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# BANGLADESH

## FY 2011–2015 Multi-Year Strategy

### U.S. Government Document

The Feed the Future (FTF) Multi-Year Strategies outline the five-year strategic planning for the U.S. Government's global hunger and food security initiative. These documents represent coordinated, whole-of-government approaches to address food security that align in support of partner country priorities. The strategies reflect analysis and strategic choices made at the time of writing and while interagency teams have formally approved these documents, they may be modified as appropriate.

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## ABBREVIATIONS AND ACRONYMS

<b>AAP</b>	Accelerating Agriculture Productivity Improvement
<b>ABSP II</b>	Agricultural Biotechnology Support Project II
<b>ADB</b>	Asian Development Bank
<b>ADP</b>	Annual Development Program
<b>AGCLIR</b>	Agriculture Commercial, Legal and Institutional Reform
<b>BARC</b>	Bangladesh Agriculture Research Council
<b>BARI</b>	Bangladesh Agricultural Research Institute
<b>BAT</b>	Bangladesh Agriculture Transformation
<b>BRAC</b>	Bangladesh Rural Advancement Committee
<b>CGIAR</b>	Consultative Group on International Agricultural Research
<b>CDCS</b>	Country Development Corporation Strategy
<b>CIP</b>	Country Investment Plan
<b>CSISA</b>	Cereal System Initiative for South Asia
<b>DAE</b>	Department of Agricultural Extension
<b>DANIDA</b>	Danish International Development Agency
<b>DFID</b>	Department for International Development
<b>DG</b>	Democracy and Governance
<b>DHS</b>	Demographic Health Survey
<b>DLI</b>	Development Leadership Initiative
<b>EU</b>	European Union
<b>FAO</b>	Food & Agriculture Organization
<b>FDA</b>	Food and Drug Administration
<b>FDP</b>	Fertilizer Deep Placement
<b>FFP</b>	Food for Peace
<b>FPMU</b>	Food Planning and Monitoring Unit
<b>FSN</b>	Foreign Service National
<b>FTF</b>	Feed the Future
<b>GAFFSP</b>	Global Agriculture and Food Security Program
<b>GCC</b>	Global Climate Change
<b>GDP</b>	Gross Domestic Product
<b>GHFSP</b>	Global Hunger and Food Security Presidential Initiative
<b>GHI</b>	Global Health Initiative
<b>GOB</b>	Government of Bangladesh
<b>HKI</b>	Helen Keller International
<b>IFDC</b>	International Fertilizer Development Center
<b>IFPRI</b>	International Food Policy Research Institute
<b>IR</b>	Intermediate Result
<b>LCG</b>	Local Consultative Group
<b>LOL</b>	Land O'Lakes
<b>MCC</b>	Millennium Challenge Corporation
<b>MDG</b>	Millennium Development Goal
<b>MOA</b>	Ministry of Agriculture
<b>MOEF</b>	Ministry of Environment and Forestry
<b>MOFDM</b>	Ministry of Food and Disaster Management
<b>MOFL</b>	Ministry of Fisheries and Livestock
<b>MOHFW</b>	Ministry of Health and Family Welfare
<b>MOWCA</b>	Ministry of Women and Children's Affairs

<b>NARS</b>	National Agricultural Research Systems
<b>NATP</b>	National Agricultural Technology Program
<b>NFPCSP</b>	National Food Policy Capacity Strengthening Program
<b>NGO</b>	Non-Government Organization
<b>NNP</b>	National Nutrition Program
<b>PIO</b>	Public International Organization
<b>PMP</b>	Performance Management Plan
<b>PRSSP</b>	Policy Research and Strategy Support Program
<b>RF</b>	Results Framework
<b>SME</b>	Small and Medium-sized Enterprises
<b>SUN</b>	Scaling Up Nutrition
<b>TCN</b>	Third Country National
<b>USAID</b>	United States Agency for International Development
<b>USDA</b>	United States Department of Agriculture
<b>USDH</b>	United States Direct Hire
<b>USG</b>	United States Government
<b>USPSC</b>	United States Personal Service Contractor
<b>WB</b>	World Bank
<b>WFP</b>	World Food Program

## I. INTRODUCTION

Identified in 2005 by Goldman-Sachs as one of the “Next 11” emerging economies, Bangladesh has both potential as well as severe challenges for agricultural production and food security. In coordination with a range of public, private and development partners, Bangladesh is committed to establishing a technically sound Country Investment Plan (CIP) that addresses major constraints to food security, prioritizes interventions, provides a cost benefit analysis and includes working to improve the business enabling environment to reduce hunger and improve nutritional status of the majority of Bangladeshis. The Feed the Future (FTF) Initiative, a US Presidential Initiative, offers an opportunity for the U.S. Government (USG) to showcase Bangladesh as a development model as it links presidential initiatives – Food Security, Global Health, Global Climate Change, and Global Engagement -- to help lift its people out of poverty while sharing USG foreign policy priorities in addressing governance and security.

## 2. DEVELOPMENT CHALLENGES AND OPPORTUNITIES

Bangladesh is the most densely populated country in the world with 162 million people living in a land area roughly the size of Iowa. Demographic trends indicate that this number will grow to around 220 million by 2050. This population growth threatens to outpace that of food production. Thirty six percent of the population lives below the poverty line. Lack of access to land is contributing to poverty in Bangladesh. Given population density and growth, average farm sizes are already too small to support a family adequately and are declining in size. Roughly 10 percent of farmers own 50 percent of the arable land, while 60 percent are functionally landless.

The degradation of land, water bodies, wetlands and forests are significant threats to the country’s food security. Compounding increased land scarcity caused by population growth, Bangladesh is estimated to be losing one percent of its arable land every year due to natural resource degradation. Approximately, 80,000 hectares are lost due to urbanization, new infrastructure and a variety of other economic activities. Nearly 80 percent of arable land is dedicated to rice production and the intensity of cultivation is 182 percent meaning that almost all fields support two crops per year a rate that, given current agronomic management, degrades soils and depletes fertility. Climate change poses significant risks for Bangladesh. Between 20-30 percent of the country is normally flooded each year. Rising sea levels have increased soil salinity in coastal areas, making it less suitable for agriculture. Arable land loss and extreme weather patterns due in part to climate change compound the threats to food security in Bangladesh.

Poverty, a lack of access to agricultural land and poor eating habits contribute to high levels of malnutrition. Bangladesh has the highest malnutrition rates in the region, and is making insufficient progress towards the Millennium Development Goal (MDG) 1 of reducing poverty by half. Forty percent of the population is undernourished and 20 percent is severely malnourished. A basic limitation of the diet is its lack of diversity. On average, the population consumes about 80 percent of its dietary energy as cereals (75 percent from rice alone), crowding out other sources of nutrition and leading to nutritional imbalance. The Bangladesh Demographic and Health Survey (DHS) indicates that 49 percent of children under five and 46 percent of women suffer from anemia, and over one in five pre-school children suffer from vitamin A deficiency. The high rates of anemia and malnutrition among women reduce their productive capacity and contribution to economic development. In addition, infant and young child feeding practices are especially poor in Bangladesh and are the major contributing factor to malnutrition. Only 42 percent of women breastfeed exclusively for the first six months of life. The negative consequences of these practices are irreversible, causing permanent damage to cognitive development and physical well-being.

Bangladesh has succeeded in eliminating or reducing many macro-economic policy distortions in the agricultural sector, including most tariffs and price controls. However, its poor business enabling environment discourages entrepreneurship, market entry, small business development and productive private sector investment. In 2009 Bangladesh ranked 111 out of 183 countries in the World Bank's (WB) "Doing Business" Report and has for years been ranked at or been close to the very bottom of the Corruption Perception Index published by Transparency International. A lack of access to electricity and to all weather roads as well as a general lack of information and know-how further impedes private sector competitiveness. Small farmers lack organization into associations as advocacy groups.

Despite the grim picture portrayed by the country's constraints, Bangladesh, in fact, is currently on a positive socio-economic development trajectory. The under-five mortality rate has declined by more than 50 percent since 1993, a key accomplishment which received special recognition at the Millennium Development Goals Summit in September 2010 in New York City. Eighty-eight percent of children (6-59 months) receive vitamin A supplementation twice a year through successful campaigns led by the Government of Bangladesh (GOB). The government is also placing an emphasis on mainstreaming nutrition in their new five-year health sector program which is currently being developed.

## **2.1 FOOD SECURITY CHALLENGES AND OPPORTUNITIES**

Bangladesh's annual Gross Domestic Product (GDP) growth rate has averaged around six percent since 2000. This growth has been paralleled by improvements in the business climate. Economic growth has led to a wealthier more urbanized population, in particular a growing middle class that demands quality over quantity and is shifting from a cereals-based diet to a diet that incorporates more meat, fish, milk, eggs, fruits and vegetables. National supply of these foods does not meet domestic demand which is expected to rise with increasing incomes. Similarly, rising horticultural imports are indicative of expanding domestic demand and insufficient domestic supplies. In addition, there is a parallel growing export market for many of these same products as incomes rise across Asia and other areas of the developing world, and as globalization leads to greater access to developed country markets.

Certain agricultural value chains have shown significant growth in recent years and many opportunities exist for value-added products. Bangladesh has the third largest fresh-water fisheries in the world. The fisheries sector contributes about 5 percent of export earnings. A large majority (80 percent) of the rural population is involved agriculture and in fisheries, and 60 percent of all protein consumption comes from fish. Expansion of the poultry sector is leading to further economic diversification both upstream (expansion of maize production and day-old chicks) and downstream (feed mills). Ten million farmers grow fruits and vegetables, selling their produce to 150,000 traders while over 200 processors convert fruits and vegetables into jams, jellies, squashes, ketchup, pickles and beverages. A study by the Asian Development Bank (ADB) found that Bangladesh has a comparative advantage in the exportation of shrimp, fish, jute, tea, fresh and processed fruits and vegetables, herbs, spices and medicinal plants as well as in the domestic sale of irrigated rice, potatoes, lentils, and onions.

### **2.1.1. Country Investment Plan Focus Areas**

Bangladesh is moving rapidly on their Country Investment Plan (CIP) finalization. The CIP was launched in May at the Food Security Investment Forum and a concept note for the Global Agriculture and Food Security Program (GAFSP) soon followed, resulting in a \$52 million award by the World Bank. In July 2010, Bangladesh was invited to the Manila Food Security Forum for Asia and the Pacific as a one of the four focus countries. In October 2010, Bangladesh participated in the 36<sup>th</sup> Session of the Committee on World Food Security in Rome. The CIP has identified 6 focus areas in which to concentrate their efforts for achieving MDG 1 goal: (1) Integrated research and extension to develop and propagate sustainable responses to climate change; (2) Improved water management and infrastructure for irrigation purposes; (3) Supply and sustainable use of agricultural inputs; (4) Fishery development



program; (5) Livestock development program; and (6) Access to markets, improved agricultural value added, increased non-farm incomes. Refinements to the CIP and finalization of the plan are progressing and a well-defined document will be in place by March 2011. The U.S. Government is providing technical assistance through the United Nations Food and Agriculture Organization (FAO) and International Food Policy Research Institute (IFPRI) to complete the remaining refinements to the CIP.

To support the GOB's CIP, FTF Bangladesh is in the process of conducting a series of assessments and analyses that will include information on the potential for specific agricultural value chains and regional focus. These analyses will also identify challenges and opportunities, and incorporate these into the design of programs for the Feed the Future (FTF) multi-year strategy.

### **2.1.2. Leveraging Local Institutional Participation**

Bangladesh benefits from a number of institutional strengths such as the Bangladeshi National Agricultural Research System (NARS), which was founded with USG assistance through USAID, the Bangladesh Agricultural Research Institute (BARI), the country's largest multi-crop research institute, conducting research on a wide variety of crops and the Department of Agricultural Extension (DAE) which has 25,000 agents. In addition, strong non-governmental organizations (NGOs) in Bangladesh often fill governmental voids in agriculture and other sectors. The Bangladesh Rural Advancement Committee (BRAC), for example, has 10,000 agricultural field agents as well as programs in health and education. The Grameen Trust is another NGO, whose Nobel Prize winning founder, Muhammad Yunus, pioneered micro-credit. The trust has now branched off into agro-industry, telecommunications and renewable energy. Through the work of Grameen phone and the growth of telecommunications in general, rural communication has greatly expanded in recent years. Another area of relative institutional strength involves social safety nets and disaster management with food reserves, mostly rice, maintained at a minimum of three months' worth of emergency needs.

## **2.2 CONSULTATION AND COORDINATION WITH GOVERNMENT AND OTHER DONORS**

The USG enjoys unparalleled access to key decision makers in Bangladesh and the Mission engages on food security at all levels, from the Prime Minister on down. Mission Dhaka works across U.S. agencies to achieve this objective, including USAID, State Department, United States Department of Agriculture (USDA), and the Food and Drug Administration (FDA). Food security and agriculture rank high on the GOB development agenda. The GOB has developed a number of national food security plans and initiatives including: The Food Policy Plan of Action - 2008-2015; Bangladesh Food Security Investment Forum (May 2010) and the CIP which is currently being finalized by the GOB with support from the U.S. Mission and other development partners is scheduled to be completed by March 2011. This document will provide the framework for the country's total assistance for food security. However, while these policies, strategies and plans inventory the country's development challenges and identify key areas of intervention to address challenges, they are not always adequately focused in terms of achievable priorities, implementation modalities, necessary resources and results monitoring.

The World Bank, the ADB and other major UN organizations such as United Nations Children's Fund, FAO, World Food Program (WFP), the United Nations Development Program, and the Consultative Group on International Agricultural Research (CGIAR) have a long history of operations, research and analysis in Bangladesh. Donor coordination of food security issues and related sector activities takes place on a regular basis through the Local Consultative Group (LCG) and its sub-groups. Through USAID, the USG is actively engaged with the LCG and the GOB, and leads efforts to support food security in Bangladesh. The USG through USAID has also renewed its commitment, along with the European Union (EU) to work with the GOB to implement and monitor the Plan of Action by increasing support for the National Food Policy Capacity Strengthening Program (NFPCSP). The Ministry of

Health and Family Welfare is currently designing its next \$3.6 billion health sector program which will focus on mainstreaming nutrition interventions. -. Currently the National Nutrition Program (NPP) is implemented vertically reaching only about 25 percent of the population. There are tremendous opportunities under the Global Health Initiative (GHI) to strengthen linkages in nutrition with FTF (Section 3.5) to promote better food utilization at the household level.

## **2.3 REGIONAL AND TRANSNATIONAL DIMENSIONS OF KEY FOOD SECURITY ISSUES**

Three major rivers originating in the Himalayas, wind through India and drain into the sea in Bangladesh - making it the largest delta in the world. Transboundary relationships between India and Bangladesh in water management have historically been a major issue affecting flood control and irrigation. Recent overtures by both countries for closer coordination have also focused on riparian issues. In addition, India has been the source for rice imports during shortages and continues to export pulses and legumes (and is a market for select Bangladeshi exports). Closer trading relationship between these two countries will ensure regional food security. Currently Bangladesh faces major shortages in electricity, and if this trend continues it will have a significant impact on overall agricultural production. A majority of the ground water irrigation during the “boro” season (which was primarily responsible for Bangladesh tripling its rice production in three decades) is pumped using electricity. A more regional integration of the electricity grid would go long way in solving the power crisis.

### Southern Region

The South was previously the breadbasket of Bangladesh. However this area is also most vulnerable to climatic extremes such as hurricanes and soil degradation through rising sea levels. With the introduction of tube-well irrigation in the North and Central regions of the country, rice production has tripled over the last three decades, while the South has lagged behind. The South also has some of the most serious poverty in the country. As productivity gains in the North and Central regions have begun to slow down, other regions need to begin increasing productivity to meet the demands of the country. The GOB is keen to focus on reviving agricultural production in the South including promotion of surface water canal irrigation. Some other donors (e.g. FAO) also are interested in developing the South. There is great potential for increasing agricultural productivity in the South through introduction of saline resistant varieties of rice and other crops, introduction of crops suitable for multiple cropping seasons, and the promotion of fish and other high-value agriculture.

Mission Dhaka has identified the South as the region where it will focus its activities. In order to confirm that this region has best potential for increasing productivity and also reducing poverty and malnutrition, the Mission has contracted with a consulting firm to conduct key and determine specific geographic focus and target groups. Geographic selection will be based on regions with greatest growth potential for rice production and diversification, prioritized high-value agricultural products and, to the degree possible, on regions with the highest level of poverty and malnutrition. Nutritional education will cover regions where there is overlap between the FTF strategy, the P.L. 480 Title II programs and GHI. In general, policy and regulatory reform and anti-corruption efforts will primarily take place at the national level. Target beneficiaries will include rice farmers, the poor who are net purchasers of rice, small and medium size farmers who can diversify production, agricultural-based enterprises, people employed in the fishing and aquaculture sectors, women and children.

## **2.4 CRITICAL AREAS FOR INTERVENTIONS**

In response to the country's major challenges and opportunities, Mission Dhaka's rationale for selection of areas for intervention is based on the following criteria: (1) investment areas with the greatest



potential both for impact and scalability, (2) comparative advantage vis-à-vis other donors, NGOs and the GOB, and (3) geographical limitations or advantages.

Selected areas for intervention are:

- Intensify rice production;
- Diversify agricultural production in higher value, nutritious agricultural production;
- Increase awareness of nutritional and dietary requirements of target groups in collaboration with the GHI and Food for Peace (FFP) non-emergency programs;
- Improve business enabling environment to promote private sector growth;
- Build capacity of farmers and Small and Medium Enterprises (SME) in the agricultural sector to promote market linkages;
- Strengthen the enabling environment for policy dialogue;
- Improve capacity of the government, civil society, farmers and private sector businesses to engage in policy dialogue;
- Rebuild research capacity; and
- Strengthen extension services to farmers

## **2.5 EXPECTED POST FEED THE FUTURE CONDITIONS FOR SUSTAINABILITY**

The strong U.S. – Bangladesh relationship will aid efforts to encourage and shape the country’s response to food insecurity. The multi-year FTF program is closely aligned with the GOB CIP, and as such will also have the buy-in of other development partners, ensuring sustainability. Furthermore, sustainability will be achieved through promotion of private sector led investment in profitable technologies, marketing and value-addition of rice and other high-value crops.

Support to government entities that promote research, extension while engaging in sound policy analysis will provide an environment where the private sector (including farmers) can fully exploit the resources available to maximize production. It is hoped that establishment of a sound enabling policy environment with GOB/stakeholder dialogue and a positive business enabling environment to promote the private sector and market linkages for farmers and SMEs will further reinforce sustainability. Rigorous cost-benefit analysis will help guarantee that the USG’s investments through USAID support long-term profitable activities. Capacity building (1) focused on commercial production and market integration is built in throughout this strategy and includes government research and extension services, the private sector, farmers and farmer organizations and women groups; and (2) in nutrition through technical assistance and trained health care providers in the public and private sector will provide the Ministry of Health & Family Welfare (MOHFW) the required institutional capacity.

Collaborative implementation with the GOB, other donors and NGOs will ensure sustainable transformational agriculture and nutritional development. The USG will need to stay thoroughly engaged with successive governments and get a strong consistent commitment to “stay the course” on the food security CIP.

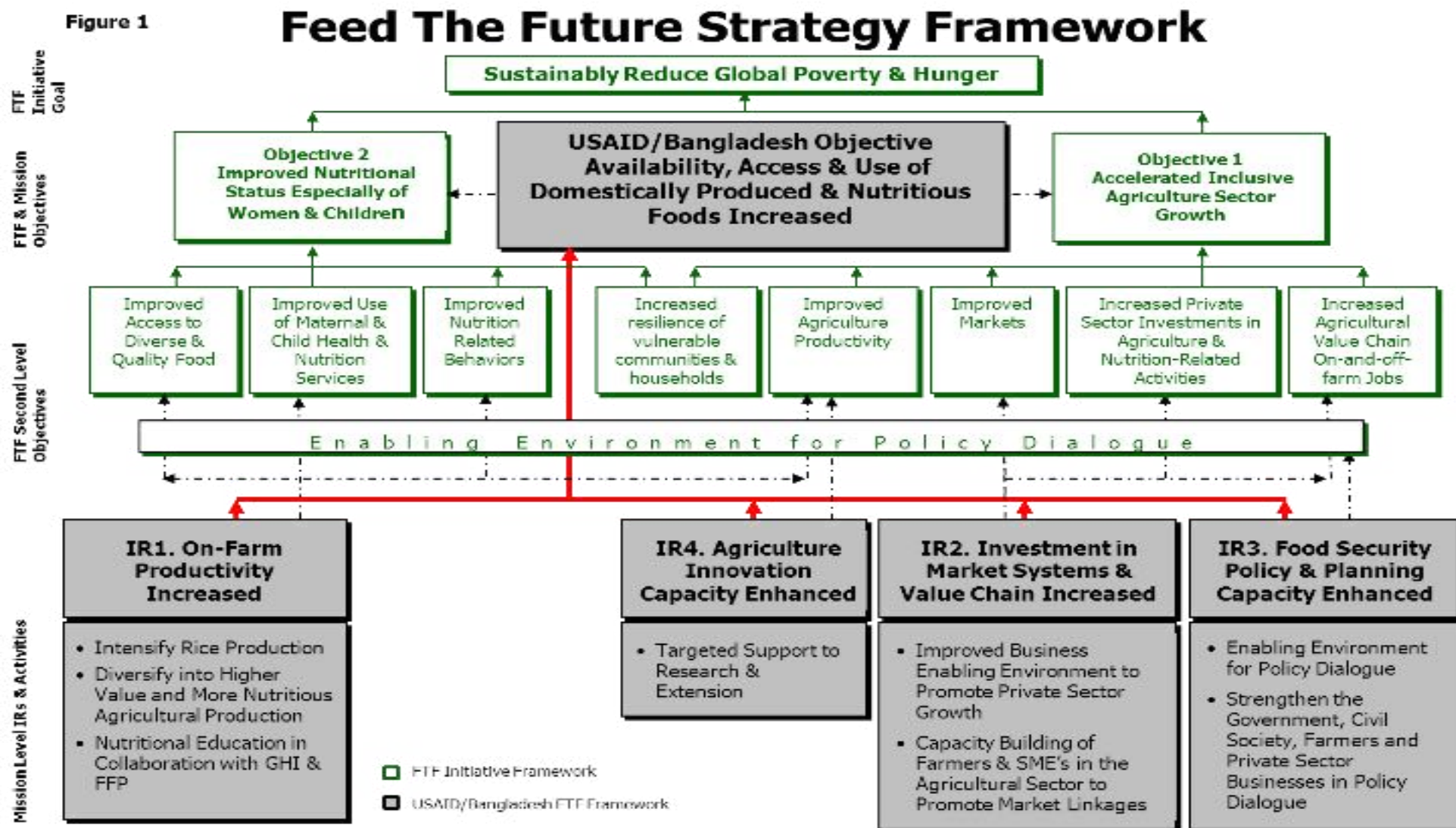
### 3. OBJECTIVES, PROGRAM STRUCTURE, AND IMPLEMENTATION

Objective Statement: Increased Availability, Access and Use of Domestically Produced and Nutritious Foods.

The USG's FTF objective "Availability, Access and Use of Domestically Produced & Nutritious Foods Increased" supports the Global Hunger and Food Security Initiative (GHFSI) goal, to "Sustainably Reduce Global Poverty & Hunger." The Mission directly contributes to the two GHFSI objectives to accelerate inclusive agriculture sector growth and improve nutritional status, especially of women and children. In line with the Paris Declaration on Aid Effectiveness, the FTF strategy also ensures national ownership as the Intermediate Results (IR) aligns Mission resources with GOB-owned processes and the CIP.

The Mission's FTF FY2010 - 2015 strategy builds on its evidence-based experience, successes and on-going agriculture, health and FFP programs. The FTF Bangladesh program will intensify staple crop production while simultaneously diversifying agriculture into high-value nutrient-dense products to increase the availability, accessibility and utilization of nutritious food. This will be complemented by GHI programs which will enhance utilization of nutritious foods by focusing on behavior change messaging on nutrition and dietary diversification. In addition, the FFP non-emergency programs will focus effective safety net programs to provide appropriate technologies to increase food production, nutrition and incomes of the poor, extreme poor and landless. In addition, the FTF program will be supported by activities to improve the business enabling environment for and capacity building to small farmers and farmer associations. The program is represented by four IRs: (1) On-Farm Productivity Increased; (2) Investment in Market Systems and Value Chain Increased; (3) Food Security Policy and Planning Capacity Enhanced; and (4) Agricultural Innovation Capacity Enhanced for maximum impact, while integrating the efforts of other public and private partners as presented in the Results Framework (Figure 1).

Figure 1. Bangladesh Feed the Future Strategy Framework



### **3.1 ON-FARM PRODUCTIVITY INCREASED (INTERMEDIATE RESULT 1)**

#### Program Interventions:

- Intensify rice production by promoting higher yielding, saline/drought resistant, and more nutritious rice through support to research institutions, government policy makers, NGOs, farmers, input suppliers and marketing agents and other private sector actors.
- Diversify into higher value and more nutritious agricultural production. Support diversification away from rice and into high-value and nutritious agricultural products such as fruits/vegetables and fish/livestock. This will increase farmer's incomes while also making more nutritious food available at the household level. In addition women will be specifically targeted through the promotion of homestead gardens.
- Increase awareness of nutritional & dietary requirements by facilitating nutrition and dietary awareness, and education; promote farmer associations.

#### Harmonization with Government of Bangladesh Plans and Priorities

IR-1 is well geared to support the GOB in its efforts to increase on-farm productivity while improving nutrition related behaviors and improving access to and use of more nutrient quality food. Activities will directly contribute to the following CIP Program Component: rice intensification through improved irrigation; intensification through increased use of improved inputs (seed and fertilizer); fisheries development; livestock development; community based nutrition activities through livelihood approaches; and orienting food and nutrition programs through behavioral change communication on dietary diversification.

#### Development Hypothesis

Bangladesh has a rapidly increasing population and one of the highest levels of population densities in the world. Rice intensification allows for greater production per unit of land and addresses Bangladesh's critical land constraint. Given that there is virtually no new land available for production, rice availability will be increased through increasing yields. However, intensification of low value staple crops such as rice has its limits in terms of providing sufficient incomes. Therefore farmers will specialize in higher value products such as fish, poultry and horticulture in order to generate increased incomes on a limited land base. Increased demand for high-value, nutrient-dense food staples and success in rice production intensification will create opportunities for farmers to increase income of higher-value products. Increased production will stabilize or reduce prices. This dynamic will increase the availability of these food staples for the poor and reduce the incidence of malnutrition. The higher/more diverse nutritional content of these products will therefore increase the potential of nutritional food security and accessibility.

Individuals living in poverty typically focus on consuming sufficient quantities of cheap staple foods with limited nutritional content, grow staple foods over high value crops and tend to sell high-value nutritious food to increase their incomes for the purchase of basic needs like clothing, shelter and medicine. This tendency is explained/ aggravated by a general lack of knowledge of proper nutrition and its role in maintaining health and the affordability of more nutritionally dense foods. In sum, the production of high-value nutritious crops will increase both the availability and accessibility (through purchase with increased incomes) of nutritious food but does not ensure actual increased utilization and, therefore, does not ensure improved nutritional outcomes. Education of mothers and families regarding good nutrition and consumption of increased supplies of nutrient-dense foods will result in improved maternal health and reduced child malnutrition. In fact, home gardening projects implemented by the Mission's

non-emergency programs found that horticultural production in combination with nutritional education reduced malnutrition significantly more than vegetable production or nutrition education alone.

#### U.S. Government Diplomatic Support

Diplomatic efforts will encourage regulatory reform, market liberalization and anti-corruption to improve the private sector business climate for farmers and small and medium-sized enterprises. Equally important is the need to encourage the GOB to ensure that market based quality inputs are available, food quality/ safety is maintained and investments in electricity are also extended to the rural areas. The USG will encourage more international trade among Bangladesh and its rice producing neighbors (e.g., India, Thailand and Vietnam) to avoid a repetition of the rice export bans that occurred during the 2007-2008 food price crisis.

### **3.2 INVESTMENT IN MARKET SYSTEMS AND VALUE CHAIN INCREASED (INTERMEDIATE RESULT 2)**

#### Program Interventions

- Improve Business Enabling Environment to Promote Private Sector Growth – identify market constraints and corruption problems; and identify incentives for agricultural producers to work with the GOB and private sector groups to eliminate these constraints.
- Build Capacity of Farmers and SMEs in the Agricultural Sector to Promote Market Linkages - Facilitate organization of producers and enterprise associations and civil society organizations; promote collective participation and advocacy; facilitate greater access to market information; provide specialized extension services; address agricultural marketing systems and infrastructure; improve market efficiency of agricultural producers within targeted value chains; support effective and efficient input supply systems; enhance market linkages; strengthen value chain relationships, improve post-harvest storage, transportation and processing; and provide information on knowledge of quality standards, health and phyto-sanitary requirements.

#### Harmonization with Government of Bangladesh Plans and Priorities

IR-2 will support the GOB in investing in market systems. Activities will directly contribute to the following CIP Program Components: access to markets; improved food policy formulation; and in strengthening agricultural extension including participatory approaches to build farmers' capacities.

#### Development Hypothesis

Improvements to the enabling environment will result in increased private investment in the agricultural sector in Bangladesh. Trade (domestic and international) necessitates functioning markets. Lack of access to markets in Bangladesh and around the world has proved to be highly correlated with poverty. An improved business climate for the private sector is critical to facilitate greater market integration of farmers and agricultural-based SMEs. Investment in farmer training and increased SME capacity will result in increased agricultural employment and income. The promotion of private sector market linkages for farmers and agricultural-based SMEs will assure sustainability.

#### U.S. Government Diplomatic Support

Diplomatic engagement will be critical to improving the business enabling environment to promote private sector growth. Mission Dhaka will work with the GOB, business and other donors to advocate

for an improved business and investment climate in Bangladesh, which is critical to broad-based economic growth. Greater involvement of women will be emphasized. While these areas of emphasis may not involve formal policy reforms, they merit promotion on both the technical and diplomatic fronts.

### **3.3 FOOD SECURITY AND PLANNING CAPACITY ENHANCED (INTERMEDIATE RESULT 3)**

#### Program Interventions:

- Strengthen Enabling Environment for Policy Dialogue – Assist in identifying and advocating for policy and other reforms; generate policy research to fill knowledge gaps on critical food security and agricultural development issues; build a stronger and more integrated knowledge support system within the country for future food policy analysis and help agricultural development strategy decisions; strengthen the analytical capacity of key national institutions through collaborative applied research using state-of-the-art analytical tools and techniques; facilitate the policymaking process, stimulate policy dialogue, and communicate research outcomes to relevant GOB ministries, the private sector and civil society.
- Improve Capacity of the Government, Civil Society, Farmers and Private Sector Businesses to Engage in Policy Dialogue - focus on improved research and civil society dialogue benefiting especially those sections of the population most vulnerable to food insecurity; strengthen the capacity of the Food Planning and Monitoring Unit (FPMU) of the Ministry of Food and Disaster Management (MOFDM) to provide timely short-term rapid policy recommendations and monitoring of food security; enhance the capacity of the FPMU to provide medium and long term policy analysis and recommendations; improve skills and capacity of GOB partner Ministries, including the Ministry of Agriculture (MOA) to improve their contributions to the FPMU's analytical work; and facilitate the engagement of and strengthen Bangladeshi civil society, private sector and farmers on food security issues to help meet the needs of FPMU in fulfilling its advisory role in support of the food policy making process.

#### Harmonization with Government of Bangladesh Plans and Priorities

IR-3 will support the GOB in Food Security Policy & Planning. Activities will directly contribute to the following CIP Program Components: capacity strengthening for food policy and CIP formation, implementation and monitoring.

#### Development Hypothesis

Sound policies that encourage free markets, private sector investments and minimal government intervention will lead to more effective food security and increased investments in agricultural-lead growth. Also see Enabling Environment for policy dialogue above.

#### U.S. Government Diplomatic Support

USG policy will encourage improved governance, reduction in corruption at all levels, transparency and inclusiveness of the private sector and civil society in policy dialogue. Diplomacy will be used when communicating with all levels of government. Dialogue with the private sector, civil society, farmers and academia should be exercised at every available opportunity to encourage active participation. Also see Enabling Environment for policy dialogue above.



### **3.4 AGRICULTURE INNOVATION CAPACITY ENHANCED (INTERMEDIATE RESULT 4)**

#### Program Interventions:

- Rebuild Research Capacity - breeding research will focus on key agronomic constraints brought about by climate change such as salinity, drought and flood water tolerance; develop bio-fortified varieties of rice with increased iron, vitamin A and zinc content; focus primarily on downstream adaptive breeding for cost effectiveness; focus on improved agronomic management such as new fertilization practices and more efficient and productive irrigation techniques; agricultural research will focus on prioritized high value crops; socio-economic research will focus on the promotion of agribusiness including marketing, and value added transformation and analysis of how to improve the overall business enabling environment; natural resource management issues associated with agricultural intensification such as soil erosion and fertility management, and mitigating the potential environmental and human health consequences of increased use of pesticides and chemical fertilizers.
- Strengthen Extension Services to Farmers- strengthening of extension programs, involving both the government as well as NGOs such as BRAC, Grameen and the private sector, will support the diffusion of research results gained through USG-supported research; extension approaches will emphasize strengthening local farmers' own capacity through participatory approaches that provide feedback to researchers based on farmer experiences and priorities; explore partnerships with Bangladesh Agricultural University on curricula development/modernizing and Department of Agriculture Extension Training Center; and establish a small grants program with the private sector on youth training in aquaculture, horticulture, and livestock industries to prepare candidates for rural employment.

#### Harmonization with Government of Bangladesh Plans and Priorities

IR-4 will support the GOB in research, extension and climate change adaption. Activities will directly contribute to the following program components of the CIP: Integrated research and extension and response to climate change.

#### Development Hypothesis

Investment in increased capacity for research and extension will result in measurable increases in food availability and accessibility as well as adapt to the effects of climate change. Research and extension are strongly associated with technological innovation and diffusion as the basis of economic growth. However, research and extension are considered “public goods” in the sense that much of the benefits cannot be captured by the private sector and therefore a free market approach will lead to sub-optimal provision. Public financing from the GOB and/or donor community is further justified when research and extension targets social goals associated with food security such as poverty alleviation and the reduction of malnutrition.

#### U.S. Government Diplomatic Support

The USG will engage with the GOB and Civil Society to advocate for more targeted research and extension. A greater emphasis on participatory approaches, moving beyond demonstration plots in agricultural extension to an approach that emphasizes farmer learning by doing and integrates farmer evaluation and adaptive design of new agricultural practices. USG research and extension investments planning will encourage the GOB to emphasize participatory approaches.

### **3.5 LINKAGES WITH OTHER U.S. GOVERNMENT PROGRAMS**

#### Health and Nutrition

On-farm productivity activities will integrate more nutrient-dense food into the Bangladeshi diet, increase awareness of proper nutrition and sanitation and investments in biofortified rice. Increasing incomes will also assist in diet diversification. Under the food security policy and planning capacity programs sound nutrition policy will require investigative policy research to assist the GOB and other stakeholders in making informed decisions. Agricultural extension will be used to disseminate nutrition messaging and increase farmers' knowledge on growing nutrient rich foods, animals, and researchers will develop more nutritious varieties. It is envisioned that FTF will impact food availability and accessibility for 45 percent of Bangladeshi households that suffer from persistent poverty and food insecurity.

#### Strategic Nutrition Programming

Through an integrated partnership with the FTF and the Gates funded "Alive and Thrive" Nutrition Project, nutrition and food utilization will strategically link FTF and GHI in Bangladesh. Under GHI, the USG through USAID will support the GOB in restarting some of the 18,000 community clinics in order to mainstream nutrition and offer an integrated package of health and nutrition services to disadvantage groups, especially women and their children. Scaling up Nutrition (SUN) approaches to mainstream nutrition and increase food security; and replicating successful models from Helen Keller International (HKI) and the Title II non-emergency food assistance programs utilizing community gardens. Mission Dhaka will use GHI funding to support facility and community based Integrated Management of Childhood Illnesses platforms, community management of acute under-nutrition, training of health and community workers to target improvements in nutrition practices and healthy growth promotion in pregnancy and young children.

These efforts will be strengthened and reinforced by activities already in place under current Food for Peace PL480 Title II programs, which includes community-based health and nutrition services (including food rations) for pregnant women and children under two. Mission Dhaka will also provide technical leadership for integrated service models to support the GOB's commitment to mainstream its vertical nutrition program into the Ministry of Health's Health Services and Family Planning directorates in the next sector program. Given the poor nutritional status of women and children, the USG will increase nutrition programming to address malnutrition among women and children through both the public, commercial and NGO sectors. The Mission will strategically capitalize on these investments to improve exclusive breastfeeding, enhanced nutrition, and eating habits that lead to better health outcomes. GHI will target adolescent girls to improve their nutritional status and delay early marriage and pregnancy through linkages with USG's health program. Activities will support more balanced household food consumption and equitable distribution of food with a special focus on women and children.

GHI will support inclusion of nutrition education during the preconception, prenatal and post natal period. Evidence shows that the window of opportunity for improved nutrition begins at conception and continues through the first two years of life. In order to prevent malnutrition, GHI will promote two critical actions: exclusive breastfeeding from 0 to 5 months and appropriate complementary feeding from 6 to 23 months with continued breastfeeding. GHI will advocate for exclusive breastfeeding, promote healthy weaning practices and decrease the introduction of harmful items like sugar water, other milk products or honey into an infant's diet. Special emphasis will be given to the most underserved communities in the south-east and north-east parts of the country.

### Safety Net and Non-emergency Food Aid Programs

Mission Dhaka's three new Title II programs (2010-2015) targeting 3.5 million poor and extreme poor are geographically focused in areas with the highest rates of poverty and malnutrition, many located in southern Bangladesh, the proposed site for the FTF program. Title II partners are engaged at the community level to increase incomes through a value chain approach, improve the diet and increase income through diversified homestead gardening and further improve nutrition and health through maternal and child health programs focused on the first 1,000 days of life. The FTF program will collaborate with the Title II partners to improve on-farm productivity and value chain marketing by upgrading skills of farmers in their target area through training programs that provide access to the latest technologies, variety seeds, and inputs. Title II partners will effectively link their beneficiaries to value chains that offer employment and higher value for their crops and livestock.

### Global Climate Change

Crop varietal research and development will focus on the principal threats posed by climate change, flooding, increased salinity and drought. Diversification of production is one of the key responses to increased climate variability as diversification limits the magnitude of vulnerability and losses inherent in a predominantly monoculture system such as Bangladesh's rice-dominated agricultural production. Furthermore, intensification, as previously mentioned, is a strategy to get the most production out of a declining land base due to climate change induced losses.

Under USAID/Bangladesh's Natural Resource Management/Global Climate Change (GCC) programs, communities who live in and around forests, mangroves and open water bodies are being trained on conservation and alternative income generating opportunities that includes sustainable agriculture. While addressing the adaptation and mitigation components of GCC, these programs also directly affects food security. The program promotes sustainable management of water bodies, fisheries management and marketing. Bangladesh has the third largest open water fisheries system in the world and fish is the major source of protein in the country. The program (as well as those of other donors) will also promote tree planting which will stabilize and reinforce roads and embankments against flooding, as well as multipurpose income generating trees (e.g. fruit, fodder, fuel wood). Trees provide buffers against climatic shocks and mitigate climate change through carbon sequestration. Households will receive payments through the carbon trading system as the international framework in this domain evolves. These payments would, further reduce food insecurity of these highly vulnerable target groups.

### Democracy and Governance

The FTF support for civil society and local government strengthening through GOB extension services in economic governance (elimination of corruption, arbitrary regulation and anti-competitive monopolization of markets) to farmers, middle men, associations and communities is intimately linked to the Mission's Democracy and Governance (DG) program. Selection of local governments to be strengthened under the Mission's local governance program starting in early 2011 will overlap with FTF's targeted areas. DG activities will strengthen the capacity of local and national governance structures to provide services such as judicial contract enforcement, fair non-corrupt taxation and transparency in planning and use of budget resources for public services such as roads, electricity, and health and education services. In addition, activities will also strengthen private sector farmer, SME and agribusiness associations by providing training in legal rights and obligations concerning taxes and regulation.

## **3.6 CROSS-CUTTING THEMES**

**Gender:** Nutritional education will focus on women and children, though not to the exclusion of men who often have significant control over household expenditures as well as intra-household distribution

of food and other resources. The choice of many prioritized high value crops such as fruits and vegetables as well as small animal husbandry are the traditional purview of women. Extension activities will also focus on reaching out to women. One concern is that while production may be the domain of women, market sales are often controlled by men. As such, the market linkages capacity building component for farmers and SMEs will ensure strong female participation. The Mission is encouraging teaching the “whole family at once” approach: this assures access to women and the next generation of farmers and better information retention. Cultural, religious and societal attitudes will take time to change but the Mission will continue to elevate the role of women.

**Local Capacity Development:** A continuous focus of the FTF strategy will be local capacity development through training at the central and upazilla levels to increase access and quality services at the community level. In addition, FTF programs as part of the broader USAID Forward, Procurement Reform agenda will evaluate potential host country government and non-government partners. Our goal is to increase the number of Bangladesh institutions directly managing USAID assistance funds in order to better achieve FTF goals and objectives.

### **3.7 CONTRIBUTION TO USAID/BANGLADESH COUNTRY DEVELOPMENT COOPERATION STRATEGY**

The FTF Objective “Availability, Access and Use of Domestically Produced & Nutritious Foods Increased” will contribute to the Mission’s Goal of “A More Prosperous, Healthy, Accountable and Climate Resilient Nation” as will be reflected in the Country Development Cooperation Strategy, currently under development. The FTF strategy will be an annex to the CDCS, and in effect, becomes the Feed the Future component of the CDCS.

## **4. CORE INVESTMENT AREAS**

Mission Dhaka’s FTF strategy was developed based on a number of analyses and assessments conducted from January 2011 to May 2011. These analyses and assessments have led to the design of a major new program focused on transforming agriculture in Bangladesh. In early January 2011, USAID conducted ten technical analyses including program scalability, institutional, cost benefit, value chain and beneficiary analyses. These analyses will be used to design the expanded Feed the Future program. Based on the results of the analyses and the design, the Mission may need to refine the FTF strategy. This section lists the “quick start” interim programs designed in FY 2010 to lay the foundation for a new agriculture and food security program, and an illustrative list of new programs to be determined following the expanded FTF program design. Note: Where the dates of the activity are indicated, the project has started. For illustrative future activities you will note a “TBD” or subject to “availability of funds”.

### **4.1 ON-FARM PRODUCTIVITY INCREASED**

#### Accelerating Agriculture Productivity Improvement (AAPI) (FY2010-2015)

- Implementing Partner: International Fertilizer Development Center’s (IFDC)
- Type of Mechanism: Cooperative Agreement
- Expected Impact/Results: 3.5 million farmers in 120 upazillas in 16 districts primarily in southern Bangladesh will improve efficiency of fertilizer utilization, yields, and productivity; adoption of fertilizer deep placement (FDP) technology, which cuts nitrogen losses by 40 percent reducing air and water pollution while increasing farmers’ yield by more than 20

percent; increase incomes by 56 percent; decrease negative environmental impacts of over-use of fertilizers; policy analyses to support reforms; expanded private sector participation in the fertilizer sector; improve awareness of the potential of micro-enterprises in FDP product supply; and cost-sharing in micro-enterprise investment in FDP product briquette machines.

#### Cereal Systems Initiative for South Asia (CSISA) (FY2010-2015)

- Implementing Partner: a consortium of CGIAR (International Rice Research Institute, the International Maize and Wheat Improvement Center and the World Fish Center) that work with Bangladesh partners;
- Type of Mechanism: Field Support Public International Organization (PIO) Grant
- Expected Impact/Results: direct research and extension services to 60,000 farmers indirect benefits to 300,000 farmers; rapid and sustainable increases in agricultural production; expansion of agriculture extension “hub” systems that enable interaction by local ‘change agents’ including researchers, Department of Agriculture Extension agents, farmers, producer associations, NGOs, the private sector, local government leaders and agro-entrepreneurs; increased staffing and research activities; more efficient rice-wheat, fisheries and maize production systems adopting new seed technologies; innovative information delivery mechanisms, including robust decision support tools developed to better integrate producer information, market prices, weather and risk; participatory evaluation of new technology and management practices.

#### Agricultural Biotechnology Support Project II (ABSP II) (FY2005 – 2013)

- Implementing Partner: Cornell University;
- Type of Mechanism: Leader with Associates -Cooperative Agreement
- Expected Impacts/Results: improved applied research and development of saline and drought seed varieties for rice and chickpeas; established biosafety regulations to register seeds by Ministry of Environment and Forestry (MOEF); new seed varieties distributed; strengthened capacities of the Bangladesh Agriculture Research Council (BARC) and the BARI, and Lal Teer See Ltd. in the private sector on applied research.

#### Other USG Support for Increasing On-farm Productivity:

- US Peace Corps: Mission Dhaka seeks to reestablish Peace Corps in Bangladesh (the Peace Corps closed in 2005 after a series of bomb explosions). Volunteers may serve as rural-based extension agents in a variety of sectors; Given that IR1 & IR2 address the rural agricultural production-marketing and capacity building for farmers and nutritional education, Peace Corps volunteers in the agricultural, enterprise development and health sectors would be uniquely well placed to support these components of the FTFS. Finally, given the susceptibility of Bangladesh to climate change, environmental education volunteers could promote activities such as reforestation and improved cook stove that conserve fuel wood. Education volunteers could be tapped to give ‘Life Skills’ classes-teaching proper nutrition and sanitation.
- Centrally Funded USAID Programs: the Integrated Pest Management, Horticulture, and Aquaculture Collaborative Research Support Program, Farmer-to-Farmer program and Adaptation to Climate Change study by the IFPRI represent some of the potential activities that could be supported by FTF.

- US Food and Drug Administration: is currently conducting training in best practices in aquaculture to assure food safety of fish and shellfish production. This will help farmers meet safety standards and increase sales. These activities could potentially be upscaled.
- US Department of Agriculture: is ideally suited to provide technical assistance in a number of areas to increase on-farm productivity: (1) The 2010 Food for Progress Program (implemented by Cornell University) is providing technical assistance for technology improvements to increase productivity (liming of soil, raised bed cultivation and arsenic management), agri-business and entrepreneurship development and capacity building; (2) Under the WFP-McGovern-Dole Food for Education and Child Nutrition program in FY 2010, WFP will receive over 20,000 tons this year, which will help with children's nutrition; (3) USDA's Local and Regional Food Aid Procurement Pilot Project through Land O' Lakes (LOL) will improve and strengthen school-based food safety nets to vulnerable children in Jamalpur district of Bangladesh. LOL will also provide 75,000 school children with a 40 gram of highly nutritious cereal bar at 341 schools for 240 days of one school year (started in early September, 2010 and concludes in late August, 2011). Fortified with vitamin premix and glucose syrup, the cereal bars provides 200 kilocalories or 10 percent of daily energy needs for each of the school children.
- USAID/India Regional FTF Program: will explore avenues to develop a regional trade program that will ease trade export bans in times of rising prices.

## **4.2 INVESTMENT IN MARKET SYSTEMS AND VALUE CHAIN INCREASED**

Illustrative Producer Organization and Rural Enterprise Change Agent Project (subject to funds availability)

- Implementing Partner: To be determined
- Type of Mechanism: To be determined
- Expected Impact/Results: expanded market opportunities for producers in areas in which On-farm Productivity projects are active; marketing activities support farm productivity, diversification, storing and handling improvements, and safe-nutritious food marketing; the demand-driven project will address local constraints to enterprise and market development in response to the needs and interests of commercially oriented producer organizations and SMEs - activities addressed will include strengthened financial services; developed market centers; storage, transport, and handling improvements; establishment of seed production enterprises; trained input suppliers, and establishment of new enterprises related to fertilizer applicators, seed cleaners.

Illustrative Agricultural Marketing Project (subject to funds availability)

- Implementing Partner: To be determined
- Type of Mechanism: To be determined
- Expected Impact/Results: scale up current market support activities to rice, horticulture and fish production related value chains shifting emphasis to national level competitiveness.



#### Other USG Support for Increased Investment in Market Systems and Value Chain:

- US Peace Corps: Mission Dhaka seeks to reestablish Peace Corps in Bangladesh (the Peace Corps closed in 2005 after a series of bomb explosions). Volunteers may serve as small business volunteers could work with SMEs and local farmers associations building much needed entrepreneurial skills.
- Centrally Funded USAID Programs: A variety of programs could provide technical assistance to SMEs and associations.
- USDA: excellent resource for Sanitary/Phyto-sanitary training. The USDA staff in New Delhi (assisted if necessary by other USDA experts) is equipped to provide that training in Bangladesh to the GOB and private sector. This will help improve the marketing of agricultural products in Bangladesh.
- Millennium Challenge Corporation (MCC): Bangladesh is under consideration for selection as a candidate to seek threshold qualification to receive MCC funding. Criteria to meet the MCC threshold for selection notably include an improved policy environment and improved governance. MCC seeks to encourage improved policy and governance as a precondition for receiving substantial funding as a favorable policy and governance context is viewed as a necessary condition for the long-term success and sustainability of development assistance. This emphasis of MCC coincides strongly with the IR2 of the FTF strategy for Bangladesh, “Improved business enabling environment to promote private sector growth”. The candidacy of Bangladesh and possible eventual selection as an MCC country could strengthen this focus area by providing additional incentives to reform the business enabling environment as well as additional resources to achieve this goal.

### **4.3 FOOD SECURITY POLICY AND PLANNING CAPACITY ENHANCED**

#### National Food Policy Capacity Strengthening Program Phase II (NFPCSP II) (FY2009 – 2012)

- Implementing Partner: Food and Agriculture Organization;
- Type of Mechanism: PIO Co-funded by USAID and the EU
- Expected Impact/Results: To date, NFPCSP has assisted the GOB in developing the National Food Policy Plan of Action which is the foundational document for the Country Investment Plan. The Food Planning and Monitoring Unit (FPMU) of the Ministry of Food and Disaster Management (MOFDM) is responsible for the evaluating and monitoring the CIP's progress. The scale up phase will strengthen national capacity to monitor the country's Food Security situation and provide research based knowledge, timely information and quality advice to policy makers; the human capacity in the (FPMU) and 12 planning agencies at various levels in the GOB will be enhanced through post-graduate, short course, and on-the-job training, institutional management improvements, food security evidence based research and advisory services, and knowledge dissemination. The 12 agencies include the MOA, MOHFW, Ministry of Fisheries and Livestock (MOFL), Ministry of Water Resources, Ministry of Environment and Forestry, the Ministry of Finance, the Ministry of Planning and the Ministry of Rural Development and Cooperatives; and the Ministry of Women and Children Affairs; and establishment of an on-line data resource center in the FPMU that will be both a depository and sharing information resource for the government, researchers, academia, private sector and civil society.

Policy Research and Strategy Support Program for Food Security and Agricultural Development in Bangladesh (PRSSP) (FY2010 – 2013)

- Implementing Partner: International Food Policy Research Institute;
- Type of Mechanism: Public International Organization Grant
- Expected Impact/Results: enhance efficiency of food production and marketing, accelerate income growth in the rural and urban poor; improve nutrition for vulnerable groups; assess impact of current agricultural policies and effectiveness in light of the CIP through work with policy and planning units in MOA, MOFDM, MOHFW and MOFL; build a stronger and more integrated knowledge support system within the country for providing food policy analysis and agricultural development strategy decisions; strengthen the analytical capacity of key national institutions through collaborative evidence-based policy analyses using state-of-the-art analytical tools and techniques; The PRSSP will be country driven with the help of a research advisory committee comprised of key researchers and policy analysts from reputed research and implementation agencies, as well as by a steering committee at an inter-governmental level. Potential institutions could include: Bangladesh Institute of Development Studies; BRAC; Bangladesh Agricultural University, Mymensingh; Centre for Policy Dialogue; BARC; and other such institutions active in the relevant fields.

#### **4.4 AGRICULTURE INNOVATION CAPACITY ENHANCED**

Illustrative National Agricultural Research System (NARS) Project (subject to funds availability)

- Implementing Partner: To be determined
- Type of Mechanism: To be determined
- Expected/Impact/Results: improved research management, up-graded facilities and equipment, trained researchers and technicians, and funded competitive research grants; research would target rice productivity improvement, production diversity to increase the availability of nutrient-dense foods at home and market levels, improved water and natural resource management, competitive grants for public-private research, and mechanisms for facilitating up-take (dissemination) of research findings. The project would be closely coordinated with the World Bank's long term National Agricultural Technology Program (NATP) (projected 2008 to 2023), with USAID funding providing important complementary technical assistance and training.

Illustrative Agricultural Extension and Advisory Services Project (subject to funds availability)

- Implementing Partner: To be determined
- Type of Mechanism: To be determined
- Expected Impact/Results: Introduction of new approaches to rural extension services; work with both public and private extension and advisory services and coordinate activities with the NATP, providing complementary technical assistance and training to leverage operational funding from that program. The Department of Agricultural Extension, the Department of Livestock and the Department of Fisheries will be important partners. Support agricultural diversification, natural resource management, market and private enterprise growth, producer organization development, and public-private partnerships through enhanced

extension program capability; a common element to all the above is the need for decentralized planning and participatory implementation of extension activities.

#### Illustrative Bangladesh Agricultural Education and Training Project

- Implementing Partner: To be determined
- Type of Mechanism: To be determined
- Expected Impact/Results: expanded human resource capacity available to public and private sectors; work in partnership with a range of training institutions across the sector—universities and colleges offer degrees and institutions offering technical/vocational training and certificate-level courses in agriculture; reform training from an emphasis on production technology for students preparing for public sector employment to that of understanding value chain development, diversified production systems, natural resource management, and agribusiness management.

#### Other USG Support for Enhanced Agriculture Innovation Capacity

The USDA is well positioned to provide technical assistance in agricultural innovation. Currently through Cornell University, technology improvements to increase productivity by liming of soil, raised bed cultivation and arsenic management is being supported. Other innovative agricultural practices using USDA's vast experience in this area will be explored.

## 5. MONITORING & EVALUATION

An important element of the Multi-Year FTF Strategy is monitoring and evaluation which is an iterative learning process that will carry out the principle of a sustained and accountable approach. Program activities will be monitored through periodic field visits by Mission staff and quarterly performance reports submitted by the implementing partners. A detailed Performance Management Plan (PMP) including current plans will be prepared subsequent to the CDCS approval and expanded FTF program design.

The FTF PMP will expand on and include required and relevant FTF and custom indicators as shown in Annex A. Baselines and targets will be established for all the indicators and will be measured periodically as program investments are made over the timeframe of the strategy. Data collected will be disaggregated by sex. Collecting, analyzing, and reporting information about program progress and impact will facilitate learning from successes and mistakes and sharing of best practices. In order to have the best possible outcome for the strategy and to verify the strategy's hypothesis, analyses including a breadbasket study of two regions, institutional capacity, social impact, technical feasibility, environmental, financial, economic and cost-benefit will be utilized in the expanded FTF program design.

Figure 1, The FTF Results Framework (RF) outlines how the Bangladesh FTF Objective "Availability, Access & Use of Domestically Produced & Nutritious Foods Increased" will contribute to FTF Initiative Goal of "Sustainably Reducing Poverty and Hunger." It will do so by contributing to the Initiative's objectives of inclusive agricultural sector growth and improved nutritional status. The RF also shows how the Mission IRs addresses these objectives. The Mission will collect and evaluate verifiable data to learn from experience. Using systematic qualitative and quantitative methods, efforts will be made to better understand the contribution of our investments to broader changes and trends. Evaluations questions will be tailored to the programs and country-level priorities, and may focus on: the efficiency of the USG implementation approach (with attention to program costs); the development hypothesis

underlying the programs; and program impact to which USG resources are contributing. Impact evaluations will help ensure efficacy before scale-up and also provide lessons for future program design.

A robust system to measure progress and ensure accountability is central to improving aid effectiveness. The Mission will continue to build capacity in the GOB to monitor, evaluate, and report progress on the CIP. The National Food Policy Capacity Strengthening Program funded by USAID/EU will expand training to build capacities to further develop and ensure coordinated monitoring of the CIP, and enhance the capacity of staff of the Food Division of the Ministry of Food and Disaster Management and its departments to contribute to the implementation.

The USG, through USAID, will support national surveys to track prevalence of malnutrition (eg. measure DHS) under the GHI program and is supporting IFPRI to conduct a household food security and diet diversity survey among women and children over a four year period and monitor data from other food security and nutritional surveillance surveys.

## 6. FINANCIAL PLANNING

Mission Dhaka's FTF strategy interventions to focus the portfolio, promote private sector led investment in profitable technologies, marketing systems and high-value nutrient-dense product chains, enhance capacity in food security policy and planning, and research require financial resources as presented in the budgets incorporated in this document. Mission Dhaka's prioritization is not by IRs but is a multi-layered approach to achieve sustainability. The program has been designed to expand/scale up when additional resources become available.

The FTF Program will be implemented by:

- Incorporating on-going USAID/Bangladesh activities that have been designed/re-designed to contribute substantially to achieve food security objectives (including PL-480 Multi-Year Assistance Program and environmental landscape projects);
- Phasing in "quick-start" activities in FY2011 to demonstrate potential for rapid and substantial impact and to guide development of larger investments; and
- Rolling out longer term investments in FY2012 to achieve impacts at scale

Funding levels for the FTF Program are uncertain, but at a higher FTF funding level, the Mission Dhaka's expanded impact and expectations on its nutrition and poverty indicators will result in:

- An increased number of targeted households
- An increase area planted to non-rice crop to 30 percent
- An increase in nutritional awareness

The number of households reached will increase exponentially - by more than the percentage increase in funding – due to economics of scale, lessons learned and efficiencies in service delivery. Furthermore, with a larger presence in the area, USAID will be able to act as a leader and leverage other donor/government funds towards the common objectives. We will also engage in 1-3 new activities with the higher level of funding resulting in more investments being made in long-term sustainable solutions that increase capacity building for agricultural extension, education and research.

Annex C provides a summary Resource Plan for the CIP from all potential funding sources:

1. Country government funding includes FTF budget resources using the base level of funding, DA, Global Health Initiative/Nutrition, PL480 Title II (Food for Peace)
2. Other USG funding includes funds that are managed centrally in Washington
3. GASFP Trust Funds
4. Other donor funding; and
5. Other sources (leveraging private sector, civil society, etc.)

#### Other Donor Funds

Several donors will contribute to the CIP though funding from some donors is still not fully accounted for. The Global Agriculture and Food Security Program will contribute Funds to the CIP and will be focused on Technology Generation and Adoption; Water Management; Linking Farmers to Markets; and Technical Assistance, Capacity Building and Project Management.

The EU, Department for International Development (DFID), and Danish International Development Agency (DANIDA) contribute substantially to social safety nets through agriculture, cash for work, livelihood and nutrition training and asset distribution programs. The EU and DANIDA work mostly in the South and DFID in the North Central and the Char lands. The EU with USAID provides capacity training with the MOFDM and DANIDA provides technical advisors for various ministries. The German and Dutch Embassies provide technical assistance, equipment and cash for work on many rural infrastructures such as polders, sea embankments, river dredging and farm to market roads, mainly in the South. ADB is concentrating its investments on high value crops working primary in the West running north to south in the “horticultural belt” of the country. The Asian Development Bank (ADB) is also considering working in livestock value chains in the coming years. World Bank will be working on fisheries.

#### Other Sources Leveraged (private sector, civil society)

Many private sector companies offer outreach services to farmers though no financial data is available for private sector and civil society. Some NGOs offer services such as inputs and loan credits, extension services, telecommunications access, and agro-processing; when accounted for, total contributions could be substantial. Some US corporations have contributed to natural disasters and social programs and could also continue to be a source of partnership.

## 8. ANNEXES

### ANNEX A. BANGLADESH FEED THE FUTURE PROGRAM ILLUSTRATIVE INDICATORS

FTF Indicator	Indicator
On-Farm Productivity	1. Increased yields of food crops (custom)
	2. Increased farm income (custom)
	3. Increased area planted to non-rice crops (custom)
	4. Increased value added processing of food staples (custom)
	5. Increased nutritional awareness
	6. Increased family consumptions of nutrient-rich foods
7. Market and Value Chain Efficiency	8. Increased use of market linked inputs (custom)
	9. Increased diversification of agricultural production (custom)
	10. Increased person-days employment in agriculture (custom)
11. Food Security Policy & Planning Capacity Building	12. FTF indicator: 4.5.2-38 Value of new private sector investment in the agriculture sector or food chain leveraged by FTF implementation
	13. Improved agribusiness investment environment
	14. Improved effectiveness of GOB sector investments (custom)
15. Agricultural Innovation Capacity Building	16. New technologies released by research programs
	17. Agricultural graduates find employment (custom)



## **ANNEX B. PRELIMINARY COST BENEFIT & BENEFICIARIES IMPACT ANALYSIS OF THE FEED THE FUTURE STRATEGY**

### **Estimated Impacts: Poverty Alleviation<sup>1</sup>**

The estimated beneficiary analysis looks at the overall impacts of the strategy as an integrated whole. In general, the rice intensification strategy is combined with a progressive diversification into other high-value sectors such as horticulture and fisheries. In order to err on the side of conservative estimates, this analysis sums the joint cost of multiple projects per household, i.e. the costs of rice intensification, horticulture and fisheries. These costs are based on ongoing (for rice) and previous (for aquaculture) projects in Bangladesh and comparable projects (for horticulture) in Nepal. Also the costs per beneficiary in Nepal are almost certainly higher in Nepal, given the mountainous terrain, poor infrastructure and lower population density. Given the sum of all three projects and the high reference point for Nepal, the cost per beneficiary analysis errs on the side of being conservatively high. In the case of the horticultural project, the benefits were deemed as sufficient to pull the beneficiaries out of poverty. Again, to err on the side of conservative estimations, this analysis assumes that the joint benefits of horticultural, rice and aquaculture interventions will be enough to pull the beneficiaries out of poverty in Bangladesh. The following estimates of beneficiaries are intended to provide rough orders of magnitude and will be updated as additional data come in and analysis is completed.

Through Feed the Future in Bangladesh, over the next five years:

- An estimated 879,000 vulnerable Bangladeshi women, children, and family members – mostly smallholder farmers – will receive targeted assistance to escape hunger and poverty.
- More than 371,000 children will be reached with services to improve their nutrition and prevent stunting and child mortality.
- Significant numbers of additional rural populations will achieve improved income and nutritional status from strategic policy and institutional reforms.

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<sup>1</sup> These preliminary targets were estimated based on analysis at the time of strategy development using estimated budget levels and ex-ante cost-beneficiary ratios from previous agriculture and nutrition investments. Therefore, targets are subject to significant change based on availability of funds and the scope of specific activities designed. More precise targets will be developed through project design for specific Feed the Future activities.

## ANNEX C. GOVERNMENT OF BANGLADESH FUNDING TOWARDS COUNTRY INVESTMENT PLAN

### Government of Bangladesh Funding Towards the Country Investment Plan

Table A details the planned composition and level of spending to implement each of the CIP components based on: (i) the currently available level of financing (as projected for the next 5 years) in support of the programmes based on the Government's Annual Development Programme (ADP), which incorporates both budget and external financing earmarked for investment; (ii) the estimated costs of the above CIP programmes over a 5-year implementation period, estimated on the basis of the expenses forecasted in the National Strategy for Accelerated Poverty Reduction II (revised), which has been endorsed by the Government in December 2009; and (iii) the financing gap.

This already incorporates the assumption that the ADP for the priority investments foreseen in the CIP will increase by 12 percent annually, which is the increase observed between the present fiscal year and the next one. This strong commitment of the Government is also apparent in the structure of the Government's budget summarized in Table A: the budget for agriculture, fisheries and livestock represented 11 percent of total budget in 2009-10 and will represent 12.0 percent next year – an increase of 9.4% which is much more than the 5.7 percent increase of the general budget.

**Table A. Government Budget for Agriculture, Livestock and Fisheries (2009-2011)**

Ministry/ Sector	Budget 2009-2010		Budget 2010-2011		Annual
	In Million	% of Total	In Million	% of Total	Percent
Agriculture, Fisheries & Livestock	955	11.6%	1045	12.0%	9.4%
Rural Development and Water Resources	2357	28.6%	2413	27.7%	2.4%

### Financing Sources and Gaps

Table A shows that, as currently planned, the GOB budget would contribute to a portion of the CIP, leaving a financing gap of 70 percent, equivalent to US\$ 7.1 billion. The GAFSP is expected to fill critical parts of this gap. In order to enable significant impact of the GAFSP funds (which represent about one percent of the total gap) the choice has been to concentrate these on the first component (food availability), which represents about 60 percent of the financing gap. The generation and adoption of technologies both fit in Program 1 of the CIP, which shows the biggest financing gap and is a critical requirement in confronting the consequences of climate change on food security. In complement, the Government considers improved water management (Program 2) as an indispensable complement to these GAFSP activities. Finally, support to marketing is considered a necessary complement that would contribute to improved availability, access (through improved valued added and incomes) and nutrition (through diversification of the diet).