recommended that Awardees implement an approach to prevent malnutrition among children under age two (the Prevention of Malnutrition Under Two Approach – PM2A). This is a population-based approach that has been tested in a Title II setting as a randomized effectiveness trial in Haiti and it yielded significant results by reducing the prevalence of malnutrition. This approach differs from many food security interventions, including those implemented in Bangladesh. Most programs target malnourished children once they have become malnourished to help them recuperate from malnutrition. Thus they target children *after* they have become malnourished (recuperative model). In the prevention approach (PM2A), all children under two and pregnant and lactating mothers are eligible to participate in the program and all receive food supplements to prevent malnutrition from occurring. This latter approach targets children *before* malnutrition sets in (preventive model). Mothers and children are targeted in a specific area regardless of their nutritional or economic status. In the Haiti trial, the prevalence of malnutrition was significantly lower in the preventive group compared to the recuperative group.

This approach integrates the five priority activities and the two priority strategies for MCHN programming in Bangladesh as is indicated in Table 15 and the subsequent paragraph on the following page.

In PM2A pregnant women are targeted to help protect the nutrition of the mother during gestation, promote the optimal growth of the child in the womb and ensure the child achieves an adequate birth weight. Targeting lactating women aims at protecting the mother from nutritional depletion and at ensuring adequate breast milk production, both in terms of quantity and quality. All children aged 6-59 months are screened for SAM and referred for treatment where available. Children aged 6-23 months are targeted to prevent growth retardation during a critical period of both rapid growth and high risk of poor physical and mental development, infectious diseases and mortality. Children aged 6-23 months; are also provided with basic health services such as immunizations, deworming and micronutrient supplementation.

TABLE 16. PRIORITY OBJECTIVES FOR THE TITLE II MCH/N PROGRAM IN BANGLADESH AND HOW CORE COMPONENTS OF “PM2A CONTRIBUTE TO THESE OBJECTIVES

PRIORITY ACTIVITIES FOR MCHN PROGRAMS IN BANGLADESH	CORE COMPONENTS OF PM2A					
	Child health/nutrition services	BCC	Screening and Referral of SAM	Food Rations	ANC and Post-natal care	Home visits
1. Improve IYCF practices for children for under two years	X	X		X		X
2. Reduce childhood illnesses among children under two years	X	X	X	X	X	X
3. Improve maternal nutrition		X		X	X	X
4. Improve nutritional status and nutrition awareness among single and newly married adolescent girls		X				X
5. Improving hygiene practices and access to safe drinking water and sanitation facilities.		X				X

The core components of a PM2A program include: (1) general health and nutrition (H/N) services for children aged 0-59 months, according to the MOH protocol, which usually includes vitamin A supplementation, deworming, management of diarrheal diseases, malaria prevention strategies (if applicable), immunization, prevention and treatment of iron deficiency, and growth monitoring and promotion; (2) a strong behavior change and communication (BCC) strategy focusing on improved preventive practices in the feeding, care, hygiene and seeking of health services for infants and young children up to 24 months old and for pregnant women and lactating mothers; (3) referral of severe acute malnutrition (SAM) in children under five years for treatment (where available) through active screening; (4) regular distribution of a conditional food ration (supplementary ration) to pregnant and lactating women, and children under two, and a family ration to beneficiary households, based on program participation; (5) ante- and postnatal care, with ANC beginning as early as possible after conception, assisted delivery at birth and postnatal controls as per MOH protocol; (6) home visits to pregnant women and mothers of newborns, severely malnourished children and/or

children with faltered growth. Addressing gender issues of relevance to maternal and child malnutrition is essential to the effective design, implementation and targeting of PM2A services. Each service may be offered in combination with others, or at distinct venues. Technical reference materials for the design of programs using PM2A are forthcoming. A brief summary description of PM2A is provided in **Annex 5**.

PM2A may cost more per beneficiary than other components of the Title II program in Bangladesh. The increased cost per beneficiary will come not only from the amount of food, but also from increased need for transportation, storage and inventory control. This may have implications on the numbers and locations of beneficiaries targeted and on the total MYAP budget. However, PM2A targeting should be at the population level and include all communities and eligible beneficiaries in the proposed project area. The family ration for all beneficiaries must address the estimated food gap in the project area and the individual ration for pregnant and lactating women and children six to 23 months of age must be of sufficient size to address a substantial portion of their nutritional needs. The rationale for the family or household ration, in addition to the individual rations for pregnant and lactating mothers and children under two, is to reduce sharing of the individual ration with other household members and ensure an adequate amount of food is available to the mother and/or child.

Title II Awardees implementing PM2A should conduct formative research to inform nutrition messaging to ensure good adoption of key nutrition behaviors. Title II Awardees should also conduct operations research as needed to assess program implementation, identify problems in program delivery and use of the program by beneficiaries, identify solutions to problems and implement them. Title II Awardees should also address ways to ensure that the provision of rations for PM2A does not inhibit participation in other program activities that do not provide rations, and avoid creating dependency upon receiving rations. It will be important for the Title II program to build strong linkages across strategic objectives and program components to improve participants' food and livelihood security and facilitate the eventual transition of households and communities as the program prepares for exit, to maintain food security and nutrition outcomes.

The following program priorities outlined below form an integral part of PM2A: improving infant and young child feeding practices for children under two years of age; preventing and treating childhood illness; improving detection and referral of children under five years of age with SAM; improving maternal nutrition and health; improving nutritional status and nutrition awareness among single and newly married adolescent girls and their families; improving hygiene practices and improving adoption of key practices through effective use of BCC interventions.

Improving infant and young child feeding practices (IYCF) for children for under two

To succeed in reducing malnutrition in young children in Bangladesh, programs must address IYCF practices, including promotion of exclusive breastfeeding through 5 months and optimal complementary feeding practices from 6 months to two years of age. WHO recommends exclusive breastfeeding for children 0-5 months, and appropriate feeding for children 6-23 months including: continued breastfeeding, feeding

solid/semi-solid food a minimum number of times per day, feeding minimum number of food groups per day, continued feeding during and after illness, feeding appropriate quantity of food, providing food with appropriate consistency, and feeding nutrient-dense foods.⁷¹

Improving IYCF practices will require the Title II Awardees to conduct formative research to design a comprehensive behavior change strategy that can be tailored to each community and targeted to caregivers and decision-makers at all appropriate contact points. Ideally, this should be combined with a gender analysis⁷² in this early research phase to ensure a comprehensive understanding of the current feeding practices. Formative research to understand child feeding practices should explore who makes the decisions regarding breastfeeding and complementary feeding and who influences these decisions, the variety, volume and consistency of food given to children, at what ages different foods are introduced, how often and at what times of day children are fed, and how children are fed. Importantly, Awardees will need to understand women's roles and responsibilities within households and how competing priorities affect women's time and ability to follow through on optimal feeding practices. This will be especially important to understand with younger adolescent mothers.

It will also be important for Awardees to ensure that the core BCC messages that are identified be communicated to mothers, husbands, and mothers-in-law such that women derive support for child care, feeding and nutrition from this strategy, and husbands and mothers-in-law learn to support mothers by relieving some of her burdens and share responsibility for children's nutritional status. Awardees will need to identify priority practices, understand current behaviors, determine what behaviors caregivers and decision-makers are willing and able to change, identify current good practices and barriers to adopting optimal behaviors. They will need to clarify how they will support existing good behaviors and promote new behaviors. Awardees should take advantage of current efforts in Bangladesh to improve IYCF (such as those of the NNP, the International Center for Diarrheal Disease Research of Bangladesh (ICDDR), BRAC, current USAID funded child survival projects, other NGOs, the Alive and Thrive project and efforts to promote essential nutrition actions) to see how IYCF strategies, BCC approaches and materials and other best practices and lessons learned from these efforts can be exploited in their program.

Awardees should identify practical and innovative ways to improve feeding practices in harmony with GOB health and nutrition policies. Given that high rates of child and maternal malnutrition persist across all wealth quintiles in Bangladesh, efforts to improve IYCF should target all pregnant and lactating women and all children under two in the program area, not just those from relatively poor households or those identified as malnourished. Potential Title II activities include person-to-person BCC interventions targeting pregnant women and mothers of children under two, their husbands and

⁷¹ WHO and PAHO 2004.

⁷² **Gender analysis** is a tool that can be used to assess the differential impact a program has on women, men, boys and girls; and is useful for understanding social processes and for responding with informed and equitable options. **Gender analysis challenges the assumption that everyone is affected by program interventions in the same way regardless of gender.** Gender analysis aims to achieve **equity** rather than equality.

mothers-in-law such as regular home visits by community health workers or volunteers, courtyard talks, interactive cooking demonstrations, monthly growth monitoring and promotion (with high quality counseling) and Care Groups (**Annex 3** contains further discussion of community-based nutrition programs). Given that a proportion of beneficiaries will be adolescent mothers, during the formative research it will be important to identify how to best target them, their husbands and families. This could include peer-to-peer activities or group activities for mothers within certain age ranges. With broader gender constraints affecting mothers' capabilities, it will be important to actively involve husbands and men more generally, to deepen their understanding of and responsibility for preventing malnutrition. MOH facilities at the upazila and union levels are responsible for conducting satellite clinics to provide basic primary care services in surrounding communities. Where feasible, Awardees should link with MOH facilities to ensure that regular growth monitoring and promotion sessions are conducted in the community by satellite clinics. BCC activities should be intensive and interactive to ensure that the individuals targeted are exposed to the same key messages on several different occasions and in ways that engage them actively. Other activities may focus on influencing community norms on IYCF by presenting local nutrition data to and discussing them with key influencers such as Imams or other religious leaders, local government officials and teachers. Awardees may also engage the Social Marketing Company, the Blue Star network of local pharmacies and local shopkeepers to promote the availability of appropriate fortified complementary foods and micronutrient supplements to poor households and to help ensure that breast milk substitutes are not marketed for feeding children less than six months in the project area.

Preventing and treating childhood illness

The Title II programs in Bangladesh should strengthen community-based maternal and child health programming to increase demand for and access to quality treatment for common child illnesses, especially pneumonia, diarrhea and malnutrition and to promote household practices to prevent, properly manage and seek appropriate care for these diseases. Title II programs should link with local MOH or NGO facilities (such as the Smiling Sun Franchise Program) to promote greater access to basic services such as immunization and vitamin A supplementation treatment services for diarrhea, acute respiratory infection (ARI) and severe acute malnutrition (SAM) are geographically and financially accessible to all households in the project area.

Awardees should conduct BCC activities targeting mothers, husbands and mothers-in-law to ensure that they can recognize the danger signs of child illnesses and seek timely care for diarrhea and ARI. They should also link up with any MOH efforts to implement community-integrated management of childhood illnesses (C-IMCI) in their project areas as well as explore the possibility of replicating existing NGO efforts to introduce community case management of diarrhea or ARI (such as those by Save the Children).

Improving detection and referral of children under five years of age with Severe Acute Malnutrition (SAM)

The Title II MYAPs are best placed to address the high levels of stunting through preventive programming. Therefore, it will be essential that any community-based program that is implemented include a sound referral system to ensure that cases of SAM receive adequate treatment. About 3 percent of children under five in Bangladesh

suffer from SAM. Children with SAM are at high risk of death and must be treated promptly and according to specific clinical protocols. MYAPs should link with facilities and programs in or near their project area that are addressing SAM. This may pose a challenge since such facilities and programs are few in Bangladesh. Currently the only government facilities with the capacity to manage SAM are division- level tertiary hospitals. In 2006 Save the Children USA piloted the introduction of Community-based Management of Acute Malnutrition (CMAM) in 20 sites, across 11 upazilas of Barisal, Bhola and Patuakhali districts. Plan International-Bangladesh has provided training in the management of SAM to rural health care providers in Jaldhaka Upazila with the help of ICDDR, B. Among the NNP's community level activities is the feeding of severely underweight children under the two identified through GMP; however, severely underweight is not the same as SAM. Given the small number of facilities capable of managing SAM, Awardees should contact the MOH and identify any NGOs providing rehabilitation services for SAM to determine how they will provide referral to such services.

Improving maternal nutrition and health

Because stunting begins as early as the fetal stage, ensuring good health and nutritional status of the mother, especially before and during pregnancy, is vital to reducing malnutrition among young children. Promoting women's nutrition, including anemia prevention and the promotion of adequate birth spacing, including delaying the first birth for married adolescent girls, should be a priority in food security programming in Bangladesh.

Priority interventions to combat maternal malnutrition should include: food supplementation to pregnant and lactating women; behavior change communication targeting mothers, husbands and mothers-in-law on the need for increased food intake, dietary diversity and rest during pregnancy. To prevent anemia in pregnant women, iron/folic acid (IFA) supplementation and deworming are recommended actions. Title II programs should also ensure that all women of reproductive age have access to high quality family planning counseling and services to ensure optimal birth intervals. Awardees should promote the use, availability and accessibility of quality ANC services as well as reliable and timely access to IFA and Vitamin A supplementation.

In order to better design and adjust their efforts, Awardees should conduct initial and ongoing formative research to explore women's dietary practices, intra-household food distribution, food access, workload, and perceptions of ANC and health facilities. This should also include an analysis of barriers to and opportunities for promoting women's nutrition, anemia prevention and optimal birth spacing.

Improving nutritional status and nutrition awareness among single and newly married adolescent girls and their families

The Title II programs should work to mitigate the health and nutrition risks of adolescent marriage and childbearing at the same time that they contribute to efforts to reduce these practices in their project area. Formative research will be needed to identify relevant attitudes, practices and community norms as well as barriers and enablers to the adoption of good practices in the project area. Depending on the results of the formative research, activities may include: nutrition education for adolescent girls

and their parents; provision of IFA supplements and periodic deworming for adolescent girls to reduce their risk of anemia; nutrition counseling for newlywed couples; ensuring referral to high quality FP counseling and FP methods for newlywed couples and encouraging their use; and educating mothers-in-law about the importance of delayed pregnancy and good nutrition for their daughters-in-law. Awardees should also seek to partner with related efforts by other groups in the project area such as rights-based efforts by BRAC, Plan Bangladesh and others to jointly address community norms on child marriage by establishing “child marriage free” communities and advocating for the enforcement of the legal minimum marriage age of 18 and adolescent pregnancy by conducting education and advocacy activities with key influencers such as community leaders, imams, other religious leaders, teachers, and local government officials. Awardees should also seek ways to partner with efforts to promote school retention and livelihood opportunities for adolescent girls as well as programs that provide reproductive health services and education to youth.

Improving hygiene practices and access to safe drinking water and sanitation facilities

Improving household hygiene practices and promoting access to safe drinking water and sanitation facilities should be a priority for future food security programs in Bangladesh. Awardees should conduct baseline and formative research at the community level to identify knowledge and beliefs about the causes of diarrhea, current high-risk behaviors, any barriers or enabling factors to improving these behaviors.

The promotion of improved hygiene practices should focus on: proper hand washing (with soap) at critical times; sanitary disposal of human feces, especially the feces of young children; treatment of water in the household; protection of drinking water from contamination in the household; protection of food from fecal contamination; and protection from arsenic contamination. . Awardees should explore possible links with social marketing efforts to improve access to water purifying products for home use.

Awardees should prioritize simple improvements to drinking water and sanitation facilities. These may include testing existing tube wells for arsenic and marking them accordingly, capping springs, protecting wells, repairing pumps; installing basic, low-cost latrines, repairing or relocating existing latrines to make them functional and/or child friendly and managing household solid waste and animal waste. Other simple improvements may include promoting access to soap for hand washing, potties for small children for safe excreta disposal and chlorine solution or filters for home disinfection of drinking water (point-of-use water purification). . Awardees should seek opportunities to link with other water and sanitation programs and services in their project areas such as those conducted by BRAC, UNICEF and by government agencies at the district and upazila levels. Useful resources for NGOs on program design for water and sanitation include the USAID Technical Resource Materials, *Control of Diarrheal Disease*, and *The Hygiene Improvement Framework: A comprehensive approach for preventing childhood diarrhea*.⁷³

⁷³ The USAID Technical Resource Materials, *Control of Diarrheal Disease*, is available at: <http://www.childsurvival.com/documents/trms/tech.cfm>. The Hygiene Improvement Framework: A comprehensive approach for preventing childhood diarrhea, is available at: http://www.ehproject.org/PDF/Joint_Publications/JIP008-HIF.pdf

Employing effective behavior change and communication (BCC) interventions

The adoption and reinforcement of key health-related behaviors at the level of the mother/caretaker, the household and the community are central to the reduction of chronic malnutrition among children under five and maternal malnutrition. While access to the necessary variety and amount of food, key maternal and child health services and clean water and sanitation are essential, without ensuring sound care-seeking, IYCF practices and dietary practices, their impact on malnutrition will be limited. The persistence of high levels of stunting among children and maternal malnutrition in the households of all wealth quintiles in Bangladesh demonstrates that access to food at the household level does not necessarily translate into improved nutrition.

Behavior change through the use of interventions informed by best practices and formative research is essential to improving maternal and child nutrition. Choosing and carrying out an appropriate set of behavior change interventions can help to improve care-giving and care-seeking practices at the household level, contribute to a supportive environment at community, institutional and policy levels for improved household health practices and improve the treatment offered to community members by health service providers.⁷⁴

The Title II Awardees will need to pay special attention to the targeting of key messages. In Bangladesh, often a mother is not the primary decision-maker on issues of her own nutrition as well as that of her child. The husband or the mother-in-law may be the one who decides what and how often the pregnant mother should eat, how much rest she may take, how and when to breastfeed the child, and when and how complementary feeding will be done. In such a context, targeting the mother for BCC activities is necessary but not sufficient to improve practices related to maternal and child nutrition if the mother-in-law and the husband are not also targeted.

While awareness-raising activities may be helpful, awardees are strongly encouraged to use behavior change approaches that are both intensive and interactive. Intensive and interactive interventions ensure that the individuals targeted are exposed to the same key messages on several different occasions and in ways that engage them actively. A study conducted in rural Bangladesh among children suffering from moderate acute malnutrition found that the number of children rehabilitated was twice as high for children whose mothers received intensive nutrition education from a specially trained health worker twice a week along with cooking demonstrations than for children whose mothers received nutrition education twice a month from a community volunteer during the same time period.⁷⁵

⁷⁴ Two good resources for the design and implementation of BCC strategies for Awardees and NGOs are the *Designing for Behavior Change* curriculum developed by the CORE Group and the *2005 Behavior Change Interventions: Technical Reference Materials*, developed by the Child Survival Technical Support Plus Project. Both are available at http://www.coregroup.org/working_groups/behavior.cfm.

⁷⁵ S.K. Roy et al. 2005.

Addressing issues of gender in the design, implementation and targeting of nutrition interventions

Inasmuch as gender inequity has a direct bearing on health outcomes for mothers and their children in Bangladesh, MCHN interventions should seek to transform certain gendered behaviors and practices that have a direct and adverse bearing on maternal and child nutrition. For example, in addition to increasing men's knowledge of exclusive breastfeeding, men must also see a role for themselves in supporting their young wives to exclusively breastfeed. While this may be a subtle shift in how men and women relate to each other, it is nonetheless important to promote exclusive breastfeeding and gender equity, for example. Title II Awardees should seek to integrate and promote gender equity as a means to improve maternal and child nutrition⁷⁶. While Awardees are encouraged to partner with efforts to improve the situation of girls and women on a broad scale, efforts under the Title II program should focus on gender-related activities that are most likely to result in improved MCHN outcomes among children under five and their mothers in the project area during the life of the project. Formative research in the project area on the role of gender inequity in health practices and outcomes will be critical in designing interventions. While gender inequity may have different manifestations in different locations, some of the major issues that the Title II programs should address include: addressing the needs of adolescent girls (unmarried, married and mothers); encouraging shared responsibility for mothers and children's well-being at the household and community levels; encouraging shared decision making around issues related to MCHN; promoting positive roles for men and mothers-in-law with regard to MCHN; advocating against child marriage; and delaying adolescent pregnancy, given the long-term adverse consequences on maternal and child nutrition. In order to address the issues above, behaviors will need to change at various levels, including individual, household, community, and service provider levels. While activities will need to target girls and women, they should not be the sole targets of program interventions.

5.2.2.3 Reducing Vulnerability of Poor Communities and Households to Natural Disasters

In a disaster prone environment like Bangladesh, Title II programs cannot just focus on increasing incomes and access to food; they also need to focus simultaneously on increasing the capacity of households and communities to withstand shocks. Risk reduction (reducing the likelihood that a shock will occur) and risk mitigation (minimizing the impacts of a shock after it occurs) are both important to help increase the resilience (reduce the vulnerability) of poor communities and households to natural disasters. Risk reduction often involves hardware activities, such as infrastructure to prevent flooding, erosion or loss of life, as well as software such as shared coping strategies and household and community contingency plans for safeguarding assets and reducing losses. Risk mitigation relies on resources built before disasters but accessible after shocks, such as savings, social connections, and ability to access government services to help in recovery.

⁷⁶ EQUATE and USAID, 2007.

Natural disasters are an ever present risk in Bangladesh, and the more serious ones have an adverse effect on everyone, the poor and extremely poor in particular. Areas targeted under this program will be affected by many quick on-set natural disasters, including floods, cyclones, storm surges, erosion, landslides, tornados, high winds, cold waves, earthquakes and droughts. These cause loss of life; destruction of productive assets; damage or destroy crops, stored food and homes; can cause temporary displacement of people and distress sales of livestock; and can drive the poor into taking on more debt and falling deeper into poverty. Even seasonal rains can cause months of disruption, leave poor rural households unable to pursue their livelihoods, hamper mobility, cause men to migrate elsewhere looking for work, leave women at home isolated in rural communities, and limit peoples' access to markets as well as to local government services.

Many of the disasters that affect the Title II target populations in Bangladesh cannot be prevented or controlled. What can be done, however, is to help communities develop and implement plans and structures that will help mitigate the impact of a disaster and, since so many are fast-onset, to make sure that people are given as much adequate warning as is possible when a disaster is expected to occur.

Improving community organization and planning

According to the GOB Comprehensive Disaster Management Programme (CDMP), disaster preparedness and mitigation capacities are supposed to exist at the community level, but this is not a reality in many rural areas. Helping communities plan for and do a better job of responding to rapid-onset natural disasters are activities that are consistent with the food security objectives of this Title II program. They are also the type of activities that the Title II cooperating sponsors, with their history and expertise working at the grassroots levels, excel at. Awardees have a comparative advantage in working with communities to make sure that they have community-based organization responsible for disaster planning and management and helping to organize and strengthen these organizations. Communities will need help with some of the planning tasks that have proven useful as part of a good disaster preparedness program, including resource mapping, risk identification and analysis and contingency planning. Special attention will also need to be given to women in the analysis of risks and vulnerabilities, since women are differentially and often more adversely affected by natural disasters, and in the development and execution of the plans, including by involving women in both the planning and implementation processes.⁷⁷

To be effective Awardees may have to work at a number of different levels beginning with the community or village but at some point involving the wards and unions to insure that the community plans are consistent with and integrated into the plans at the higher levels of government. This may also necessitate helping the unions and wards in their program areas to insure that they have up-to-date risk and vulnerability maps and disaster preparedness plans. A range of actors will also need to be involved in the development of these plans, the private sector as well as community groups and special

⁷⁷ GOB January 2009.

efforts will need to be taken to ensure that key players at all levels are linked together and that they understand the various maps and plans as well as their own respective roles and responsibilities.

Increasing/protecting community and household assets

As in the past, the Title II programs should continue to devote resources to the repair, rehabilitation and construction of infrastructure that can help save lives and protect and add to poor communities' productive infrastructure. The fact that Title II resources can be used to support these types of activities makes them somewhat unique among USAID development programs. Under the new program, however, Awardees are encouraged to make more use of food in their infrastructure programs paying workers with food (food for work) or a combination of food and cash.

These programs can have a positive impact in the short-run on the food security of needy households by providing them with what is basically an income supplement in exchange for their work. If the projects that are selected help protect lives and protect and enhance the productive assets of the community, they can also make an important contribution to improved food security in the community over the longer term. Since these are development programs, greater emphasis should be put on the protection and creation of assets than the generation of temporary employment.

Decisions about specific infrastructure should be made in consultation with the communities and based on the needs and opportunities identified by the communities, including in their risk reduction and disaster preparedness plans. A variety of public works have proven to be effective in saving lives and protecting assets, including repairing and constructing cyclone and flood shelters, adapting schools and other community infrastructure to shelter uses, repairing and improving pathways to shelters and feeder roads linking communities to markets and government services, building dikes, protecting river banks and mound slopes, and raising homesteads, latrines and tube wells above average flood levels. Although priority should be given to the protection of community assets, a limited amount of resources might also be usefully used to help some of the poorest households protect their home and key productive assets, such as raising their homesteads.

When more emphasis is put on protecting and creating community assets than on the generation of temporary employment, issues related to the quality and sustainability of the infrastructure become more important. To insure quality and sustainability of the infrastructure may require the Title II Awardees to make adjustment in their staffing patterns, adding more engineers, for example, and improving supervision. Enhancing sustainability also requires that appropriate environmental mitigation measures are incorporated into the design and implementation of the infrastructure and that sufficient time and attention is paid to building local capacity and commitment to maintain whatever is built.

BOX 3. SUGGESTED PRINCIPLES FOR IMPLEMENTING TITLE II-SUPPORTED ASSET PROTECTION/CREATION PROGRAMS IN BANGLADESH

- Give priority to the use of food as a payment for work performed (food for work) rather than cash.
- Give priority to infrastructure that protects lives and existing assets.
- When creating new assets, give priority to (1) productive assets rather than social assets and (2) community assets (public goods) rather than private assets.
- Involve communities in the identification, design and implementation of the infrastructure, recognizing that communities are more likely to contribute to and maintain assets they recognize as having an economic value to them.
- Enhance the likelihood of sustainability by (1) insuring quality, (2) building in appropriate environmental mitigation measures and (3) strengthening local commitment and capacity to operate and maintain any infrastructure that is constructed.
- Avoid selecting activities or implementing activities in ways that are likely to distort participants' economic incentives in perverse ways and/or have adverse effects on local labor and product markets.

Improving early warning and disaster response systems

Awardees also have an important role to play in working with these community-based organizations to help them better organize and improve their abilities to respond to natural disasters. The GOB is expanding its disaster management program, and Awardees can support and complement these activities, including by providing more training for community volunteers and other key actors at the community level and helping increase public awareness. Awardees can also help in insuring that representatives from different organizations and different levels are brought together so that key players can acquire a common understanding of the actions and obligations of each party with respect to early warning and disaster response. Training also needs to include raising people's awareness of their own vulnerability and the steps they can take to protect their lives and assets from natural disasters and to reduce the relief mentality that is found in some communities. Women will need to be an integral part of the development and implementation of these systems, and their special interests and needs need to be taken into account in the development and implementation of the training courses.⁷⁸

Effective disaster response also depends on getting early and accurate warnings of impending disasters. This will require making sure that communities are linked into the existing early warning systems, including the National Disaster Management Information Centre that the GOB is in the process of developing. In agricultural areas, getting early warning information to farmers may also require helping to improve the coordination between the weather forecasting services, the existing warning system and the Ministry of Agriculture and the extension services. Awardees should also consider working with

⁷⁸ The Department of Relief and Rehabilitation in the MFDM has produced "A Facilitators' Guidebook for Practicing Gender and Social Exclusion Analysis" (January 2009), which Awardees can use in this process.

national level organizations to develop and/or update disaster early warning systems, working with the GOB Flood Forecasting Warning Centre, for example. They might also consider providing assistance to help improve the content and delivery of specific information as appropriate and/or helping to rehabilitate and/or replace key early warning equipment.

All of the Title II Awardees will be expected to participate in the GOB's CDMP, follow the national framework for disaster management led by the MFDM and coordinate with and complement the GOB's system.

Developing/maintaining the disaster response capacity of Awardees and partners

Since disasters will continue to be an on-going problem, Awardees will need to develop and maintain their ability to respond to a variety of rapid-onset natural disasters throughout the life of their Title II programs. This will necessitate frequent in-service training for staff and the staff of the partner organizations that they are working with. Staff need to become familiar with their own organization's preparedness and response plans as well as with the local plans, and they will need to understand their own roles and responsibilities in the event of a disaster. As has proved effective under the current program, in cyclone and flood prone areas in particular, Awardees will also be expected to maintain an emergency stockpile of food and other emergency supplies. Awardees may also want to consider establishing rapid response teams to have available in the event of a larger-scale disaster, and/or small emergency fund they could use to respond rapidly to the many small-scale rapid-onset disasters that occur on an annual basis.

5.2.3 Mission Management Priorities

The Title II program in Bangladesh is likely to expand in the coming years with additional resources being made available to use as rations in a program to prevent malnutrition among children less than two years of age, as described in the previous section. Other mission priorities include improving the synergies between and better integrating the Title II program and the other food security related activities in its portfolio, including activities in its IG, agricultural, natural resources management and health and nutrition portfolios. A new agricultural-based food security program is in the process of being designed, which could and should provide more opportunities for more collaboration and integration between the Mission funded and the Title II programs. There are also opportunities to forge closer links with the Mission's DA funded health program. A GAO audit of the Title II program and its effectiveness in addressing global food insecurity, which includes the Bangladesh programs as one of its case studies, may also affect future Mission priorities.

5.2.4 Key Design Considerations

5.2.4.1 Targeting the Program Geographically

The Title II program should be targeted to the areas of the country that are the most vulnerable to food insecurity and where interventions can be expected to have a significant impact on a relatively large number of people. That is, areas should be selected based not just on the severity of the problem (e.g. the percentage of the population that is poor) but also on the total numbers of people that are affected.

The USAID guidance that was provided prior to the development of the current Title II programs gave priority to three areas of the country: the coastal belt, the riverine areas in close proximity to the Padma, Brahmaputra, Meghna and Tista rivers, and the haor and beel areas. These areas were identified in the WFP's 2005 Food Security Atlas as being highly vulnerable to food insecurity and, as noted by USAID in its previous Title II guidance, are particularly vulnerable to cyclones and floods.

The approach that is being proposed in this FSCF is to give higher priority in the geographical targeting of the program to the chronic dimensions of food insecurity. This is done by using the two indicators of food insecurity that are the closest proxies available for lack of access to food and poor food utilization (i.e. the percent of the population in a given area that is poor and the percent of children under five that is chronically malnourished) to identify the priority areas. Information on these two indicators is available at the district and upazila level from the WFP's 2009 food security mapping exercise.

These data were used to identify 18 districts to be targeted by Awardees. These districts (in which the 45 upazilas with highest rates of both poverty and chronic malnutrition are located) are as follows: Jamalpur and Mymensingh (in Dhaka division); Barisal, Bhola, Patuakhali, and Barguna (in Barisal division); Khulna, Narail, and Bagerhat (in Khulna division); Kurigram, Nilphamari, Bogra, Dinajpur, Pabna, Rangpur, and Sirajganj (in Rajshahi division); and Cox' Bazaar (in Chittagong division). Please see the districts plotted on the map in **Figure 18**.

Two categories of upazilas were identified. The first set, which is identified as the "Upazilas at Highest Risk," are characterized by very high rates of extreme poverty (greater than 44 percent) and very high estimated prevalence of stunting⁷⁹ (see **Table 16**). The second set, which is identified as "Upazilas at High Risk," are characterized by high rates of poverty (greater than 49 percent) and high estimated prevalence of stunting (see **Table 17**). Both sets of upazilas have been plotted on the map below.

Twenty seven upazilas fall into the set of "Upazilas at Highest Risk." Ten are located in the Division of Dhaka (with eight in the District of Mymensingh), eight in the Division of Barisal and six in the Division of Rajshahi, with only two from the Division of Khulna and one from the Division of Chittagong. In terms of population numbers, the upazilas range from 114 thousand (in Chilmari upazila in the Division of Rajshahi) to almost 525 thousand (in one of the upazilas in the Division of Dhaka). Added together, they total more than 7 million people. Eighteen upazilas fall into the set of "High Risk Upazilas." Eight are located in the Division of Rajshahi and six are located in the Division of Barisal, two in Dhaka and one each in Chittagong and Khulna. Added together they total another 4 million people.

⁷⁹ For a detailed explanation of WFP's classification of stunting prevalence at the upazila level, please see Annex 4.

Title II Awardees should identify a program area within the 18 districts, in the 45 high-risk upazilas identified. Once a program area has been identified, Awardees can choose to include upazilas that are contiguous to the most high-risk upazilas identified in **Tables 16** and **17**. Title II Awardees should ideally plan to cover as much of the food insecure area as possible within high-risk upazilas in the district(s) they have identified, rather than small areas in a larger number of upazilas or districts. This recommendation should result in greater efficiency in use of resources and greater impact not only in the project area, but impact also reflected in district level data. If areas of the upazila or district are covered by other food security projects, this should be clarified, along with an explanation of how the Title II Awardee will complement the existing program and avoid duplication of efforts. Determination of food insecurity within areas of an upazila should be evidenced-based, using data collected through surveys and/or rapid assessments and indicators that are known to correlate with food insecurity and vulnerability. Within these upazilas, each Title II Awardee will need to make further decisions about which specific areas in which to work and justify its selection. At this point, vulnerability to natural disasters may be taken into account as one of the key decision criteria used. The specific decisions will be unique to the individual Title II Awardee, but should also be evidence-based.

FIGURE 18. MAP OF PRIORITY DISTRICTS AND UPAZILAS AT RISK

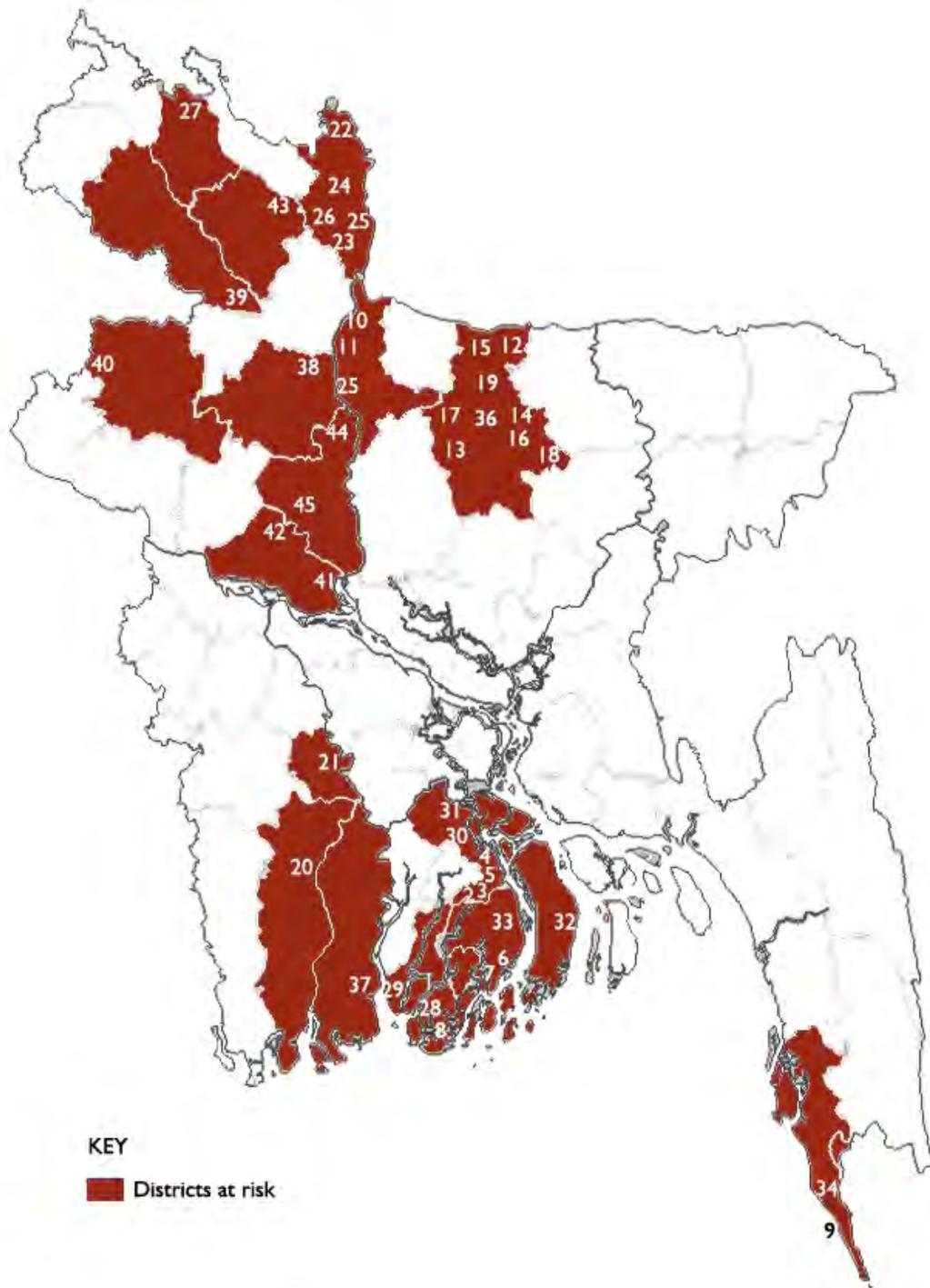


TABLE 17. UPAZILAS AT HIGHEST RISK

Very High Extreme Poverty (> 44 percent) AND Very High Estimated Stunting Prevalence

	DIVISION	DISTRICT	UPAZILA	POPULATION IN 2000
1	Barisal	Barguna	Barguna Sadar	237,613
2	Barisal	Barisal	Bakerganj	353,909
3	Barisal	Barisal	Barisal Sadar (kotwali)	463,032
4	Barisal	Barisal	Hizla	174,508
5	Barisal	Barisal	Mehendiganj	304,364
6	Barisal	Patuakhali	Dashmina	117,037
7	Barisal	Patuakhali	Galachipa	325,235
8	Barisal	Patuakhali	Kala Para	202,078
9	Chittagong	Cox's Bazar	Teknaf	200,607
10	Dhaka	Jamalpur	Dewanganj	229,307
11	Dhaka	Jamalpur	Islampur	289,337
12	Dhaka	Mymensingh	Dhobaura	172,152
13	Dhaka	Mymensingh	Fulbaria	396,019
14	Dhaka	Mymensingh	Gauripur	282,940
15	Dhaka	Mymensingh	Haluaghat	269,372
16	Dhaka	Mymensingh	Ishwarganj	338,080
17	Dhaka	Mymensingh	Muktagachha	366,397
18	Dhaka	Mymensingh	Nandail	370,850
19	Dhaka	Mymensingh	Phulpur	524,720
20	Khulna	Khulna	Batiaghata	140,574
21	Khulna	Narail	Lohagara	221,000
22	Rajshahi	Kurigram	Bhurungamari	197,070
23	Rajshahi	Kurigram	Chilmari	114,350
24	Rajshahi	Kurigram	Kurigram Sadar	259,157
25	Rajshahi	Kurigram	Raumari	165,815
26	Rajshahi	Kurigram	Ulipur	359,626
27	Rajshahi	Nilphamari	Dimla	223,975
	TOTAL			7,299,124

TABLE 18. UPAZILAS AT HIGH RISK

High Poverty (> 49 percent) AND High Estimated Stunting Prevalence

	DIVISION	DISTRICT	UPAZILA	POPULATION IN 2000
28	Barisal	Barguna	Amtali	259,757
29	Barisal	Barguna	Patharghata	162,025
30	Barisal	Barisal	Babuganj	146,740
31	Barisal	Barisal	Gaurnadi	180,219
32	Barisal	Bhola	Tazumuddin	120,189
33	Barisal	Patuakhali	Bauphal	304,959
34	Chittagong	Cox's Bazar	Ukhia	155,187
35	Dhaka	Jamalpur	Madarganj	233,049
36	Dhaka	Mymensingh	Mymensingh Sadar	674,452
37	Khulna	Bagerhat	Sarankhola	114,083
38	Rajshahi	Bogra	Sonatola	167,547
39	Rajshahi	Dinajpur	Ghoraghat	103,119
40	Rajshahi	Naogaon	Porsha	121,809
41	Rajshahi	Pabna	Bera	231,430
42	Rajshahi	Pabna	Bhangura	99,474
43	Rajshahi	Rangpur	Kaunia	214,317
44	Rajshahi	Sirajganj	Kazipur	266,950
45	Rajshahi	Sirajganj	Ullah Para	449,243
	TOTAL			4,004,549

5.2.4.2 Targeting Programs in the Community to Vulnerable Households and Individuals

To be effective, many of the activities that need to be done to reduce the vulnerability of communities to natural disasters will have to involve and take into account all members of the community, the non-poor as well as the poor, as well as women and others with special needs (see **Figure 19**). Activities that fall into this category include community organization and planning activities related to risk identification, the protection of community assets and disaster preparedness. Since women and children are more likely to be adversely affected by many disasters, their special needs will need to be assessed and acted on, as will the needs of other potentially more vulnerable groups such as the elderly and disabled and other socially excluded groups.

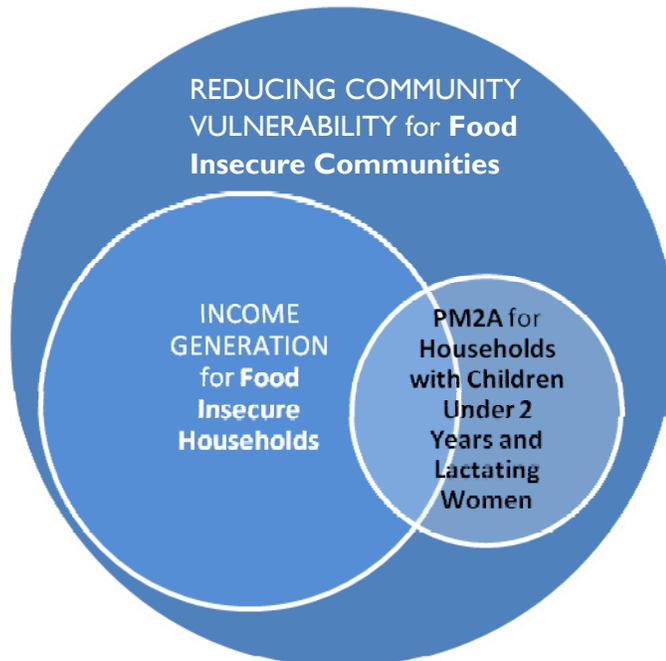
All households with children under two years of age and pregnant and lactating women also need to be given priority, because of the long term negative effects of chronic child malnutrition and the fact that over 40 percent of the children under five in Bangladesh are stunted. To prevent chronic malnutrition, all households with children under two living in targeted program areas should be targeted by the health and nutrition programs described in the previous section on program priorities and not just poor or extremely poor households or households with children who are already malnourished. In other words, the Title II programs in Bangladesh must also include households with children

under two who are not food insecure (areas A and B in the accompanying diagram).⁸⁰ (See previous section on “Preventing malnutrition among children under two” for the rationale for this approach.)

The IG programs should be designed to benefit poor and extremely poor households, who are by definition food insecure. This is most likely to mean targeting programs directly to these households. However, there could also be situations when working with medium-size farmers, for example, and or small and medium businesses, in collaboration with other programs that are targeted to these latter groups, although indirect, could represent a cost effective way to increase the jobs available to the poor and extremely poor. Awardees should also make an effort to ensure that women have the opportunity and are able to participate in these programs, including by making adaptations in their design and implementation. Women could be the main target of some activities in an IG program. However, they should not be the sole target or necessarily the primary target for the IG programs as a whole.

Programs that involve food for work and asset and/or cash transfers, on the other hand, need to be directly targeted to the poorer, more food insecure households and individuals. Food and cash for work should be self targeted to the poor and food insecure by setting the value of the ration below the prevailing wage rate in rural areas. Setting a low value on the ration is likely to attract more women and poorer women. Asset transfers to poor women can also be another way to enable more women to participate in the IG programs.

FIGURE 19. TARGETING AT THE COMMUNITY LEVEL



⁸⁰ Since the targeted areas are to be selected based on lack of access to food (poverty) and poor food utilization (chronic child malnutrition), a large proportion of the households living in these communities are expected to be poor and/or include malnourished children.

5.2.4.3 Integrating gender equity in program design and implementation

Key GOB strategies recognize that there are large disparities between men and women, with women being marginalized both socially and economically. The goal that is articulated in the GOB's 2009 PRSP, for example, is to “establish overall rights of women, achieve gender equity, empower women and include women in the mainstream of development activities.”⁸¹ Women in Bangladesh face problems in accessing productive resources and participating in development opportunities and decision making, which has adverse consequences for the country's economic growth and development. Socio-cultural factors, limited control over the means of production and limited participation in social and economic activities, some of which are described in more detail in previous sections, are among the main challenges to reducing these disparities. Although the current Title II programs have addressed some issues of gender equity, the principles of gender equity need to be integrated more explicitly and proactively into all food security programs. A better understanding of the gender constraints, how gender issues will affect the various dimensions of their programs and their ability to achieve their food security objectives, should inform the design and implementation of the Title II programs. Men's and women's needs and constraints will differ, and they will not always be affected in the same way by project interventions. Adding a gender lens to these programs means understanding and taking these differences into account in the design and implementation of the Title II programs. As such, integrating gender equity in programming is context-specific. Mainstreaming gender into a program does not mean that a program has to become exclusively or even primarily focused on women. It is about understanding the social context in the program area sufficiently to transform the enabling environment at the community level so that men and women can dialogue, participate and gain equitably from program efforts in food security and nutrition. Integrating gender equity in this way will facilitate and deepen program impact, and along the way will likely promote gender equity as well. It is up to each program to undertake some initial assessment of the social context and gender constraints, and then determine how they will integrate ways to address these constraints as an integral part of programming, choosing how much to address depending on feasibility, and with the explicit aim that this is an important means to improve program outcomes in nutrition and food security.

5.2.4.4 Assessing the environment for effective programming

To design and implement successful programs, Awardees will need to have a good understanding of the environment in which their programs will operate. This will require Awardees to invest in data gathering and analysis during the preparation of their projects, in the initial stages of project implementation, and in some cases, throughout the life of the project. MYAP Awardees will also need to undertake a gender analysis and gendered vulnerability assessment to understand the changing nature of the current socio-cultural context. In the disaster preparedness component, Awardees will need to undertake community-specific assessments of resources, risks and vulnerabilities.

Using business tools to inform the design and implementation of income generation interventions

In the IG component, assessing the environment means undertaking assessments of markets and production potentials, value chains and activity profitability. Assessments of market potentials and needs and estimates of the costs, and returns to participants from

⁸¹ GOB October 2008.

different activities being promoted under the Title II MYAP are essential as a basis for designing a successful IG component. They are also necessary throughout the life of the MYAP as one means for helping IG participants better understand the dynamics of the economic environment in which they are working and maintain their competitiveness

Applying formative research to develop an effective approach to behavior change for MCHN

Title II Awardees will need to conduct formative research to develop a comprehensive behavior change strategy that can be tailored to the communities where they will work and targeted to key individuals and decision-makers in order to achieve program outcomes and impact. Focused research will be needed to better understand barriers, constraints and facilitators to adoption of improved infant and young child feeding and care practices and improved nutrition and health practices for pregnant and lactating women, including adolescent girls. In tandem with focused research in these areas, it will be important for Title II Awardees to undertake a gender analysis and gendered vulnerability assessment to understand the current socio-cultural context in which they will operate. A sound understanding of the current gender relations between men and women, stressors constraining community members, family structures and hierarchy and whether and how traditional values and practices may be changing in favor of or against maternal and child health and nutrition will be important. These gender constraints can have significant influence on program design, implementation, and impact. Title II Awardees need to identify priority behaviors, understand current practices, determine which behaviors people are willing and able to change, determine constraints that may prevent adoption and decide how best to provide support to those adopting new behaviors.

5.2.4.5 Assembling the Necessary Technical Expertise

These are development programs so Awardees will also have to insure that they have the necessary basic technical expertise on their staff and that they are able to access additional, more specialized technical expertise that is also likely to be needed on a more intermittent basis through partnerships with other organizations, including other USAID project implementers, local universities, NGOs and the private sector. As indicated previously, the types of IG programs that are needed in Bangladesh will require considerable hands on expertise in marketing and business management and development in order to succeed. To be able to successfully implement the type of MCHN program that is being proposed, Awardees will also need to have qualified staff with expertise in maternal and child nutrition programming at the community level.

5.2.4.6 Finding the Right Balance between Food and Cash

To enhance program effectiveness, the Title II programs in Bangladesh will need to find the right balance between food and cash. The Title II program is the largest source of USG resources available to focus on food security problems and its main resource is food. FFP indicated in its current Strategic Plan, which was developed in 2005, that it expected the direct distribution of food to play an important role in non-emergency as well as in emergency programs, and the importance that FFP attaches to the use of food, if anything, has grown since the time this Strategy was approved.

The current Title II programs in Bangladesh have a relatively high percentage of total resources being monetized. In the next round of MYAPs, USAID intends to give greater priority to programs that give more emphasis to the use of food in (1) preventive nutrition programs and (2) infrastructure development programs. USAID does recognize, on the other hand, that a significant amount of cash will continue to be needed to pay for the expertise, technical assistance and training that are required to ensure that programs will have a measurable and sustainable impact on the underlying causes of poverty and malnutrition in the target areas over the longer term.

Numerous examples are provided in the FFP Strategic Plan of the types of activities that need to be combined with food in order to achieve the longer term objectives of a Title II program. In a nutrition prevention program, for example, a food transfer may be needed to enable poor families to feed their young children adequately, and food can also serve as an incentive to encourage parents to participate in a community-based MCHN program and to offset the opportunity cost of participation. What is also essential, however, is that such programs provide the participants with education and counseling on how best to feed their young children and provide or facilitate their access to other essential services such as GMP, health and nutrition education and immunizations. In other words, the provision of food is a facilitator, but it is the latter set of interventions that are essential if the objective of reducing the prevalence of chronic malnutrition among children under five is to be achieved. And, cash is needed to fund these activities. Food can also be used to pay for the time people spend working on public infrastructure programs. However, cash is also needed to fund the complementary inputs that are needed to insure the successful completion of these programs, such as engineering drawings and services and cement as well as the technical assistance and training that is needed to ensure that the public works are operated properly and maintained. Cash is also needed to pay for the technical assistance and training activities that account for most if not all the major costs associated with successful agricultural development and income generation programs.⁸²

The Title II Awardees began importing wheat and selling it to the GOB for use in its own public food distribution program in 1995, and this arrangement is expected to continue under the new Title II programs. Approximately half of the wheat that the GOB buys, which also comes from other sources, is sold, including some at subsidized prices, and the cash resources used in cash transfers to priority groups. The other half is used in the GOB's FFW Program (over 18 percent) and in its VGD Program (56 percent) (See the discussion of the GOB's safety net programs in the previous section for more information on the GOB's FFW and VGD programs).

5.2.4.7 Integrating Programs at the Community Level

Title II activities need to be integrated at the community level to create synergies and increase impact. The current Title II programs were designed with a commitment to integration, and this emphasis on integration needs to be continued in the next round of programs and intensified. For program integration to pay off, core program activities need to be well-designed, technically sound and functioning well. Effective program integration should enable beneficiaries who are vulnerable and from poor and extremely

⁸² FFP, "Strategic Plan," pp 64-74.

poor households to benefit from the various program components when appropriate (for example a mother of a child under two from an extremely poor household should be eligible to participate in the MCHN program activities, and her household should be eligible to participate in IG activities). However, while a significant number of households are expected to be able to benefit from both the IG and the MCHN programs, there will also be many who are eligible to participate in only one or the other components of the Title II program (for example, extremely poor households without children under two would not be eligible to participate in the MCHN program, but should benefit from IG activities). Similarly, households participating in the MCHN program that are not poor would not be a priority for IG activities, since population-level age-based targeting is used for the MCHN component that would include all eligible pregnant and lactating mothers and children under two in the program area. (See previous section on “Targeting at the Community Level.”)

5.2.4.8 Monitoring and Reporting on Program Performance

Developing an effective monitoring and reporting system that is responsive to internal management needs as well as the various reporting requirements of FFP, the Mission and the Office of Foreign Assistance (F) in the State Department will be a real challenge. To help clarify its requirements, FFP issued two information bulletins in August 2007 (see **Annex 10**). The first bulletin (FFPIB 07-01) describes the four sets of reporting requirements that are applicable to all MYAPs. These include: (1) CS program indicators, (2) FFP/ Washington’s Performance Management Plan (PMP) indicators, (3) USAID Mission indicators, and (4) “F” indicators, i.e. indicators required by the Director of U.S. Foreign Assistance under the new U.S. Strategic Framework for Foreign Assistance. The second bulletin (FFPIB 07-02) lays out new reporting requirements designed to enable FFP to better track progress toward the objective and intermediate results identified in its 2006-2010 Strategic Plan. All Title II Awardees will need to follow this new guidance in developing and implementing their new MYAPs.

5.2.4.9 Developing Sustainability and Exit Strategies

Title II Awardees need to give priority to sustainability issues and to developing criteria to determine when their programs can exit specific communities and monitor progress towards exit. In developing their approaches to sustainability, the Title II Awardees will need to distinguish between the sustainability of the outcomes and impacts of their programs and the sustainability of the institutional mechanisms they are using to deliver their programs. The MCHN program, if successful, will have a sustained impact on the cohort of children who will be prevented from becoming chronically malnourished while they are under two because they will continue to reap benefits throughout their lives. The Title II Awardees also need to understand the different factors that drive sustainability in the public and private sectors, and recognize the importance of economic returns driving the latter. Given past history in Bangladesh, involving the GOB as well as donor and NGO programs, the Title II Awardees need to take particular care not to use approaches in non-emergency situations that could create disincentives to private sector willingness to participate and invest in rural areas, including in businesses that have the potential for creating more and better jobs for the rural poor and extremely poor. Partnering with and helping strengthen the capacities of other organizations, including other NGOs, local government offices, universities and private business, that will continue to operate and provide services in their work areas after the

Title II programs end should also be an important part of Awardee sustainability and exit strategies in all three project components.

5.2.4.10 Operations Research

In order to reduce food insecurity, MYAPs must effectively implement well-designed food security program interventions that successfully reach their target groups. However, program implementation is challenging, especially in countries with limited infrastructure and human resources. Operations research (OR) enables problem identification in service delivery and problem-solving by testing programmatic solutions. An important objective of OR is to provide program managers and policy decision makers with the information they need to improve existing services. The sequence of activities in an OR process includes five basic steps: (1) identifying the problem in service delivery or implementation; (2) identifying a solution or strategy to address the problem; (3) testing the solution to improve the quality of service delivery or implementation; (4) evaluating and modifying the solution as needed; and (5) integrating the solution at scale into the program. By incorporating well-designed OR at the core of field activities, programs can continuously examine the quality of their implementation and identify constraints to delivery, access, and utilization of planned services, adjusting the program as necessary. OR is an iterative process, which should be conducted early on in and repeated at various points during the life of a project to ensure continued quality in service delivery and program implementation. If done well, and provided the program design is sound, it can increase the likelihood that the project will attain its stated objectives.

5.2.5 Cross-cutting Issues

5.2.5.1 Risk and Vulnerability

Under FFP's current Strategic Plan, Awardees are required to pay particular attention to reducing vulnerability and risk. Reducing the vulnerability and risk of poor communities and individuals to natural disasters is one of the three priority activities that have been identified in FSCF. Poor and extremely poor households in the target areas are also vulnerable to other types of risks such as the illness or death of a family member, domestic violence, and/or the loss of a job or access to land. Awardees will also need to keep these types of risks in mind, including the differential effects of risks by gender, in the design and implementation of all their activities, adapting activities and adding others to help mitigate the effects of these types of more individualized risks as well.

5.2.5.2 Building Local Capacity

Capacity strengthening of local partners and local governments is a high priority need for ensuring that the food security objectives of the Title II program are achieved. Capacity strengthening initiatives should be designed to ensure the sustainability of food security initiatives through strengthening the analytical and managerial capacities of these stakeholders, as well as that of community and household leaders. Capacity strengthening also includes activities designed to strengthen communities capacities to organize, plan and represent their interests in broader fora. The Title II Awardees also need to focus on strengthening the capacities of their own staff and volunteers, providing them with on-going training and frequent, supportive supervision. Capacity-

building should be integrated into the design of all food security program activities, rather than existing as a stand-alone objective of the program. The Title Awardees also have a role to play as important stakeholders in assisting and supporting the GOB with the development and implementation of its food security-related policies and programs, including its disaster response efforts, adding their own unique field-based knowledge and experience to the mix.

5.2.5.3 Environment

The quality of the country's natural resources and peoples' equitable access to them are critical to the success of poverty reduction and food security interventions in Bangladesh. As the GOB describes the situation in its 2005 PRSP, "Human lives and livelihoods in Bangladesh are intricately intertwined with nature," and "no process of development and eradication of poverty can be conceived of without putting caring for the environment and sustainable development at the centre-stage."⁸³ The links between poverty and food insecurity and the quality and conservation of natural resources are many and mutually reinforcing. People in Bangladesh, in the rural areas in particular, are dependent on natural resources for their livelihoods. The poor, to eke out a living, use natural resources beyond their sustainable limits and this leads to depletion and degradation of the resource base. And, overexploitation of natural resources leads to declines in the quality and quantity of the resources, which aggravates poverty and leads to a decline in the quality of life. The Title II food security programs must integrate the sustainable use of natural resources into their interventions to support agricultural-based livelihoods, rural income strategies, disaster prevention, preparedness and resilience building.

6. COLLABORATION AND RESOURCE INTEGRATION

Organizations that want to partner with USAID/Bangladesh in the implementation of a food security program will need to explore opportunities and mechanisms for collaborating and joint programming to ensure the efficient use of resources. Prospective Title II Awardees are also encouraged to demonstrate how their programs will build on the comparative advantages of the Title II program and take maximum advantage of synergies and complementarities with other programs, including USAID/Bangladesh and USAID centrally funded projects.⁸⁴ The USAID Mission also expects to make a portion of its DA resources available to support the new Title II programs. These resources will be made available subsequent to the decisions about the Title program Awardees, through a competitive process, and only to those Title II programs that are directly complementary to the Mission's country strategy and its development priorities.

⁸³ GOB October 2005.

⁸⁴ The FFP "Guidelines for Fiscal Year 2008," (Draft) provide more detailed guidance on the types of coordination and synergies that it expects with respect to a number of programs and technical areas, including the GDA and HIV/AIDS.

In developing their proposals Awardees should explore ways to partner and collaborate with other organizations active in Bangladesh, including other donors and local NGOs, universities, research organizations, GOB ministries and local governments. Effective partnering can increase the efficiency, effectiveness and scale of Title II programs. Effective partnering and collaboration with local organizations can also help increase the likelihood of ownership and the sustainability of programs, including the sustainability of service delivery.

Prospective Awardees are also encouraged to involve and collaborate with the private sector, in their IG programs in particular, and to give some indication in their proposals which business they are considering working with, where and how. This is particularly important in Bangladesh, given the important role of the private sector in the development of markets, the provision of technical services and the creation of agricultural and non-agricultural-based jobs in the rural areas. .

Prospective Awardees should also indicate how their programs align with and support GOB policies, including NFP PoA, NNP, the PRSP and the National Disaster Management Programme (NDMP) (See the previous section for a more complete review of GOB, policies, strategies and programs related to food security.) Title II Awardee's programs will also need to be consistent with and support USAID's 1995 "Food Aid and Food Security Policy," FFP's "Strategic Plan for 2006-2010," and USAID/Bangladesh strategy and programs.

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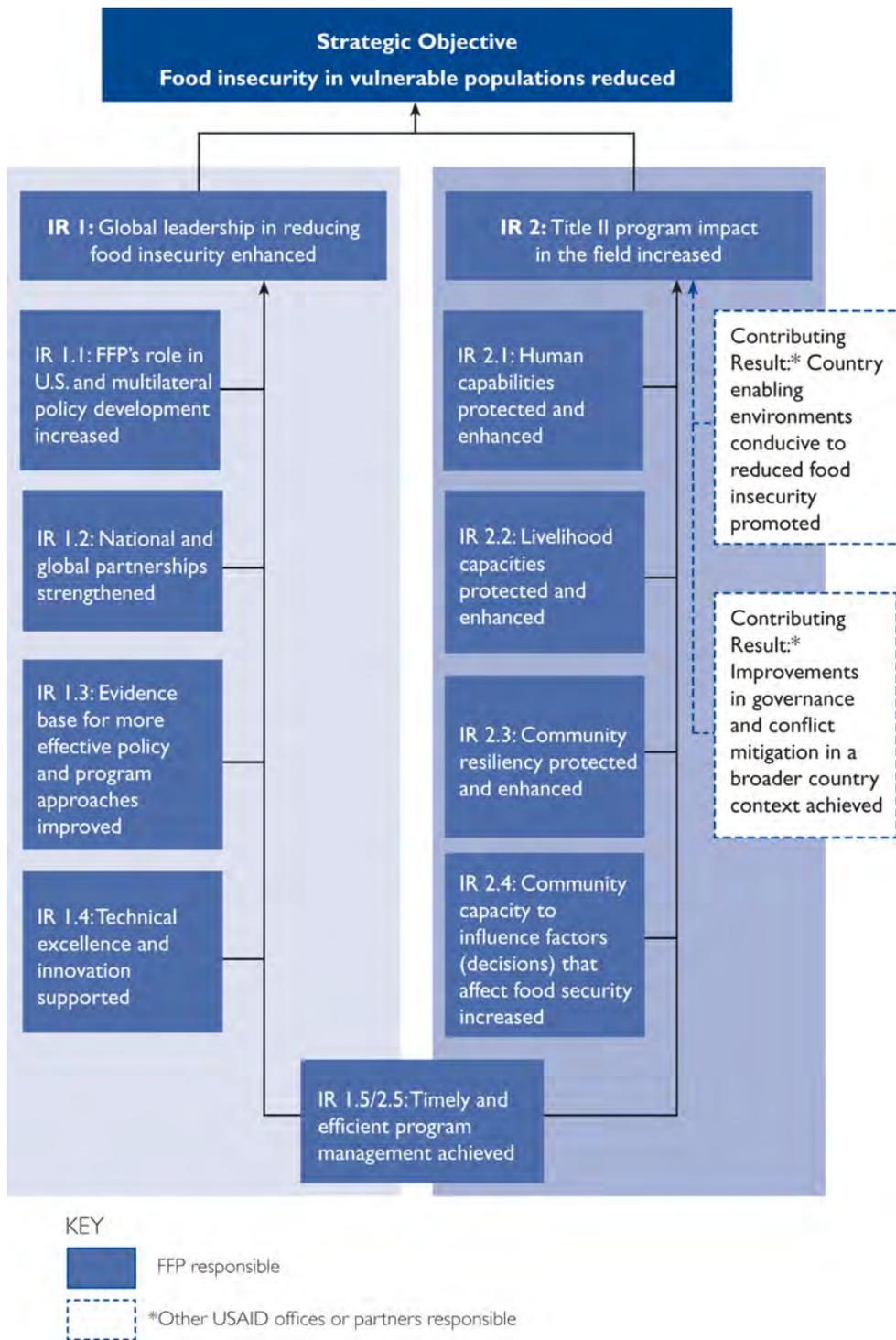
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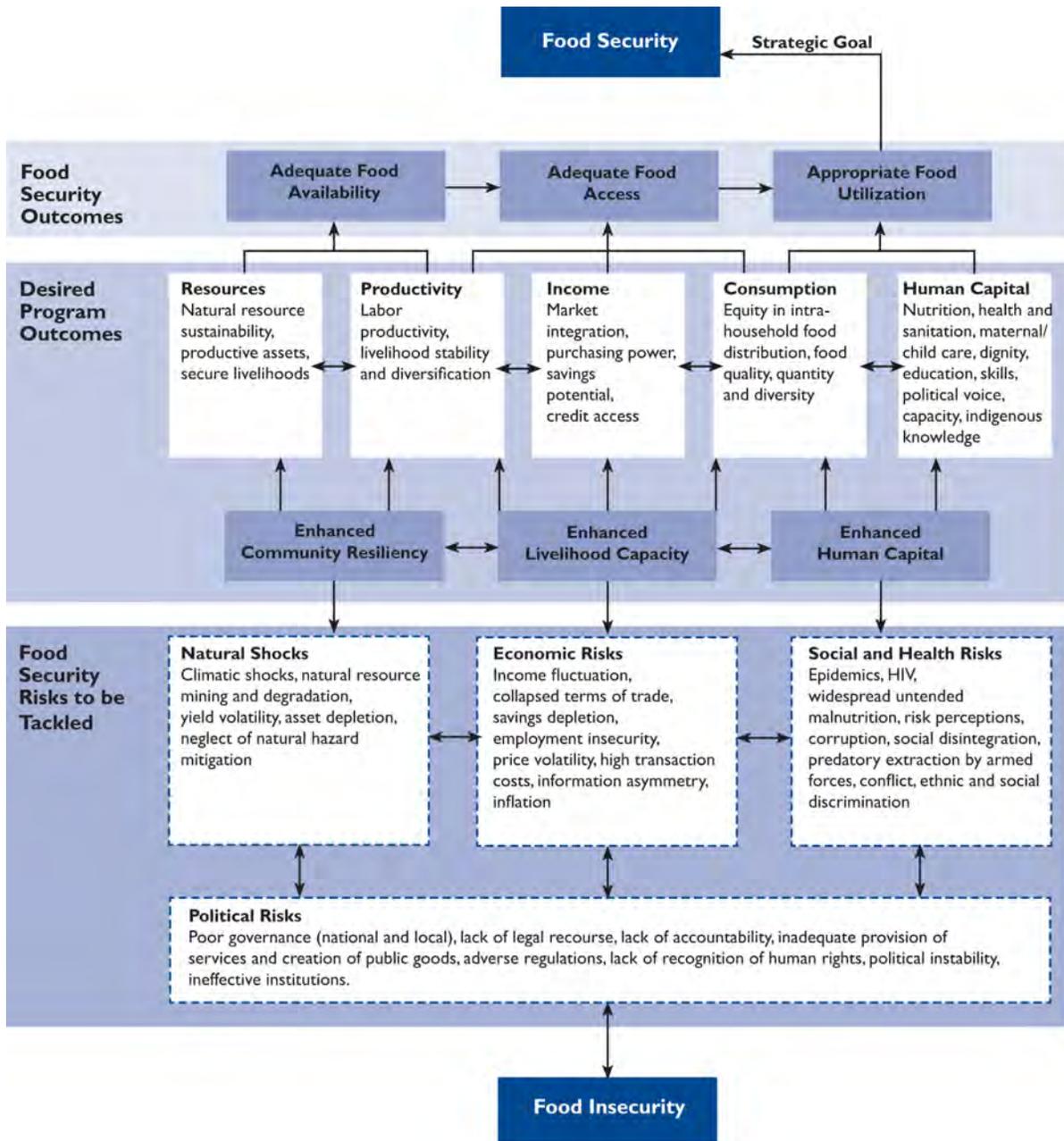
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ANNEX I. FFP STRATEGIC FRAMEWORK FOR 2006 – 2010



ANNEX 2. FFP EXPANDED CONCEPTUAL FRAMEWORK FOR UNDERSTANDING FOOD INSECURITY



Source: Webb and Rogers, *Addressing the "In" in Food Insecurity*, 2003.

ANNEX 3. DESCRIPTIONS OF COMMUNITY-BASED NUTRITION PROGRAMS

POSITIVE DEVIANCE (PD)/HEARTH, COMMUNITY-BASED MANAGEMENT OF ACUTE MALNUTRITION (CMAM)⁸⁵ AND COMMUNITY-BASED GROWTH PROMOTION (CBGP)

COMMUNITY-BASED PROGRAM	POSITIVE DEVIANCE (PD)/HEARTH	COMMUNITY-BASED MANAGEMENT OF ACUTE MALNUTRITION (CMAM)	COMMUNITY-BASED GROWTH PROMOTION (CBGP)
Brief Summary Description	Program to rehabilitate underweight children. PDI identifies successful practices and strategies of poor local families that have healthy children. In the two-week intensive behavior change program (Hearth sessions), volunteers and caregivers prepare and feed a recuperative meal of locally available foods and learn and practice affordable, acceptable, effective and sustainable PD care practices identified in families of healthy children. The Hearth ingredients are provided by participating families so that they learn that they can afford the foods, where to acquire them and how to use them. Families are followed up with home visits after graduating from the Hearth session to ensure continued growth.	A community-based approach for managing cases of SAM, which includes outpatient care for SAM without medical complications, inpatient care for SAM with medical complications and community outreach. Community workers are trained to use MUAC and assess edema to actively seek and refer SAM and moderate acute malnutrition (MAM) cases to the CMAM program. Based on a medical evaluation and using routine medication and RUTF, CMAM treats the majority of cases at home. Children with SAM with medical complications are referred to inpatient care for stabilization before being released to outpatient care for full recovery. CMAM programs may also include a component to manage MAM with routine medications and supplementary feeding.	Strategy implemented at the community level to prevent malnutrition and improve child growth through monthly monitoring of child weight gain, one-on-one counseling and negotiation for behavior change, home visits, and integration with other health services. Action is taken based on whether a child has gained adequate weight, not their nutritional status, identifying and dealing with growth problems before the child becomes malnourished. A study of the Community-Based Integrated Child Care (AIN-C) Program in Honduras found that it had a long-term average cost per child of 6.82 USD (5.91 USD for just children under two), and cost about 11 percent of a traditional, facility-based program.
Objectives	<ul style="list-style-type: none"> • Rehabilitate malnourished children • Enable families to maintain child's improved nutritional status • Prevent malnutrition among other children born in the community • Improve care and feeding practices 	<ul style="list-style-type: none"> • Treat SAM in the community • Reduce morbidity and mortality of children with SAM 	<ul style="list-style-type: none"> • Improve child growth • Prevent malnutrition
Target Group	Children 6-36 months with moderate and severe malnutrition, (weight-for-age < -2 Z-scores)	<ul style="list-style-type: none"> • Children 6-59 months with SAM (MUAC < 110, weight-for-height < -3 Z-scores or < 70 percent, and/or bilateral pitting edema) 	Children 0-24 months

⁸⁵ CMAM originated as an emergency care model known as "Community Therapeutic Care" or CTC.

COMMUNITY-BASED PROGRAM	POSITIVE DEVIANCE (PD)/HEARTH	COMMUNITY-BASED MANAGEMENT OF ACUTE MALNUTRITION (CMAM)	COMMUNITY-BASED GROWTH PROMOTION (CBGP)
		<ul style="list-style-type: none"> • Children with MAM (weight-for-height < -2 Z-scores) may be included if there is a supplementary feeding program • Children under 6 months receive inpatient care 	
Criteria	<p>Consider PD/Hearth if you can answer yes to the following questions:</p> <ul style="list-style-type: none"> • Are at least 30 percent of children 6-36 months moderately or severely underweight (weight-for-age < -2 Z-scores)? • Is nutrient-rich food available and affordable? • Are homes located within a short distance of each other? • Is there is a community commitment to overcome malnutrition? • Is there access to basic complementary health services such as deworming, immunizations, malaria treatment, micronutrient supplementation and referrals? • Is there a system (or can a system be created) for identifying and tracking malnourished children? • Is there organizational commitment from the implementing agency? 	<ul style="list-style-type: none"> • Availability of national protocols for the management of acute malnutrition • Availability of RUTF and therapeutic milk (F75/F100) • Availability of trained staff • Caseload of children with SAM exceeds 2 percent of the population of children 6-59 months • Communities with greater than 10 percent global acute malnutrition among children 6-59 months • May be considered for use in communities post-emergency or with frequent periodic emergencies 	<ul style="list-style-type: none"> • Best used where underweight prevalence is high • Community motivation to reduce underweight • A large cadre of committed community volunteers • A central location within a reasonable walk for most community members
Unique Aspects	<ul style="list-style-type: none"> • Caregivers contribute local foods • Community-level rehabilitation • Uses locally-available foods and feasible practices • Engages community in addressing malnutrition • Prevention and recuperation 	<ul style="list-style-type: none"> • Community-based approach for treating acute malnutrition on an outpatient basis • Use of RUTF instead of milk-based formulas • Community outreach for active case finding and referral to catch children with SAM or MAM as early as possible 	<ul style="list-style-type: none"> • Uses trained community-selected volunteers • Closely tied to evidence-based interventions • Uses “adequate weight gain” as early indicator of malnutrition • Referral and counter-referral system with health posts/centers

COMMUNITY-BASED PROGRAM	POSITIVE DEVIANCE (PD)/HEARTH	COMMUNITY-BASED MANAGEMENT OF ACUTE MALNUTRITION (CMAM)	COMMUNITY-BASED GROWTH PROMOTION (CBGP)
	<ul style="list-style-type: none"> • Follow-up home visits • Intensive behavior change 		<ul style="list-style-type: none"> • Counseling, negotiation • Supervision, home visits • Active community involvement in problem-solving and planning • Potential contact for MUAC screening and SAM referral • Addresses the causes of poor growth, not just the symptoms • Cost analysis conducted of AIN-C in Honduras: long-term average cost of 6.82 USD per child participant (5.91 USD for just children under two) and 0.44 USD per capita; this is 11 percent of the cost of a traditional, facility-based program
<p>Needed Elements for Quality Programming</p>	<ul style="list-style-type: none"> • PDI done in every community • Growth monitoring to identify malnourished children • BCC strategies for larger community • Health services to address common childhood diseases • Community mobilization • Qualitative skill sets to engage community in conducting and analyzing PDI • Skills in anthropometric measurement • Ability to identify children with SAM for referral • Technical assistance from someone skilled in the PD/Hearth approach • Good supervision skills • Access to basic complementary health services (e.g., immunization, deworming, micronutrients) 	<ul style="list-style-type: none"> • Active community case finding using MUAC and assessment of edema • BCC strategies for sustainable prevention • Health services to address common childhood diseases • Skills in anthropometric measurement • Trained community members who can identify cases of severe or complicated acute malnutrition for referral • Technical assistance from someone skilled in the CMAM approach • Sufficient budget for a supply of RUTF • Trained clinical staff to conduct medical evaluation, identify medical complications, refer and treat cases 	<ul style="list-style-type: none"> • Linked health and nutrition interventions • Needs large network of community-based workers or volunteers (2-3 community workers per 20 children) • Supportive and quality monitoring and supervision essential • Quality of counseling important • Community participation in planning • Caretaker involvement in monitoring the child's weight gain • Analysis of causes of inadequate growth, with guidelines for taking actions

COMMUNITY-BASED PROGRAM	POSITIVE DEVIANCE (PD)/HEARTH	COMMUNITY-BASED MANAGEMENT OF ACUTE MALNUTRITION (CMAM)	COMMUNITY-BASED GROWTH PROMOTION (CBGP)
Information Resources	<p><i>Positive Deviance/Hearth: A Resource Guide for Sustainably Rehabilitating Malnourished Children.</i> www.coregroup.org/working_groups/pd_hearth.cfm</p>	<p><i>Training Guide for Community-based Management of Acute Malnutrition.</i> www.fanta-2.org</p> <p><i>Community-based Therapeutic Care: A Field Manual.</i> www.fanta-2.org</p>	<p>Griffiths, et al. <i>Promoting the Growth of Children: What Works. Tool #4.</i> The World Bank Nutrition Toolkit. www.worldbank.org (Search for “Nutrition Toolkit”)</p> <p>Fiedler. May 2003. <i>A cost analysis of the Honduras Community-based Integrated Child Care Program.</i> World Bank HNP Discussion Paper. http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/281627-1095698140167/Fiedler-ACostAnalysis-whole.pdf</p>

COMMUNITY INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS (C-IMCI), COUNSELING AT KEY CONTACT POINTS, HOME VISITS

NUTRITION PROGRAM	COMMUNITY INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS (C-IMCI)	COUNSELING AT KEY CONTACT POINTS	HOME VISITS (E.G., AUXILIARY NURSE, COMMUNITY HEALTH WORKERS, CARE GROUPS)
Brief Summary Description	<p>Community program to address malnutrition, measles, malaria, pneumonia and diarrhea. Four key elements are: facility/community linkages; care and information at the community level; promotion of 16 key family practices; coordination with other sectors.</p>	<p>Counseling from a health care provider to a caregiver during the delivery of health services. Counseling messages can be personalized to the needs of the mother/caregiver or child. Contact points include:</p> <ul style="list-style-type: none"> • IMCI or sick child visits • Well child visits • Immunizations • PMTCT clinics • Antenatal care visits • Delivery • Postpartum care • Growth monitoring and promotion • Child health days • Recuperative feeding sessions 	<p>Home visits, conducted by community health worker/volunteer or nutrition volunteer provide outreach, follow up and support to pregnant women, lactating women, caregivers of children and their families. Visits may include checking on the health of a baby, counseling caregivers or following up with a child who has experienced growth faltering or illness.</p>

NUTRITION PROGRAM	COMMUNITY INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS (C-IMCI)	COUNSELING AT KEY CONTACT POINTS	HOME VISITS (E.G., AUXILIARY NURSE, COMMUNITY HEALTH WORKERS, CARE GROUPS)
Objectives	<ul style="list-style-type: none"> • Reduce morbidity and mortality of children under • Address malnutrition, malaria, pneumonia, diarrhea, measles 	To improve care and feeding practices for pregnant and lactating women and children under five years	<ul style="list-style-type: none"> • Ensure child's health or growth is improving • Improve care and feeding practices • Support family
Target Group	Children 0-59 months	<ul style="list-style-type: none"> • Pregnant and lactating women • Mothers/caregivers of children under five • Influencers of children under five 	Pregnant and lactating women, mothers/caregivers of children 0-23 months or up to 59 months
Criteria	<ul style="list-style-type: none"> • National IMCI policies and protocols • Collaborating health facility for patient referral • A cadre of available community health workers or volunteers • High prevalence of common childhood illnesses 	<ul style="list-style-type: none"> • Time available for counseling • Adequate coverage: community where women access services at the health facility 	<ul style="list-style-type: none"> • Willing and available volunteers • Walkable community
Unique Aspects	<ul style="list-style-type: none"> • Integrated approach focuses on whole child, not disease • Community level prevention and treatment • Linked with health facilities • Evidence-based protocols for prevention and treatment • Addresses relationship among illnesses • All Essential Nutrition Actions (ENA) messages are part of IMCI key family practices • Mostly applied to children who present with illness • Nutrition component often needs strengthening 	<ul style="list-style-type: none"> • Messages targeted to stage of life cycle at which the mother/caregiver seeks the service • Individually tailored guidance 	<ul style="list-style-type: none"> • Opportunity to tailor messages to individual needs and to engage in dialogue to negotiate change • Community members provide the support and counseling • Individually tailored guidance and support
Needed Elements for Quality Programming	Involvement and commitment of the health sector needed	<ul style="list-style-type: none"> • Sound training on counseling and negotiation skills • Counseling materials developed with 	<ul style="list-style-type: none"> • Formative research to inform design of a BCC strategy and materials • Training in counseling and negotiation

NUTRITION PROGRAM	COMMUNITY INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS (C-IMCI)	COUNSELING AT KEY CONTACT POINTS	HOME VISITS (E.G., AUXILIARY NURSE, COMMUNITY HEALTH WORKERS, CARE GROUPS)
		<ul style="list-style-type: none"> sound formative research Time and space available for counseling Supportive supervision 	<ul style="list-style-type: none"> Ongoing supportive supervision Materials for a low literacy population, if necessary
Information Resources	C-IMCI Program Guidance www.coregroup.org/working_groups/C-IMCI_Policy_Guidance_Jan%202009.pdf		

SUPPORT GROUPS, CARE GROUPS AND CHILD HEALTH WEEKS/DAYS

NUTRITION PROGRAM	SUPPORT GROUPS (E.G., MOTHERS/GRANDMOTHERS)	CARE GROUPS	CHILD HEALTH WEEKS/DAYS
Brief Summary Description	A way in which mothers can learn from each other, health care providers or members of the community about optimal child care and feeding practices. This is a comfortable, supportive and respectful environment. May be mother-to-mother or facilitated by a health care provider or other community member.	Community-based strategy for improving coverage and behavior change through building teams of women who individually represent, serve and promote health among women in 10-15 households in their community. The leaders form a Care Group that meets weekly or bi-weekly and is trained by a paid facilitator. These Care Group members visit the women for whom they are responsible, offering support, guidance and education to promote behavior change.	Occurs every six months to deliver vitamin A supplements and other preventive health services to children at the community level. In addition to vitamin A supplementation, services have included catch-up immunization, providing iron/folic acid to pregnant women, deworming, iodized salt testing, re-dipping ITNs, and promotion of infant and young child nutrition.
Objectives	Promote optimal child care and feeding behaviors	<ul style="list-style-type: none"> Improve coverage of health programs Sustainable behavior change 	<ul style="list-style-type: none"> Increase coverage of vitamin A supplementation Increase coverage of other nutrition interventions Provide deworming
Target Group	Mothers of young children (<2, <3 or < 5 years)	Mothers of children 0-59 months	Children 0-59 months

NUTRITION PROGRAM	SUPPORT GROUPS (E.G., MOTHERS/GRANDMOTHERS)	CARE GROUPS	CHILD HEALTH WEEKS/DAYS
Criteria	<ul style="list-style-type: none"> Mothers willing and able to meet and share with each other A community in which IYCF practices need to be improved 	<ul style="list-style-type: none"> Community with houses close enough together so that volunteers can walk between them and to meetings Need a sufficient volunteer pool 	Vitamin A program in-country
Unique Aspects	<ul style="list-style-type: none"> Groups are composed of peers Safe environment for mothers to learn and share Research shows the level of influence of peers on behavior change in strong⁸⁶ Requires minimal outside resources 	<ul style="list-style-type: none"> Trained “leader mother” volunteers provide support to other mothers Small number of paid staff reach large population (through leader mothers) Peers support Can support multiple health initiatives 	<ul style="list-style-type: none"> High coverage rates Feasible in diverse settings Community census and social mobilization
Needed Elements for Quality Programming	<ul style="list-style-type: none"> Group leader must have strong facilitation skills Training may be necessary Variation in methodology from very interactive to lecture driven Can link to the non-health sector 	<ul style="list-style-type: none"> Time available: leader mothers must have 5 hours per week to volunteer Comprehensive and ongoing training of leader mothers Long start-up time (due to training): project should be of a 4-5 year duration Supervisor to promoter ratio should be 1:5 	<ul style="list-style-type: none"> Best suited for areas with high prevalence of vitamin A deficiency Require coordination with district health plan Assure adequate supply Volunteers and supervisors need to be trained Substantial social mobilization Follow-up/record-keeping important Part of a larger nutrition strategy
Information Resources	<p>Linkages. <i>Training of Trainers for Mother to Mother Support Groups</i>. www.linkagesproject.org/media/publications/Training%20Modules/MTMSG.pdf.</p>	<p>World Relief and CORE. <i>The Care Group Difference</i>. www.coregroup.org/diffusion/Care_Manual.pdf.</p>	

⁸⁶ WHO and LINKAGES 2003.

ANNEX 4. WFP PROCEDURES FOR ESTIMATING CHILD MALNUTRITION AT THE LOCAL LEVEL⁸⁷

Using a variant of the small area estimation technique, the Bangladesh Bureau of Statistics jointly with the WFP derived two indicators of child malnutrition based on measurements of a child's height and weight, namely stunting and underweight. Stunting or low height-for-age is defined as having a height at least two standard deviations below the median height for a reference population. Underweight or low weight-for-age is similarly defined. The data used as a reference standard in these definitions was established in 1975 by the National Centre for Health Statistics/Centre for Disease Control in the USA (the NCHS reference). Stunting can be regarded as evidence of chronic malnutrition. Underweight reflects both chronic and acute malnutrition. A third indicator of child malnutrition, wasting, or low weight-for-height, reflects short-term acute hunger. Wasting rates vary according to the season and are significantly lower than underweight and stunting rates, at an annual average of approximately 12 percent. For this reason, estimates of wasting were not calculated. In order to estimate stunting and underweight, a 5 percent sample of the 2001 population census was combined with data from the 2000 HIES and the Child Nutrition Survey (CNS). Despite the fact that the CNS contains a wealth of information only two additional indicators could be added to the ones used for the poverty estimates, namely age and sex. Due to limitation in the number of variables that could be used and the lack of local level indicators on health, care and hygiene practices, a satisfactory predictive model for malnutrition could not be found. To improve results, the country was divided into six relatively homogenous zones (Chittagong Hill Tracts, North-east, Coastal, Eastern, Central and Northern) and a separate model was fitted for each zone. Unfortunately, a few zones had only small numbers of sampled households in the survey data and so only simple models could be fitted. The average standard error was about 6 percent, which is perhaps a little too high for a reliable comparison to be made between upazilas. The standard errors were therefore incorporated by calculating the probability of stunting and underweight in children under five exceeding 50 percent in a particular upazila. The probabilities were then classified into four classes and mapped. For the reasons described above, the resulting child malnutrition maps should be regarded as tentative.

Very High Estimated Stunting Prevalence

(Probability >75 percent that prevalence of stunting is >50 percent)

High Estimated Stunting Prevalence

(Probability 50 – 75 percent that prevalence of stunting is > 50 Percent)

⁸⁷ The content of this Annex is quoted from WFP-Bangladesh, 2004, The Food Security Atlas of Bangladesh: Towards a poverty and hunger free Bangladesh, p. 20

ANNEX 5. PREVENTION OF MALNUTRITION IN CHILDREN UNDER TWO APPROACH (PM2A)

What is PM2A?

PM2A is a food-assisted approach to reducing the prevalence of child malnutrition by targeting a package of preventive health and nutrition interventions to all pregnant and lactating women and children under two regardless of nutritional status. The PM2A approach was rigorously studied in a Title II program in Haiti and found to be more effective in reducing child malnutrition than a recuperative approach that provided similar services but targeted only malnourished children.

Who is targeted by PM2A?

- Pregnant women
- Lactating women with children under 6 months
- Children under two

What are the core program components of PM2A?

PM2A is a comprehensive approach that includes several essential and complementary interventions:

- **Conditional food ration for individual and household.** PM2A provides a dry individual ration to all pregnant women, lactating women until their children are 6 months, and children 6-23 months. PM2A also provides a dry household ration to families for the entire duration of receipt of the individual ration. All members of the target group are eligible to receive the ration if they participate in the other essential PM2A components, including preventive health services and BCC sessions. Guidance on calculating the ration is available in the USAID Commodities Reference Guide: http://www.usaid.gov/our_work/humanitarian_assistance/ffp/crg/.
- **Preventive health services.** The PM2A approach requires that mothers/caregivers access essential health services including antenatal care, postpartum care, immunization, vitamin A supplementation, iron/folic acid supplementation during pregnancy and regular health visits. The PM2A approach aims to create demand and improve quality and access of the services provided by the Ministry of Health or other agency (e.g., UNICEF).
- **BCC.** BCC is focused on improving care and feeding practices. Messages should be targeted according to pregnancy status and age group of the child. The BCC program, messages and materials should be based on sound formative research and delivered through multiple contact points.
- **Community outreach.** Community outreach is needed to create awareness, identify program beneficiaries; educate the community about the program, its goals and requirements; and maximize program coverage.

- **Home visits.** Trained community volunteers conduct home visits to provide counseling, support and referral (as necessary) to women in late stages of pregnancy, newborns, children with growth faltering, ill children, or those who have stopped attending required services.
- **Screening and referral for SAM.** Children who suffer from SAM urgently require treatment. PM2A programs should screen children 6-59 month with MUAC to identify SAM cases and refer them to appropriate treatment.
- **Quality assurance.** The program design must be guided by sound *formative research* and the program implementation consistently improved through *operations research*.

Key Considerations for PM2A

- PM2A is most appropriate when there is widespread chronic malnutrition in the target population.
- PM2A should be implemented in a location where the essential preventive health services are assured for the duration of the project.
- The catchment area must be able to absorb the quantity of food needed (BEST analysis).
- The logistics, cost or accessibility of the geographic location may affect geographic targeting.
- PM2A should be coordinated with services provided by the host country governments, donor agencies and other programs operating in the same catchment area.
- A stable political and social environment with limited in- and out-migration is necessary for optimal implementation.

ANNEX 6. RESOURCES ON COMMUNITY-BASED PROGRAMS AND BEHAVIOR CHANGE PROGRAMMING

COMMUNITY-BASED NUTRITION PROGRAMS

PVO Child Survival and Health Grants Program. *Nutrition Technical Reference Materials*.
www.childsurvival.com/documents/trms/tech.cfm

Community-based Growth Promotion

Griffiths, Marcia, Kate Dickin and Michael Favin (1996). *Promoting the Growth of Children: What Works*. Tool #4. The World Bank Nutrition Toolkit, The World Bank.
<http://siteresources.worldbank.org/NUTRITION/Resources/Tool4-Frontmat.pdf>

C-IMCI

CORE (2001). *Reaching Communities for Child Health and Nutrition: A Framework for Household and Community IMCI*.
www.coregroup.org/working_groups/c_imci_full_english.pdf

PD/Hearth

Core (2003). *Positive Deviance/Hearth: A resource guide for sustainably rehabilitating malnourished children*.
www.coregroup.org/working_groups/pd_hearth.cfm

Core (2005). *Positive Deviance/Hearth: Essential Elements*. A resource guide for sustainably rehabilitating malnourished children (addendum)
www.coregroup.org/working_groups/PD_Hearth_Addendum_Aug_2005.pdf

Care Groups

World Relief and Core (2005). *The Care Group Difference: A guide to mobilizing community-based volunteer health educators*. www.coregroup.org/diffusion/Care_Manual.pdf

Community-Based Management of Acute Malnutrition (CMAM)

Food and Nutrition Technical Assistance Project. 2008. *Training Guide for Community-Based Management of Acute Malnutrition (CMAM)*. www.fanta-2.org

Support Groups

Linkages (2003). *Mother-to-Mother Support Group Methodology and Infant Feeding: Training of Trainers*
www.linkagesproject.org/publications/index.php?detail=51

BEHAVIOR CHANGE

Child Survival and Health Grants Program (2005). *Behavior Change Interventions Technical Reference Materials*. www.childsurvival.com/documents/trms/xcut.cfm

Core and AED. *Applying the BEHAVE Framework. Workshop Guide.*
www.coregroup.org/working%5Fgroups/behave_guide.cfm

The Core Group. Social and Behavior Change Working Group.
www.coregroup.org/working%5Fgroups/behavior.cfm

Emory University; Nutrition Research Institute, Peru; National Institute of Public Health, Mexico; PAHO (2003). *ProPAN: Process for the Promotion of Child Feeding.*
www.paho.org/English/AD/FCH/NU/ProPAN-index.htm

FORMATIVE RESEARCH

Dicken, K and M. Griffiths. *Designing by Dialogue: A Program Planners' Guide to Consultative Research for Improving Young Child Feeding.*
www.eldis.org/go/display/?id=27958&type=Document

Food for the Hungry International. *How to Conduct Barrier Analysis.*
http://barrieranalysis.fhi.net/how_to/how_to_conduct_barrier_analysis.htm

ANNEX 7. ADMINISTRATIVE MAP OF BANGLADESH

