



a U.S. Government initiative

SEE THE **FUTURE**  
FEED  
CHANGE

# TANZANIA

## 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.

*Document approved February 22, 2011*

[feedthefuture.gov](http://feedthefuture.gov)

# TABLE OF CONTENTS

<b>ABBREVIATIONS AND ACRONYMS .....</b>	<b>4</b>
<b>I. DEVELOPMENT CHALLENGES AND OPPORTUNITIES .....</b>	<b>6</b>
1.1 CONTEXT AND CHALLENGES.....	6
1.2 OPPORTUNITIES .....	6
1.3 FEED THE FUTURE (FTF) STRATEGIC CHOICES .....	8
1.3.1 Targeted value chains .....	8
1.3.2 Targeted regions .....	8
1.3.3 Cost-benefit analysis .....	9
1.3.4 Opportunities for collaboration .....	10
1.3.5 Gender considerations .....	11
1.3.6 Natural resource management and climate change issues .....	12
1.3.7 Regional issues .....	12
<b>2. FEED THE FUTURE OBJECTIVE, PROGRAM STRUCTURE, AND IMPLEMENTATION.....</b>	<b>13</b>
2.1 INTERMEDIATE RESULT 1: IMPROVED AGRICULTURAL PRODUCTIVITY .....	15
2.2 INTERMEDIATE RESULT 2: EXPANDING MARKETS AND TRADE .....	16
2.3 INTERMEDIATE RESULT 3: INCREASED INVESTMENT IN AGRICULTURE- AND NUTRITION-RELATED ACTIVITIES .....	17
2.4 INTERMEDIATE RESULT 4: INCREASED RESILIENCE OF VULNERABLE COMMUNITIES AND HOUSEHOLDS .....	18
2.5 INTERMEDIATE RESULT 5: IMPROVED ACCESS TO DIVERSE AND QUALITY FOODS.....	18
2.6 INTERMEDIATE RESULT 6: IMPROVED NUTRITION-RELATED BEHAVIORS AND INTERMEDIATE RESULT 7: IMPROVED UTILIZATION OF MATERNAL AND CHILD HEALTH AND NUTRITION SERVICES.....	18
2.7 INTERMEDIATE RESULT 8: IMPROVED ENABLING POLICY ENVIRONMENT FOR BOTH AGRICULTURE AND NUTRITION .....	19
<b>3. CORE INVESTMENT AREAS.....</b>	<b>19</b>
3.1 TARGETED VALUE CHAINS .....	19
3.1.1 Rice.....	20
3.1.2 Maize .....	22
3.1.3 Horticulture .....	23
3.2 CORE INVESTMENT AREA 1A: SYSTEMS TRANSFORMATION THROUGH AGRICULTURAL PRODUCTION AND PROCESSING .....	24
3.2.1 NAFKA – Staples Value Chain Development (Rice and Maize) .....	27
3.2.2 Market-Based Solutions to Reduce Poverty and Improve Nutrition .....	27
3.2.3 Sustainable Horticulture for Income and Food Security in Tanzania (SHIFT).....	27
3.2.4 Tanzania Agriculture Productivity Program (TAPP) .....	28
3.3 CORE INVESTMENT AREA 1B: SYSTEMS TRANSFORMATION THROUGH MARKET ACCESS AND SUSTAINABLE NATURAL RESOURCE MANAGEMENT .....	29
3.3.1 Engineering Service Component.....	30
3.3.2 Irrigation Infrastructure Component .....	30
3.3.3 Rural Roads Infrastructure Component.....	31
3.3.4 Climate Change Adaptation Component.....	31
3.4 CORE INVESTMENT AREA 2: IMPROVING NUTRITION.....	33
3.4.1 Flagship Nutrition Program .....	33

3.5	CORE INVESTMENT AREA 3: CAPACITY BUILDING AND SUPPORT SERVICES .....	35
3.5.1	<i>Support to Comprehensive Africa Agriculture Development (CAADP) Post Compact Activities.....</i>	36
3.5.2	<i>Africa Leadership Training and Capacity Building .....</i>	36
3.5.3	<i>Sokoine University of Agriculture Capacity Building.....</i>	36
3.6	CORE INVESTMENT AREA 4: ENABLING POLICY ENVIRONMENT .....	38
3.6.1	<i>Enabling Policy Environment for Agricultural Sector Growth.....</i>	40
<b>4.</b>	<b>MONITORING AND EVALUATION.....</b>	<b>41</b>
<b>5.</b>	<b>FINANCIAL PLANNING .....</b>	<b>43</b>
<b>6.</b>	<b>MANAGEMENT .....</b>	<b>43</b>
<b>7.</b>	<b>ANNEX: FEED THE FUTURE INDICATORS .....</b>	<b>44</b>

## ABBREVIATIONS AND ACRONYMS

<b>AGRA</b>	Alliance for Green Revolution in Africa
<b>AgCLIR</b>	Agribusiness Climate Legal Institution Reform
<b>AOTR</b>	Agreement Officer Technical Representative
<b>ASARECA</b>	Association for Agricultural Research in East and Central Africa
<b>ASDP</b>	Agriculture Sector Development Program
<b>BEST</b>	Business Environment Strengthening of Tanzania
<b>BizCLIR</b>	Business Climate Legal Institutional Reform
<b>CAADP</b>	Comprehensive Africa Agriculture Development Program
<b>CGIAR</b>	Consultative Group of International Agriculture Research
<b>CFP</b>	Cochrane Fellowship Program
<b>COMPETE</b>	Competitiveness and Trade Expansion
<b>COTR</b>	Contracting Officer Technical Representative
<b>CRSP</b>	Collaborative Research Support Program
<b>DAI</b>	Development Alternatives Incorporated
<b>DCA</b>	Development Credit Authority
<b>DFID</b>	Department for International Development
<b>DPG</b>	Development Partners Group
<b>EAC</b>	Eastern Africa Community
<b>EGAT</b>	Economic Growth, Agriculture and Trade
<b>FANTA</b>	Food and Nutrition Technical Assistance
<b>FAO</b>	Food and Agriculture Organization
<b>FCI</b>	Financial Crisis Initiative
<b>FDI</b>	Foreign Direct Investment
<b>FEWSNET</b>	Famine Early Warning System Network
<b>FY</b>	Fiscal Year
<b>GATE</b>	Greater Access to Trade Expansion
<b>GBS</b>	General Budget Support
<b>GDA</b>	Global Development Alliance
<b>GDP</b>	Gross Domestic Product
<b>GFSR</b>	Global Food Security Response
<b>GOT</b>	Government of Tanzania
<b>HEPAD</b>	Higher Education Partnerships for African Development
<b>HBS</b>	Household Budget Survey
<b>IITA</b>	International Institute of Tropical Agriculture
<b>IFAD</b>	International Fund for Agriculture Development
<b>IQC</b>	Indefinite Quantity Contract
<b>iWASH</b>	Integrated Water, Sanitation and Hygiene program
<b>JAST</b>	Joint Assistance Strategy for Tanzania
<b>LGU</b>	Land Grant University
<b>MAFSC</b>	Ministry of Agriculture, Food Security and Cooperatives
<b>MDGs</b>	Millennium Development Goals
<b>MEMS</b>	Monitoring and Evaluation Management System
<b>MKUKUTA</b>	National Strategy for Growth and Poverty Reduction (GOT)
<b>MT</b>	Metric Tons
<b>MUS</b>	Multiple Use Services
<b>NAPA</b>	National Adaptation Plan for Action
<b>NBS</b>	National Bureau of Statistics
<b>NEPAD</b>	New Partnership for Africa's Development

<b>NOAA</b>	National Oceanic and Atmospheric Administration
<b>NAR</b>	National Agricultural Research
<b>OTA</b>	Office of Technical Assistance
<b>PAPA</b>	Participating Agency Program Agreement
<b>PLACE</b>	Prosperity, Livelihoods and Conservation Ecosystems
<b>PLHA</b>	People Living with HIV/AIDS
<b>PESA</b>	Private Enterprise Support Activities
<b>RANET</b>	Radio and Internet for the Communication of Hydro-Meteorological & Climate Related Information
<b>SADC</b>	Southern Africa Development Community
<b>T-MEMS</b>	Tanzania Monitoring and Evaluation Management Services
<b>TAHA</b>	Tanzania Horticultural Association
<b>TASTA</b>	Tanzania Seed Trade Association
<b>TFNC</b>	Tanzania Food and Nutrition Center
<b>TMA</b>	Tanzania Meteorological Agency
<b>TPSF</b>	Tanzania Private Sector Foundation
<b>TTIS</b>	Tanzania Trade Integration Strategy
<b>USACE</b>	United States Army Corps of Engineering
<b>USAID</b>	United States Agency for International Development
<b>USG</b>	United States Government
<b>USDA</b>	United States Department of Agriculture
<b>USTDA</b>	United States Trade and Development Agency
<b>WFP</b>	World Food Program
<b>WID</b>	Women in Development
<b>WLTIE</b>	Women's Leadership Training in Economics
<b>WTO</b>	World Trade Organization

# I. DEVELOPMENT CHALLENGES AND OPPORTUNITIES

## I.1 CONTEXT AND CHALLENGES

Tanzania is a democratic republic of 40 million people, with an average annual GDP growth rate of 6-7 percent over the past decade. Despite recent growth of the Tanzanian economy, the poverty rate has only decreased two percent and the number of people below the poverty line has actually increased due to population growth since 2001. Human development indicators, though improving gradually, remain low. It is unlikely that Tanzania will be able to achieve Millennium Development Goal (MDG) 1 without significant additional intervention. While nationally, 34 percent of Tanzanians are below the income poverty line, some regions have as much as half the population unable to meet their basic needs. Although decreasing, the national HIV prevalence rate is 5.7 percent. The country has high population growth, with 43 percent of the population under the age of 15.

Agriculture continues to be the mainstay of the economy, contributing close to 26 percent of GDP and employing 75 percent of the labor force, with women contributing to more than 75 percent of the agricultural labor. Tanzania is a net importer of rice; however, with improved yields, it could fulfill growing domestic and regional demand. Furthermore, while Tanzania is largely self-sufficient in its main staple crop, maize, it still faces shortfalls in some years due to weather variability and low yields. Climate change impacts could pose serious threats to subsistence farmers, including prolonged drought as well as extreme and unpredictable weather events. Limited financial resources, weak infrastructure, and poor policies have not provided incentives to develop the agricultural sector. Only nine percent of the Tanzanian population has access to formal financial services, and only four percent has received a personal loan from a bank. Further, the credit squeeze resulting from the global financial crisis was felt acutely in Tanzania's agriculture sector.

A key factor undermining Tanzania's progress towards economic growth and poverty reduction is chronic undernutrition, which currently affects four out of every ten children under five nation-wide<sup>1</sup>. Undernutrition diminishes the ability of children to grow, learn and earn income as adults, and thus contribute to the economy. It is caused primarily by inadequate access to a diverse and quality diet and poor caring and feeding practices at the household level. Undernutrition begins even before children are born because over half of pregnant women suffer from anemia<sup>2</sup>. Undernutrition also costs Tanzania 2.65 percent of its GDP, due to lost revenues mainly in the agriculture sector that are attributable to poor cognitive and physical development.

## I.2 OPPORTUNITIES

### Agricultural Opportunities

Despite the above-mentioned challenges, the opportunities are great for Tanzania to reduce poverty and hunger by increasing incomes through equitable agricultural growth and improving nutrition. Domestic advocates for an agriculture-based economic growth model in Tanzania describe the country as a sleeping agricultural giant. The potential is great, with a country abundant in land, water resources, motivated agricultural laborers and entrepreneurs and access to international markets through a major port. Women are already participating in value chain work, thus there is opportunity to both engage and empower them as beneficiaries of value chain efforts. The climate is generally favorable for many crops, and with increased irrigation and improved seeds, productivity and yields could rapidly increase.

---

<sup>1</sup> TDHS 2009/10

<sup>2</sup> TDHS 2009/10

## Nutrition Opportunities

Efforts are already underway in country to reposition nutrition higher on the national policy agenda, recognizing that addressing the root causes of undernutrition in Tanzania would have huge potential for reducing under-five mortality, increasing work productivity and improving economic growth. Tanzania is recognized as an “Early Riser” under the global Scaling Up Nutrition (SUN) Framework for Action, and both the National Nutrition Strategy (2010-2015) and the nutrition component of the Tanzania Agriculture and Food Security Implementation Plan (TAFSIP) provide a solid foundation from which the Government and development partners can advance a common agenda for improving nutrition.

## Political Commitment to Agriculture and Food Security Investment

The Tanzanian government, private sector, and civil society have recently demonstrated a sustained commitment to realize the potential of agriculture for Tanzania. The Government of Tanzania’s (GOT) 2006-2015 Agricultural Sector Development Program (ASDP) is part of the broader National Strategy for Growth and Poverty Reduction (MKUKUTA). A private sector initiative to invigorate agriculture through the *Kilimo Kwanza* (Agriculture First) campaign has been endorsed by the government as well.

## Southern Agricultural Growth Corridor of Tanzania

Other actors are coalescing around Tanzania’s country-led plan and the opportunities that it offers. One element of the Tanzanian plan includes strategic investments in the Southern Agricultural Growth Corridor of Tanzania (SAGCOT). It is a public-private partnership which aims to boost agricultural competitiveness in Tanzania by aligning investment in agriculture with existing infrastructure from the port of Dar es Salaam through the central and southern parts of the country to Zambia. The partnership is being led by numerous Tanzanian private sector companies represented by their umbrella organization, the Agriculture Council of Tanzania. International support for SAGCOT includes General Mills, Yara International, Unilever, Syngenta, DuPont, Land ‘O Lakes, Monsanto, and SAB Miller. The SAGCOT investment blueprint was presented by the Tanzanian President at the World Economic Forum in January 2011. More than 80 percent of FTF investments will be located in the corridor.

## Comprehensive Africa Agriculture Development Program

Comprehensive Africa Agriculture Development Program (CAADP) analytics<sup>3</sup> for the compact flagged that in order to effectively reduce poverty and food insecurity, a key challenge will be to address the underlying problems in the structure and level of growth among the different subsectors. In order to maximize the impact of growth on poverty reduction and food security, growth must be broader, inclusive of value chains in which the poor participate, and targeted to reach as many poor people as possible. In addition, the analysis recommended that Tanzania should invest more in research and extension to address the underlying causes of low productivity in the pro-poor value chains.

Based on these recommendations, numerous stakeholders have been actively developing the CAADP plan, known as the TAFSIP. With development of a comprehensive country-led investment plan through CAADP, conditions are ideal for Tanzania to benefit from significant increases in agricultural assistance to support scaled impact on food security, poverty, nutrition and economic growth.

---

<sup>3</sup> Conducted as part of the CAADP compact process.

### I.3 FEED THE FUTURE (FTF) STRATEGIC CHOICES

Within this dynamic context, the U.S. Government (USG) commitments through FTF have been designed to complement the work of other actors and make a significant impact through areas of comparative advantage for the USG. The key FTF investments will be made along four categories where the USG can play the role of “superconductor” to advance systemic change through innovative public and private partnerships:

**Table 1. Feed the Future Core Investment Areas**

CORE INVESTMENT AREAS	
<b>1</b>	<b>Systems transformations for the rice, maize, and horticulture value chains through:</b> <ul style="list-style-type: none"><li>- <b>Agricultural Production and Processing</b></li><li>- <b>Market Access and Natural Resource Management</b></li></ul>
<b>2</b>	<b>Nutrition, with major interventions targeting children under five and pregnant women</b>
<b>3</b>	<b>Agricultural Support Services and Capacity Building, including research and development and financial services</b>
<b>4</b>	<b>Enabling Policy Environment, by addressing major binding constraints</b>

#### I.3.1 Targeted value chains

FTF will have the highest impact with focused interventions in areas that offer opportunities to reduce poverty and undernutrition. Selection of value chains was based on analysis of potential to improve incomes and nutrition, prioritization by the country, and complementary interventions by other actors. Below are brief descriptions of the targeted value chains, with further details in Section 3.

- Rice was selected as the primary value chain for investment. Regional analysis shows that Tanzania has a comparative advantage in rice production, although there are opportunities to enhance competitiveness. It is the second most important food in terms of consumption in Tanzanian diet, and has been increasing as a proportion of the Tanzanian diet, and also has potential to provide for regional market demand. Since nearly 1 in 5 farmers are involved in rice production, advances in this value chain can support broad-based growth.
- Maize was selected as a secondary value chain. It is the most important food item in terms of consumption in the Tanzanian diet. Nearly two-thirds of Tanzanian farmers are engaged in maize production, so broad pro-poor growth can be achieved by targeting this value chain. The milling process offers opportunities to enhance capacity of medium private sector milling enterprises to fortify food to improve nutrition. A complementary diplomatic strategy will address the trade policies that have hampered growth in this value chain.
- Horticulture will be the other secondary focus value chain. It offers the opportunity for increased income through meeting demand in domestic, regional and international markets, as well as playing an important role to improve nutrition through dietary diversity. Women are highly engaged in this value chain.

#### I.3.2 Targeted regions

FTF Tanzania will focus the scope of interventions to achieve scalable high growth impact on the “productive” poor in targeted areas. Morogoro and Zanzibar will be the focus of irrigated rice production, while maize value chains will be promoted in Dodoma and Manyara regions. Horticulture



value chains are focused in the central, northern and southern highland regions, as well as Zanzibar. Dodoma, Manyara and Morogoro have been identified as the primary regions of focus for nutrition-related interventions.

FTF investments are targeted in regions selected for their agricultural growth potential and opportunity for reducing undernutrition and poverty. The areas were prioritized by GOT and private investors, and can leverage complementary investments from other donors. These areas are within close proximity of transport corridors for market access and impact on nearby food insecure areas. The water resources and climatic conditions are appropriate for selected value chains.

The 2007 Household Budget Survey (HBS) indicates that well over one-third of people in FTF target rural areas live below the poverty line (37.6 percent), much higher than in Dar es Salaam (16.4 percent), or in other urban areas (24.1 percent). Poverty is particularly acute in Zanzibar, where nearly half (49 percent) of approximately one million people live below the income poverty line. Both Dodoma and Manyara suffer from chronic food shortages despite strong potential for agricultural development. Dodoma has the highest rates of chronic undernutrition among children under five in the country (56 percent).

**Table 2. Feed the Future Targeted Regions**

<b><u>Value Chain</u></b>	<b><u>Region</u></b>	<b><u>Districts</u></b>
Rice	Morogoro and Zanzibar	Mvomero, Kilombero and Zanzibar
Maize	Manyara and Dodoma	Kiteto and Kongwa
Horticulture	Arusha, Manyara, Kilimanjaro, Tanga, Coast, Dodoma, Iringa, Mbeya and Zanzibar	Arumeru, Babati, Karatu, Hai, Moshi-rural, Lushoto, Korogwe, Kibaha, Bagamoyo, Kisarawe, Mvomero and Zanzibar

### **I.3.3 Cost-benefit analysis**

#### **Agriculture**

An estimated 834,000 vulnerable Tanzanian women, children, and family members---mostly smallholder farmers---will receive targeted assistance to escape hunger and poverty<sup>4</sup>.

Both financial and economic returns to investment in irrigation are extremely positive. A rapid cost-benefit analysis conducted by the mission for the irrigation project forecasts an internal rate of return (IRR) of 24 percent, which is above the referenced minimum IRR of 12 percent used by the World Bank. The assumptions for this cost-benefit analysis are based on a 20-year cost/benefit stream, two tons/ha incremental yields as the result of change from rain-fed to irrigated rice, and \$700/ton wholesale price of rice (which is quite conservative as the price ranges between \$700 and \$1,000 per ton). A World Bank assessment (2010) of the development and rehabilitation of 46,000 hectares of irrigated land under the Tanzanian ASDP program found that average yields for paddy rice increased from 1.9 tons to 4.5 tons per hectare and average gross income per hectare rose from Tsh 1.5 million to Tsh 3.6 million per year.<sup>5</sup> The economic analysis observed that farm-level returns to community investments in irrigation

<sup>4</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.

<sup>5</sup> World Bank IDA Pilot Crisis Response Window Study May 2010

technology exceeded the minimum increases required for a 12 percent Economic Rate of Return (ERR). For rehabilitation, the ERR was 76 percent and for new irrigation development the ERR was 32 percent.

## Nutrition

A review of published studies shows that investment in a comprehensive package of proven nutrition interventions can achieve a “one-fifth to one-third decrease in stunting among children under five years over a two to three year period”.<sup>6</sup> Under the U.S. Government FTF Strategy more than 439,000 children will be reached with services to improve their nutrition and prevent stunting and child mortality<sup>7</sup>. Households reached through the nutrition flagship program will intentionally overlap with those targeted through the agriculture programs in order to maximize programmatic synergies and impact.

### **I.3.4 Opportunities for collaboration**

There are many active donors in Tanzania, whose priorities are now being aligned with the country-led plans to ensure effective collaboration and coordination. The Agriculture Development Partners Group meets on a regular basis to coordinate planned assistance and discuss the government of Tanzania priorities. Most development assistance in Tanzania is in the form of General Budget Support (GBS) or basket funding. USAID’s unique development modality has led both donors and GOT to request U.S. Government support for specific activities where aid modalities have limited their ability to rapidly address short-term needs with potentially broad impact. GOT and donors recognize that USAID’s comparative advantage is to rapidly respond with programs to support a thriving private sector-led agricultural transformation.

Food security and nutrition activities are coordinated between agriculture- and nutrition-related ministries: Ministry of Agriculture, Food Security and Cooperatives; Ministry of Livestock and Fisheries; Ministry of Industry, Trade and Marketing; Ministry of Health and Social Welfare; Tanzania Food and Nutrition Center; and the Prime Minister’s Office Regional Administration and Local Government. USAID/Tanzania also participates in the Development Partners Group for Nutrition and the government-led Multisectoral Working Group on Nutrition. Civil society and private sector association partners include: The Tanzania Private Sector Foundation (TPSF), the Grain Council, Tanzania Horticultural Association, the Agricultural Council of Tanzania, Tanzania Seed Association, the Partnership for Nutrition and the Foundation for Civil Society. These entities were involved and consulted in the creation of the TAFSIP and FTF. With respect to gender, USAID/Tanzania is Co-Lead in the Development Partners Group on Gender, where it works to ensure that gender is adequately addressed in different GOT policy review processes such as those for Kilimo Kwanza, CAADP and the National Nutrition Strategy.

---

<sup>6</sup> Bhutta ZA, Ahmed T, Black R et al. What Works? Interventions for maternal and child undernutrition and survival. The Lancet (2008) 41-64. Advancing Nutrition for Long-Term, Equitable Growth (2008) World Bank, Tanzania Food and Nutrition Centre and UNICEF. Horton S, Shekar M, McDonald et al. Scaling Up Nutrition. What will it cost? World Bank (2009).

<sup>7</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.

### **I.3.5 Gender considerations**

Gender is a cross-cutting issue for FTF Tanzania. While horticulture production in Tanzania is considered a “women’s crop”, women contribute significantly to all food production, processing, and marketing activities and are key participants in all staple value chains. Women form 75 percent of the agriculture labor force and are involved in all aspects of the horticulture, rice, and maize value chains. Women are the main source of farm labor, yet they have limited participation in decision making and benefit little from the downstream portion of value chain activities such as warehouse receipt system, marketing, processing and trade. There is also gender inequality in access to productive resources (particularly land and water resources and agricultural inputs such as improved seed and fertilizer) and to training and leadership opportunities.

Gender inequalities limit the growth potential of Tanzania. If FTF and the TAFSIP are to achieve their shared objectives of increasing agricultural growth, reducing poverty and improving nutritional status, explicit and specific attention to gender, particularly women’s access to land, water, information, credit, technology training and leadership opportunities will be essential. The gender assessment conducted for USAID/Tanzania’s horticulture program (“Promoting Gender Equitable Opportunities in Agricultural Value Chains”, GATE, 2004-2009) provides lessons learned and recommendations that will be used not only for the horticulture value chain, but for the maize and rice value chains as well. The program included a focused effort to provide gender training and program-specific analyses and recommendations to USAID staff and program implementers. This approach will be replicated as new programs and implementing partners begin to engage in the rice and maize value chains and in the processing and policy components of the FTF program.

Following the recommendations from the Greater Access to Trade Expansion (GATE) project, FTF will promote gender equitable market facilitation by promoting women’s access to membership and leadership positions in relevant organizations and ensuring that they have access to the productive assets they need. Examples include strengthening women’s participation and leadership in farmer, processor, and irrigation organizations and ensuring market information and farm technologies such as improved seed varieties, fertilizer, and agriculture production and processing equipment are accessible to both men and women. FTF will also promote women’s access to labor-saving agricultural equipment and technologies, and encourage household approaches to agriculture, gender and nutrition education and training. FTF will also ensure that women are engaged in and benefit from initiatives to improve the quantity and quality of horticulture, maize, and rice products, and will work with lending institutions to design women’s and pro-poor business loan instruments, and advocate for the use of non-land assets and moveable property as collateral for loans.

While the nutritional investments are targeted to women and children, a household approach will be implemented to involve men and enhance their role in improving the nutritional status of the family. Interventions will seek to ensure that work opportunities made available for women do not inadvertently impact negatively on child care and feeding practices at the household level. Agricultural research and training opportunities will be designed to increase the number of women participants and specific efforts will be undertaken to increase women’s leadership and management roles in the agriculture sector and related research institutions.

Gender issues will also be integrated into the policy component of FTF. For example, while Tanzanian laws give women the right to own land and other property, in practice, discriminatory provisions in the law and customary practices often deny women the access to land and other property. Policy reform topics will therefore include addressing the inequitable status of women in land ownership in Tanzania, which has limited women’s ability to access credit, invest in long-term production activities, and harness tangible assets they require to increase their income and reduce poverty.

Gender assessments will be undertaken as part of the monitoring and evaluation system, including establishing gender-sensitive indicators, baseline information and conducting impact assessments. Additional gender analyses will also be undertaken during the early stages of the program to understand better the role of women in the rice and maize value chains and the impacts of agricultural programs on gender asset distribution and management.

Tanzania has a number of in-country gender resources which will be utilized during the implementation of FTF. Examples include the Tanzania Gender Networking Program, the Tanzania Women Lawyers Association, the Tanzanian Women in Agriculture, Livestock and Environment, and other women business and agricultural organizations.

### **1.3.6 Natural resource management and climate change issues**

Considering the potential near- and longer-term impacts of climate change is fundamental to sustainability of any agriculture intervention. Climate change impact scenarios for East Africa forecast extremes in precipitation and temperature, two of the most important factors in understanding and mitigating agricultural risk. The human dimensions of climate change bear fundamentally on our adaptive capacity to reduce risk. Therefore, it is fundamental to understand social, economic and environmental systems, barriers and opportunities to target basic and applied research to create information tools for decision-makers as they strive to increase their adaptive capacity. Key institutions for enhancing climate resilience in Tanzania include the Tanzania Meteorology Agency (TMA), the Ministry of Agriculture, Food Security and Cooperatives (MAFSC), and regional institutions such as the River Basin Management Offices and Regional and District government offices in charge of land use planning and investment promotion.

Unchecked and ill-planned agricultural expansion is one of the most severe threats to Tanzania's natural resource base. There is a close linkage between poverty and environmental degradation. Tanzania's forests—valuable reservoirs of biodiversity and an important watershed resource critical for human health and agriculture—are being cleared at the alarming rate of 400,000 ha per year, the third highest deforestation rate in Africa. Agricultural expansion using existing techniques carries environmental costs as forests and wildlife areas are encroached on, as increasingly marginal land comes into cultivation, and as fish stocks are depleted.

Poorly planned settlement patterns coupled with high population growth have led to poor land use and unsustainable agricultural practices. If the USG goal is to create long-term, sustainable agricultural growth, it must be done in the context of conserving the natural resource base to sustain those activities for growing populations. FTF will support appropriate climate change vulnerability and impact assessments in targeted geographic regions in order to foster regional, integrated climate research focused on the needs of key decision-makers, such as the River Basin Management Offices and Regional and District land use planning programs. Working with TMA and MAFSC, innovations in climate information, across multiple timescales, will optimize decision-making with regards to improved seed varieties, timing of planting and harvest, and integrated water resources management to sustain irrigated agriculture. A climate change and water property rights assessment will be completed before construction of any irrigation schemes in order to effectively build in mitigation efforts and/or modify irrigation plans as needed.

### **1.3.7 Regional issues**

The regional dimensions of investments are critical to ensuring regional food security. Tanzania is part of the East African Community and is pursuing closer economic integration, and the agricultural sector

must be included in this framework. Investments at a regional level will focus on trade facilitation and harmonization. Furthermore, a regional approach will be taken to address surveillance and responses to trans-boundary diseases. The regional analytical and research capabilities of international organizations will be leveraged.

## 2. FEED THE FUTURE OBJECTIVE, PROGRAM STRUCTURE, AND IMPLEMENTATION

FTF Tanzania's goal is to reduce the poverty rate and increase the agricultural sector annual growth rate from 3.2 to 6.3 percent (CAADP) by 2015 in the target areas<sup>8</sup>. FTF implementation will contribute to the broader country CAADP objectives. These high-level FTF Tanzania targets for poverty reduction and growth were determined using historical trend data from the National Bureau of Statistics reports, and are based on the assumption that FTF will be able to augment existing resources to achieve the planned transformations.

Improving nutrition is also a high level FTF goal. FTF Tanzania will aim to reduce the prevalence of underweight children and to reduce stunting among children aged 6 to 59 months from 49 percent to 39 percent in the FTF target regions (Dodoma, Manyara and Morogoro)<sup>9</sup>. The program will also aim to reduce maternal anemia by 20 per cent in target regions over the next five years.

Over the next five years, Feed the Future in Tanzania will also:

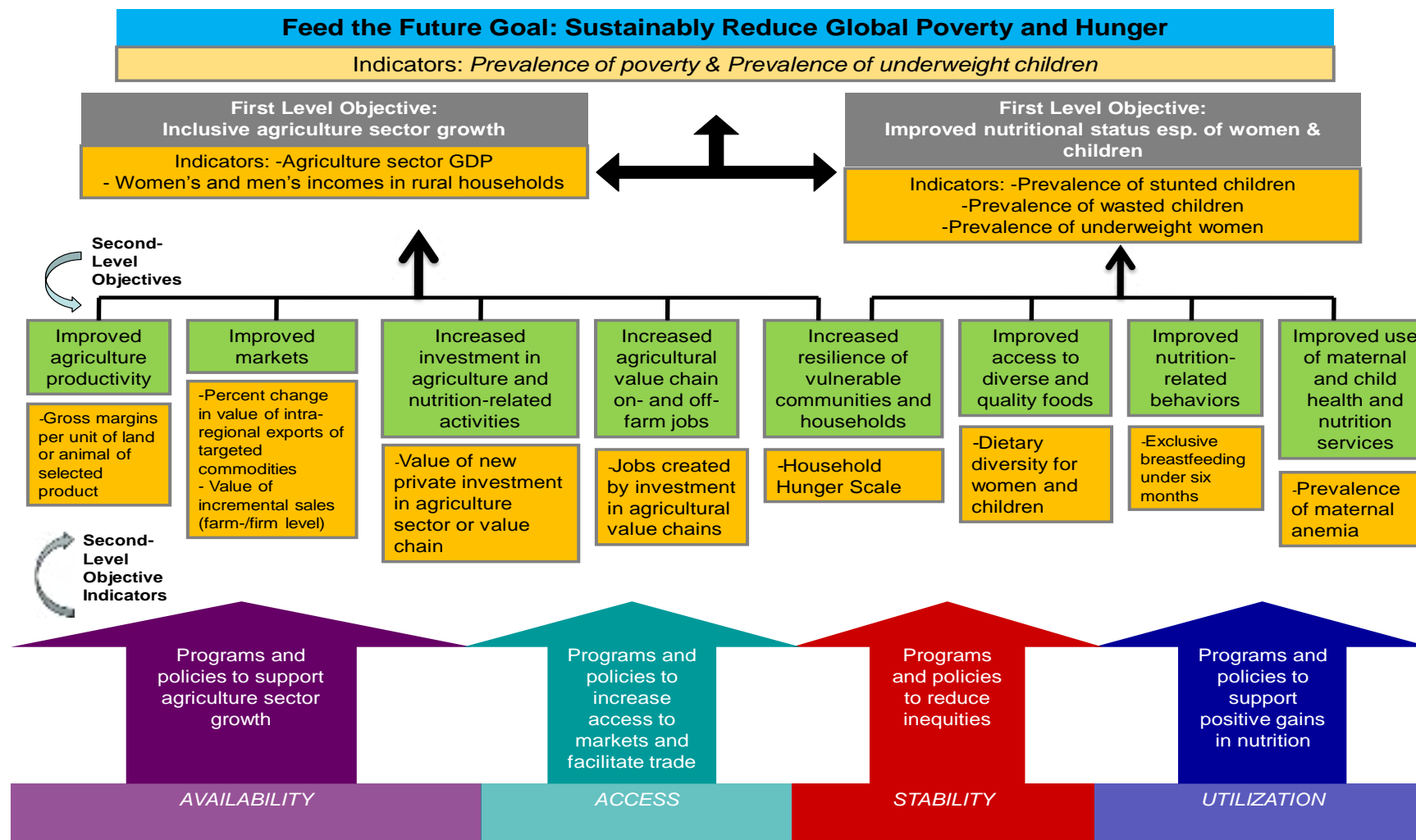
- Assist nearly 900,000 vulnerable Tanzanian women, children, and family members – mostly smallholder farmers – to escape hunger and poverty.
- Reach more than 400,000 children, improving their nutrition to prevent stunting and child mortality.
- Significant numbers of additional rural populations will achieve improved income and nutritional status from strategic policy engagement and institutional investments.

---

<sup>8</sup> The MDG estimated projection for poverty reduction is expected to be 3 percent per annum to achieve the desirable growth; however, historical data indicates reduction rate of less than 1 per cent. With additional FTF resources we have used a target reduction rate of 1 percent per annum.

<sup>9</sup> According to the 2008 Lancet Journal Series on undernutrition, through investment in a comprehensive package of proven interventions, a one-fifth to one-third decrease in stunting among children under-five years can be achieved over a 2-3 year period.

**Figure I. Feed the Future Results Framework**



## Aggregated Agriculture Sector Results

FTF Tanzania aims to increase the quantity (25 percent for rice, 10 percent for maize and 20 percent for horticulture) and quality of food supply in the country and hence improve overall food availability and utilization. FTF will increase yields of target crops by at least 50 percent (rice from 2 to 3-4tons/ha, maize from 1.5 to 2.5 tons/ha) through dissemination and adoption by farmers of improved farm technologies and agronomic practices such as use of improved seeds and fertilizer. Irrigated agriculture will be promoted to improve productivity and to mitigate the impacts of climate change. The target is to increase the area under irrigation in Tanzania by 15.5 percent, from 306,000 ha to 353,000 ha, through development of smallholder irrigation schemes in Morogoro and Zanzibar.

FTF aims to enhance Tanzania's competitiveness in regional and international trade, and thereby increase trade in the targeted value chain by at least 25 percent. This target would be achieved through improved policy and regulatory framework, reduction in marketing cost and time through improved rural infrastructure, and improved efficiency in the value chain through the promotion of agro-processing, warehousing and market linkages. By 2015, FTF aims to rehabilitate 3,000 kilometers (km) of rural roads and increase the value of produce passing through warehouse receipt facilities, thus reducing postharvest losses (both roads and value linked to losses?) for maize and rice from 20 percent to 10 percent.

The above-mentioned FTF objectives will be achieved through intermediate results (IRs) which address the availability, access, stability, and utilization of food. The IRs are outlined in the FTF Results Framework in Figure 1, and are common across all FTF focus countries. In addition, an intermediate result for policy reform has been added for FTF Tanzania, given the importance of achieving an enabling policy environment for both agriculture and nutrition.

**Table 3. Intermediate Results Addressing the Availability, Access, Stability, and Utilization of Food**

Increasing food availability and access
<b>IR 1: Improved agricultural productivity</b>
<b>IR 2: Expanding markets and trade</b>
<b>IR 3: Increased investment in agriculture and nutrition-related activities</b>

### **2.1 INTERMEDIATE RESULT 1: IMPROVED AGRICULTURAL PRODUCTIVITY**

FTF Tanzania is using a multi-faceted approach to improve productivity. The IR of improved agricultural productivity will be measured by the lead indicator of gross margin per unit of land for the focus commodities of rice, maize, and horticulture. Each of these activities will lead to improved agricultural productivity, which will lead to inclusive agriculture sector growth to reduce poverty and hunger.

- *Increasing the capacity of National Agricultural Research Services and Sokoine University of Agriculture* to develop the quality of their agricultural programs will lead to enhanced human and institutional capacity for agricultural sector productivity. This in turn will enable Tanzanians to respond more quickly and efficiently to domestic agricultural challenges through enhanced technology development, dissemination, management and innovation. In addition, enhanced human capacity for policy formulation and implementation is critical to transformational development and sustainability.
- *The introduction of new technologies and management practices* is expected to lead to new methods being adopted by producers that increase the gross margin per unit of land. The work of the



research and development institutions will be closely linked with extension so that new technologies are shared with producers. In particular, technologies and practices that improve the capacity to address climate change will enable Tanzanians to respond to the variability of weather patterns. Increased knowledge of adaptation and mitigation mechanisms will lead to activities that help mitigate risks, improving the resiliency of producers. Major investments are planned to increase areas under irrigation. This is one method to reduce the dependence on rain-fed agriculture and increase the reliable supply of water. The regular supply of water will help to improve growing conditions and to increase productivity. Technologies to reduce women's workload will be researched and promoted.

- *By increasing the capacity of farmer organizations*, FTF Tanzania will increase the knowledge of the producers in particular farming practices and link them to markets, which will lead to higher gross margins. Helping the members of these institutions will assist in improving the overall value of production in the agricultural value chain, improving productivity and contributing to a reduction in poverty. Furthermore, these investments in strengthening farmer organizations will help to ensure sustained positive impacts.

## **2.2 INTERMEDIATE RESULT 2: EXPANDING MARKETS AND TRADE**

In order to achieve agriculture sector growth, it is essential that the increased productivity is linked to market access through expanding markets and trade. The lead indicator for this IR is the value of incremental sales attributed to FTF implementation.

Through FTF Tanzania, there will be improved linkages of rural communities to markets through improved rural roads. This is considered crucial to increasing agricultural and other rural-based production, as well as to increasing the access of rural communities to food at reasonable prices, and to greater off-farm employment opportunities. The construction of rural roads will reduce the cost of transport, which will help raise farmers' profits and incomes while reducing the cost to the consumer, enabling both populations to purchase more diverse foods for improved food security and nutrition. In addition, better rural roads will reduce the number of days required to trade, leading to increased competitiveness and increased access to markets, which will increase rural incomes and reduce poverty. Other activities will include the following:

- *Reductions in postharvest losses* will be achieved through the investments in rural roads, but also other programs to improve storage and handling. Post-harvest losses of foodstuffs and other agricultural products are typically a significant proportion of overall initial production in developing countries. A reduction in postharvest losses could therefore substantially increase both food and income available to rural households, and increase food availability to urban areas. Small-scale processing is an area where women in Tanzania are already playing a big role.
- *Facilitating access to markets and ease of trade across borders* will provide an incentive to improve agricultural output. Because the poor are mainly in farming or agricultural sector activities, simplifying trade will improve the incomes of the poor, particularly with target value chains linking smallholder outgrowers to domestic and regional markets.
- *Establishing a warehouse receipt system* through the staples investments will enable producers to store their grains at harvest time when prices are low, use their stored grain as collateral for credit, and sell their grain later when prices are favorable.



## 2.3 INTERMEDIATE RESULT 3: INCREASED INVESTMENT IN AGRICULTURE- AND NUTRITION-RELATED ACTIVITIES

FTF investments will help leverage public and private sector investment. Increased investment is the predominate source of economic growth in agriculture and other economic sectors. Private sector investment is critical because it indicates that the investment is perceived by private agents to provide a positive financial return and therefore is likely to lead to sustainable increases in agricultural production. The lead indicator for this IR will be the value of new private sector investment in the agriculture sector, or food chain, leveraged by FTF implementation and percent of the national budget invested in agriculture and nutrition. Increased public and private investment in agriculture and nutrition related activities will involve the following:

- *Increased agricultural and rural financing* lead to increased access to credit and greater investment in the agricultural sector. Greater access to credit can enable farmers to access improved seeds and fertilizer, production machinery, and processing equipment to increase their productivity, leading to higher rural incomes. A stimulated rural economy will increase the number of on- and off-farm jobs created. All of these will help strengthen agricultural sector growth. Increased financial services for small and medium enterprises will stimulate agricultural business activity and contribute to the key objective of inclusive agriculture sector growth. A special focus on women can also promote their access to credit and investment opportunities, and hence, access and control of income, which will in turn support improved household food security, nutrition and child and maternal health.
- Additionally, FTF Tanzania will *facilitate public-private partnerships*. By promoting public-private partnerships, there will be increased ability to leverage the capacity of the private sector in investment and encourage the government to apply policies and regulations that will be favorable to growth. One example of a model is through the dynamic investments planned through SAGCOT.
- *Training and capacity building programs* for producers and processors will introduce new technologies and management practices, which will be adopted and increase the productivity per unit of land. This in turn will increase rural incomes and stimulate further investments in agriculture, leading to additional job creation in the agricultural sector. An emphasis on women's participation in capacity building programs will promote women's leadership and decision making capacities, for example, within food processor associations.
- *Increasing the capacity of private sector trade and advocacy organizations* to provide services for their members and to push for an enabling environment for agricultural investment will ensure sustainability.
- Meeting the CAADP commitment to increase public sector funding for agriculture to ten percent of the national budget will improve public goods such as research, extension, and infrastructure required to increase agricultural growth and stimulate private sector investment.
- Together with other development partners, FTF Tanzania will support the Prime Minister's Office, the Tanzania Food and Nutrition Centre, key sector ministries and civil society to *develop, launch and lead in the implementation of a national nutrition education and communication program* that will result in measurable improvements in terms of the quality and sustainability of nutrition service delivery at the district, ward, facility and community levels. USAID Tanzania has deliberately aligned its nutrition investments under both FTF and the Global Health

Initiatives in order to maximize synergies and results to be achieved across USG investments in agriculture, economic growth, health, HIV/AIDS, gender and water and sanitation.

**Table 4. Intermediate Results for Increasing Food Stability and Utilization**

Increasing food stability and utilization

**IR 4: Increased resilience of vulnerable communities and households**

**IR 5: Improved access to diverse and quality foods**

**IR 6: Improved nutrition-related behaviors**

**IR 7: Improved utilization of maternal and child health and nutrition services**

## **2.4 INTERMEDIATE RESULT 4: INCREASED RESILIENCE OF VULNERABLE COMMUNITIES AND HOUSEHOLDS**

This will be accomplished through the incorporation of nutrition outreach and behavior change activities to ensure both increases in household production and income lead to the purchase and consumption of higher quality foods and better feeding of young children. Efforts will be made to target both men and women so that new farming skills, access to inputs and services, and increases in income translate directly into improved health and wellbeing of children. The indicator to be used to measure this IR is “the percentage of households with adequate food consumption”.

## **2.5 INTERMEDIATE RESULT 5: IMPROVED ACCESS TO DIVERSE AND QUALITY FOODS**

This will be achieved through increasing community and household production of staples and quality foods like fruits, green and yellow vegetables, and animal proteins through community gardens, and poultry and livestock farming. Activities will also engage smallholder farmers to help maximize food preservation and processing techniques (e.g., through food fortification, drying and granaries). The indicator that will be used to measure this IR is “the percentage of children 6 to 23 months who receive a minimum acceptable diet” (disaggregated by sex and geographic location).

## **2.6 INTERMEDIATE RESULT 6: IMPROVED NUTRITION-RELATED BEHAVIORS AND INTERMEDIATE RESULT 7: IMPROVED UTILIZATION OF MATERNAL AND CHILD HEALTH AND NUTRITION SERVICES**

This will be achieved through targeted nutrition outreach and behavior change activities that target pregnant and lactating mothers and children under-five years of age. It is expected that the nutrition education and communication program developed will lead to behavior changes among both women and men that will improve nutritional status of children, particularly in the targeted age range of the first thousand days. For example, the program will be developed to promote exclusive breastfeeding for children under 6 months and appropriate complementary feeding practices from 6 to 23 months. Behavior change messages and appropriate job aids will also be developed to inform and support health workers, agriculture extension workers and other key audience groups regarding the importance of consuming foods rich in iron and taking iron-folate supplements during pregnancy. Sensitization efforts will focus on building constructive engagement of men in household nutrition- and care-related behaviors. Increasing access to and awareness of the importance of iron rich foods and iron-folate supplements will reduce the prevalence of maternal anemia and improve the nutritional status of reproductive age women. Improved health of the mothers will lead to better nutritional outcomes for children as well. The indicators that will be used to measure these IRs are: “(i) the proportion of infants under six months who are exclusively breastfed; (ii) the proportion of mothers who take iron supplementation for more than 90 days during pregnancy and the post-partum period.”

**Table 5. Intermediate Results for Supportive Policies for Food Security**

Supportive Policies for Food Security

**IR 8: Improved enabling policy environment for both agriculture and nutrition**

## **2.7 INTERMEDIATE RESULT 8: IMPROVED ENABLING POLICY ENVIRONMENT FOR BOTH AGRICULTURE AND NUTRITION**

To complement all of this work, FTF investments are also being directed to policy reform. The activities include conducting research on institutional barriers and simultaneously equipping private sector entities with the analytical skills to articulate the needs for reform. These in turn are expected to lead to reforms and regulations being presented for public and stakeholder consultation, and subsequently presented for legislation or decree. The successful implementation of reforms is expected to have several results, including stimulating additional private sector investment in agriculture, and providing greater incentives for farmers and producers, as well as promoting effective participation, contribution and benefits of women in agriculture-related activities. This will result in increases in rural incomes and expanded agricultural sector growth, leading to reductions in poverty. Additionally, the policy reforms to enhance targeted nutritional interventions are expected to lead to better nutritional outcomes.

## **3. CORE INVESTMENT AREAS**

The core investment areas for FTF Tanzania are based upon the priorities articulated in the TAFSIP. Strategic choices have been made, based on the USG comparative advantage in particular areas and on the potential for making substantial impacts on the goals of increasing incomes and improving nutrition.

This section begins with analysis and justification of the selection of the three targeted value chains. Next, the context for core investment areas is outlined, including the connection to TAFSIP. The programs and mechanisms are described, with delineation between FTF investments and other aligned USG programs.

### **3.1 TARGETED VALUE CHAINS**

TAFSIP details a number of priority investment areas, from which FTF Tanzania has strategically identified core investments along three value chains within selected regions. Investment areas were judged based on potential to impact food security at the household level, based on household food caloric contribution and food budget share; impact on poverty reduction including the percentage of farming households participating in the production of the crops; potential for regional trade; overall economic impact and cross-sector linkages, based on growth models; and overall potential to reduce vulnerability to climate change. The following section provides the justification for these choices.

In Africa overall, growing trade in food staples appears poised to dwarf all other agricultural markets.<sup>10</sup> Currently, the market value of Africa's food staples amounts to \$50 billion per year, or nearly three-fourths of the value of all agricultural production. Given growing urbanization and the highest rates of poverty in the world, Africa's market demand for food staples will grow dramatically in coming decades. As a result, production of food staples—for growing urban markets and food-deficit rural areas—represents the largest growth opportunity available to African farmers.<sup>11</sup>

<sup>10</sup> MSU Lessons Learned from 25 Years of FS Research

<sup>11</sup> Diao and Hazell, 2004.

Many researchers argue that to effectively reduce poverty and hunger, commodities selected for investment must be smallholder-based with broad participation by the poor and a wide geographic scope.<sup>12</sup> Maize and rice are both important staple food crops in Tanzania and both are produced largely by small-scale farmers.<sup>13</sup> Maize is considered primarily a food crop, though most maize producers grow maize for consumption and for sale. While rice is also an important staple in Tanzania, unlike maize, rice is viewed as more of a cash crop, though many rice producers also grow rice for consumption and for sale.

### 3.1.1 Rice

Rice is a priority for Tanzania, as articulated both in the TAFSIP, as well as the Tanzania National Rice Strategy. There is political will on the part of the GOT to enhance production and productivity of rice. As a result, the GOT has created a suitable policy environment, including the exemption of taxes on agricultural inputs such as machinery and fertilizers. The GOT has also established a goal and strategy for doubling rice production by 2018<sup>14</sup>.

Investments in rice provide a key opportunity to achieve the FTF goal of broad-based growth. As rice is more commercialized than other staple crops (42 percent is marketed, compared to 28 percent of maize and just 18 percent of sorghum<sup>15</sup>), smallholder farmers can increase their incomes through this commodity. Moreover, nearly one in five agricultural households are engaged in rice production. Thus, investments in the rice value chain have potential to spur agricultural sector growth.<sup>16</sup>

A regional analysis by Cornell University showed that Tanzania has a comparative advantage in rice production, but the country needs to enhance its competitiveness.<sup>17</sup> There are, however, challenges. Current analyses indicate that Tanzanian rice is marginally competitive, at best, with imported rice. Yet a recent study commissioned by USAID/Tanzania indicates that while under current conditions rice may not be competitive with imports<sup>18</sup>, the constraints to improved competitiveness can be addressed through investments. Increasing productivity and competitiveness in rice will require substantial investments to rehabilitate existing irrigation schemes and to construct and/or rehabilitate rural roads. Low yields have been caused by the use of genetically low-yielding varieties, drought, low soil fertility, weed infestations and prevalence of insect pests and diseases. Investments that address these areas will improve the productivity and competitiveness of the rice value chain.

FTF, in collaboration with other development partners such as JICA and the World Bank, will invest in the improved competitiveness of the Tanzanian rice value chain. An on-going study by Research for Poverty Alleviation (REPOA) and the Danish Institute of International Studies (DIIS) examining the effectiveness and impact of rice tariffs in Tanzania showed that in the last 10 years, tariff rates ranged between 9 and 22 percent, despite the 75 percent rate set under the East African Community's (EAC) Common External Tariff. Preliminary results from the study reveal that rice imports decreased from 191,000 tons in 2000 to 39,000 tons in 2009, concurrently with increased domestic production from 400,000 to 800,000 tons during the same period, suggesting that Tanzanian rice can be competitive even under the lower tariff rates.

---

<sup>12</sup> Ibid.

<sup>13</sup> Less than two percent of the national maize crop is derived from large-scale production

<sup>14</sup> National Rice Development Strategy, May 2009

<sup>15</sup> Staple Food Prices in Tanzania, Nicolas Minot, January 2010

<sup>16</sup> Karl Pauw and James Thurlow (IFPRI 2010) and Henry Gordon (World Bank 2003)

<sup>17</sup> Mutambatsere, 2008.

<sup>18</sup> MicoCLIR August 2010

Based on the analysis above, and the World Bank's experience which shows dramatic increases in yields (from 1.9 tons per hectare under traditional irrigation to 4.5 tons per hectare under newly developed or rehabilitated irrigation) and very high financial and economic rates of return to irrigated rice (WB May 2010), FTF will concentrate on the irrigated farmer/trader channel, as identified using the program cycle tool MicroCLIR, to improve the competitiveness of the Tanzanian rice value chain. Farmers in this channel achieve higher yields, operate in clusters, and are more integrated into markets (with rice producers taking on more of the storage and trading functions) compared to the traditional rice channel. This channel also contains concentrated areas of high-production potential for smallholders with many different services available and many opportunities for service development and enhancement of the production and marketing processes<sup>19</sup>.

Moreover, vast opportunities for rice development exist in the country because of the availability of land (21 million ha) suitable for rice. Adequate water resources (both surface and aquifer) provide the necessary inputs for irrigation in the target areas. With careful water resources management planning, based on sound data on timing and quantity of water available, limited resources can be strategically managed to improve targeted production. As Tanzania lowers its costs of production, improves quality and becomes more competitive in rice, it has an opportunity to meet a growing demand for rice in domestic and regional markets.

There are robust markets for rice, both domestically and in the region. Consumption of rice has increased rapidly among Tanzanians, especially for higher-income households<sup>20</sup>. As a continent, Africa spends \$2 billion annually on rice imports. Current African production is concentrated in West Africa and Egypt. Tanzania is surrounded by countries that are net importers of rice. Regional demand is growing at 6 percent per annum and the gap between demand and supply in EAC is about 3.3 million tons. In the eastern, central, and southern regions of Africa, only Madagascar surpasses Tanzania in current production of rice.

To intensify the impact of the program, FTF investments will target the central and northern regions where irrigation projects will be undertaken, primarily in Morogoro, and with a small investment on Zanzibar. The geographic focus takes into consideration the potential for agriculture in these areas, the activities of other donors, previous USAID investments, GOT investments, and the potential for regional trade along transport corridors. The target regions border on the frontier to the semi-arid Central Zone, where chronic food insecurity exists, along with the highest levels of poverty and undernutrition in the country. The focus on Kilombero and Mvomero districts within Morogoro will create a demonstration effect for improving productivity. Morogoro currently grows 20 percent of Tanzania's rice; Kilombero is the most important district in the region for rice production, and Mvomero District is the third most important. These districts are located along critical transport corridors with easy access to roads and railway lines, and in relative close proximity to the Dar es Salaam port.

Additionally, USAID will support the revival of foundation seed farms and will work with private seed out-growers through its Development Credit Authority (DCA) credit guarantee to develop a commercially viable seed industry in Tanzania through the Tanzania Seed Trade Association (TASTA). USAID will also support the Morogoro- and Arusha-based Agricultural Research Station and National Seed Laboratory to continue breeding high-yielding seeds and varieties resistant to drought, pestilence and disease, as well as supporting the International Institute of Tropical Agriculture (IITA) in multiplication and distribution of the improved rice variety *Nerica*. The International Rice Research

---

<sup>19</sup> MicroCLIR, August 2010

<sup>20</sup> World Bank, 2009

Institute in Tanzania is another potential collaborator for the improvement of rice inputs and techniques. The rural roads component of FTF will be targeted to the geographic focus areas and to the irrigation schemes to be rehabilitated, thus dramatically lowering transport costs and improving access to markets.

FTF will also work with producers' and irrigators' organizations to improve their capacity to manage the irrigation systems. Guidelines for the operation and maintenance of smallholder irrigation schemes were developed under ASDP and include guiding figures and procedures for developing realistic operations and maintenance budgets and for determining farmers' contributions to operation and maintenance costs. FTF will build on ASDP's experience in training the irrigators' organizations to determine the operation and maintenance requirements, to keep books and records, to establish and manage a long-term maintenance fund, and to enforce the by-laws of their organizations.

FTF will conduct ex-ante benefit/costs analyses for every irrigation scheme to be developed or rehabilitated as part of the architecture and engineering design work, and it will conduct ex-post impact assessments on the financial, economic, social, and environmental impact of irrigation. FTF will also undertake special studies to assess the competitiveness of Tanzania's rice value chain.

There are strong opportunities for collaboration within the rice value chain. JICA has been supporting the Kilimanjaro Agriculture Training Center (KATC), which has been conducting training to rice farmers and extension workers on improved agronomy, irrigation scheme management and water user associations. KATC has developed curricula and field-tested teaching materials and staff that could be engaged in building the capacity of rice farmers and their associations in FTF target areas.

The World Bank has established a regional center of excellence in rice research at Katrin in Kilombero, Morogoro. FAO has expressed interest in collaborating in farmer training and agro-processing. IFAD has on-going activities in rural finance, while Irish AID has some development activities in Morogoro region. The public-private partnership under SAGCOT is also seeking to align agricultural investments along existing and planned infrastructure to enhance Tanzania's competitiveness in agricultural trade. Morogoro is one of the SAGCOT clusters, and the investment blueprint proposes agribusiness activities focused on the rice value chain specifically in that region.

### **3.1.2 Maize**

Maize is a priority investment area for Tanzania, especially within the TAFSIP. Two-thirds of farmers engage in maize production, so there is an excellent opportunity for broad-based agricultural growth by targeting this commodity. Investing in the maize value chain also has the potential to improve nutritional status of Tanzanians through fortification in the milling process.

While investments in maize will be critical to reducing poverty and improving food security, the subsector is facing severe production and market constraints which require urgent attention. Maize yields are low because smallholder farmers rely on traditional technologies and produce mainly for subsistence, yet the use of improved technologies and inputs can dramatically increase the yields.

Other donors are already investing in maize in the Southern Highlands, where the cost of maize is too expensive for the food insecure populations of central regions due to high transport costs. FTF Tanzania will therefore concentrate efforts to improve maize productivity in Kiteto District in Manyara Region and Kongwa district in Dodoma region. Kiteto and Kongwa Districts are the main catchment areas for the maize supply to Kibaigwa market, one of the largest maize markets in East Africa. Maize interventions in Kiteto District, which currently produces a surplus of about 25,000 tons of maize annually, should result in greater surpluses and lower prices for the food insecure adjacent central regions. Production and marketing of maize in Kiteto District has become a key engine of change, and

given Kiteto's proximity to districts classified as food insecure, there are opportunities for selling to the World Food Program (WFP).

There are a number of opportunities for collaboration for increased impact for the maize value chain. USAID recently partnered with General Mills to build the capacity of staples millers in value addition to enable the scale-up of milling, fortification, blending and product diversification to produce domestically for vulnerable populations such as children under five (particularly appropriate weaning food), people living with HIV/AIDS, and pregnant and lactating women. This activity will be designed to enable participation by local millers in institutional procurements to drive long-term sustainability and growth in domestic value addition. The millers also blend maize with cassava, sorghum and millet to enhance utilization of these traditional staples and to increase food availability.

Since Tanzania seeks to build a regional market for rice and maize, the investments will be closely coordinated with the USAID/East Africa Regional Mission. Coordinated activities to harmonize grades and standards will facilitate trade across borders, easing acute food insecurity. There are opportunities to work with the East Africa Grains Council to strengthen the institutions related to the maize value chain and to build the storage and postharvest capabilities based upon the warehouse receipt systems they are developing.

### **3.1.3 Horticulture**

The Tanzanian Horticultural Association (TAHA), a strong private sector apex association, has mobilized resources toward an ambitious multi-year strategy and has been active in working with the government to implement policies that enable horticulture sector growth. The horticulture industry recognizes its potential to expand economic opportunities for Tanzanians, enhance health and nutrition across the population and contribute significantly to poverty reduction. Horticulture can be a profitable option for Tanzanian farmers to lift themselves from the cycle of poverty. Increased on-farm incomes, improved nutrition and food security, and the creation of thousands of new pre- and postharvest jobs will be the results of growth in horticulture. These results can only be created by commercially competitive businesses that are able to deliver high quality fresh produce at a reasonable price.

Horticulture has the highest potential to engage women farmers, and offers the possibility for integrating home perma-gardening for diet diversification. Previously established infrastructure and distribution channels can be leveraged for a wide variety of fruits and vegetables for domestic, regional and international markets. Investments in the horticulture value chain, to encourage production by smallholders, will be focused in the Northern and Southern Highlands and the coastal regions. Key FTF interventions in horticulture relate to:

- Horticulture value chain development;
- Domestic, regional and export trade promotion;
- GAP standards certification and compliance;
- Postharvest management and logistics support;
- Formation and strengthening of farmer associations;
- Promotion of public-private partnerships;
- Ensuring food security and improving family nutrition.

FTF Tanzania targets fresh and processed fruits, vegetables, flowers and spices in:



- **Arusha:** Smallholder flowers, spices, fruit and vegetable production programs for export and regional markets together with vegetables for processing industries that will result in import substitution.
- **Moshi/Hai:** Smallholder flowers, agroforestry, spices and vegetable production programs (conventional and organic) for export and local markets.
- **Lushoto/Tanga:** Smallholder vegetables and fruit for local market; passion fruit for local, regional and export markets; organic spices (cardamom, cinnamon, cloves, black pepper) for export.
- **Morogoro:** Vegetables for both local and regional markets; pineapples, passion fruit for processing.
- **The Coastal Strip:** Processed fruit (mango, pineapple, passion fruit); root crops (sweet potatoes); spices (chillies, vanilla, ginger); cashews (for export).
- **Zanzibar:** Cloves; fruit and vegetables for the hospitality industry and local markets; vegetables and spices for micro- to small-scale processors.
- **Mbeya and Iringa:** This is part of the SAGCOT, where FTF supports fruit and vegetable growers, including avocado for export, tomato for local processing and other fruits and vegetables for the local market.

FTF will directly benefit more than 100,000 farmers and their families through horticulture programs by engaging them in improved agricultural practices that generate income and are environmentally sustainable. Efforts to improve nutrition and mitigate the impact of HIV/AIDS on rural communities will be integrated through all proposed intervention plans. Women and youth groups will also be encouraged to view horticulture as a business opportunity.

### **3.2 CORE INVESTMENT AREA 1A: SYSTEMS TRANSFORMATION THROUGH AGRICULTURAL PRODUCTION AND PROCESSING**

The first set of core investments contribute to IRs 1-3, 5, 6, 7, and 8. These core investments play a role in systems transformation, with a primary focus on rice and targeted interventions in maize and horticulture as secondary value chains. The main objective is inclusive agriculture sector growth, which will be accomplished through increased agricultural productivity, expanded markets and trade, increased private sector investment in agriculture- and nutrition-related activities, and increased agricultural value chain on- and off-farm jobs. Investment in these value chains will improve availability and access to staple foods and improve nutrition. USG investments will facilitate the competitiveness of smallholders in rice, maize and horticulture.

#### Connection to the Tanzania Agriculture and Food Security Implementation Plan (TAFSIP)

The first two programs in the TAFSIP focus on production and processing to improve food security and provide the rationale for the prioritization of the first core investment area. TAFSIP Program 1 aims to increase agricultural production, food and nutrition security by improving crop production and productivity, increasing production and productivity for livestock, fisheries and aquaculture, improving food and nutrition security, and enhancing disaster risk management and preparedness. TAFSIP Program 2 aims to expand agro-processing and value addition through improving postharvest product management, enhancing agro- processing, preservation and value addition, and transformation and diversification of agricultural products.



**Table 6. Core Investment Areas Matrix**

Core Investment Area	TAFSIP Programs	FTF Investments	Aligned USG Investments
<b>IA: Systems Transformation through Agricultural Production and Processing</b>	<p>PROGRAM 1: AGRICULTURAL PRODUCTION, FOOD AND NUTRITION SECURITY</p> <p>Sub-Program 1.1: Improving Crop Production and Productivity</p> <p>Sub-Program 1.2: Production and productivity for Livestock and Fisheries and Aquaculture</p> <p>Sub-Program 1.3: Improve Food and Nutrition Security</p> <p>Sub-Program 1.4: Disaster Risk Management and Preparedness</p> <p>PROGRAM 2: AGRO PROCESSING AND VALUE ADDITION</p> <p>Sub-Program 2.1: Postharvest Product Management</p> <p>Sub-Program 2.2: Enhancing Agro-processing, preservation and value addition</p> <p>Sub-Program 2.3: Transformation and diversification of agricultural products</p>	<p>1. Staples Value Chain Development [Rice and Maize]</p> <p>2. Market-Based Solutions to Reduce Poverty and Improve Nutrition [Rice and Maize]</p> <p>3. Sustainable Horticulture for Income and Food Security in Tanzania (SHIFT) [Horticulture]</p> <p>4. Tanzania Agriculture Productivity Program (TAPP) [Horticulture]</p>	<p>5. USAID East Africa Mission COMPETE and trade facilitation programs</p> <p>6. U.S. African Development Foundation's business development services and grant funding</p> <p>7. USDA Local and Regional Procurement: local procurement (includes maize)</p> <p>8. USDA Food for Progress: Dairy Program</p> <p>9. Peace Corps permagardening</p>
<b>IB: Systems Transformation through Market Access and Natural Resource Management</b>	<p>PROGRAM 3: RURAL INFRASTRUCTURE AND MARKET DEVELOPMENT</p> <p>Sub-Program 3.1: Marketing of agricultural products</p> <p>Sub-Program 3.2: Facilitate development of rural roads and market infrastructure (roads, markets, storage facilities, electrification etc)</p> <p>Sub-Program 3.3: Development of Marketing Information Systems</p> <p>Sub-Program 3.4: Developing quality management and trade certification</p> <p>Sub-Program 3.5: Development of Market-Oriented Cooperatives/Associations</p> <p>PROGRAM 4: SUSTAINABLE LAND AND WATER RESOURCES MANAGEMENT</p> <p>Sub-Program 4.1 Irrigation developments</p> <p>Sub-Program 4.2: Water resource management</p> <p>Sub-Program 4.3: integrated agricultural land use management</p>	<p>1. Engineering Services Component</p> <p>2. Irrigation Infrastructure Component</p> <p>3. Rural Roads Infrastructure Component</p> <p>4. Climate Change Adaptation Component</p>	<p>5. Integrated Water, Sanitation and Hygiene (iWSH) Program</p> <p>6. MCC Roads, Electricity, Water Projects</p> <p>7. USAID East Africa Mission: Regional Climate Change Program</p>

Core Investment Area	TAFSIP Programs	FTF Investments	Aligned USG Investments
<b>2: Nutrition</b>	Sub-Program 1.3: Improve Food and Nutrition Security	1. Integrated Nutrition Investment Framework – Nutrition Flagship Program	2. USAID HIV/AIDS FTF wraparound 3. USAID School Feeding Program 4. State Department Scaling Up Nutrition Support 5. USDA Food for Education: school feedings and nutrition education 6. Peace Corps Nutrition Education
<b>3: Agricultural Support Services and Capacity Building</b>	<p>PROGRAM 5: AGRICULTURAL SUPPORT SERVICES Sub-Program 5.1: Research and Technology Development and Dissemination Sub-Program 5.2: Mechanization services</p> <p>Sub-Program 5.3: Extension Services (dissemination mechanisms) Sub-Program 5.4: Agriculture-based Business Development Centres Sub-Program 5.5: Access to financial services</p> <p>PROGRAM 6: STRENGTHENING INSTITUTIONAL CAPACITY Sub-Program 6.1: Institutional Strengthening Sub-Program 6.2 Human Resource Capacity Sub-Program 6.3: Communication System</p>	<p>1. Support to Comprehensive Africa Agriculture Development (CAADP) Post Compact Activities</p> <p>2. Africa Leadership Training and Capacity Building Program</p> <p>3. Sokoine University of Agriculture Capacity Building</p> <p>4. Collaborative Research and Capacity Building of Sokoine University of Agriculture and the National Agricultural Research System</p>	<p>5. DCA Loan Guarantee</p> <p>6. PRIDE corporate bond guarantee</p> <p>7. USDA Food for Progress FINCA Microfinance Program</p> <p>8. USDA Cochran Fellows</p> <p>9. USDA Borlaug Fellows</p> <p>10. USDA Faculty Exchange Program</p> <p>11. Norman Borlaug Research Initiative</p> <p>12. State Department International Visitors Program</p>
<b>4: Policy Enabling Environment</b>		1. Agriculture Enabling Environment Program	2. State Department 3. USDA ERS policy support 4. USAID East Africa Regional Mission Policy Reform Support

### **3.2.1 NAFKA – Staples Value Chain Development (Rice and Maize)**

*Description:* This program will facilitate the competitiveness of the smallholder-based rice value chain, and balance these impacts on growth with broader efforts to reduce poverty through investments aimed at improving the competitiveness and productivity of the maize value chain. This includes support to the Morogoro and Arusha-based Agricultural Research Station and National Seed Laboratory. Specific activities will:

- Improve the competitiveness and productivity of maize and rice value chains;
- Facilitate improved domestic and regional trade;
- Expand the warehouse receipts program in Tanzania;
- Expand the depth and breadth of benefits from the growth of the maize and rice subsectors, including increased benefits to women and youth; and
- Enhance rural household nutrition by promoting consumption of a nutritious basket of fortified foods that include but are not limited to staple crops.

*Expected outcomes:*

- Improved competitiveness and trade of the maize and rice value chains
- Improved value chain productivity

### **3.2.2 Market-Based Solutions to Reduce Poverty and Improve Nutrition**

*Description:* The purpose of this project is to strengthen the capabilities of the agro-processors operating in the FTF targeted geographic areas for the staple grains of rice and maize and a range of horticultural products to build sustainable enterprises and expand and diversify the production and marketing of nutritious processed foods. This will include an array of support to processors of different scales of operations, farmers, public sector institutions involved in food technology and safety, agribusinesses, and traders.

*Expected outcomes:*

- Increased competitiveness of the agro-processing sector to take advantage of marketing and trade opportunities
- Improved agro-processor access to information and training on improved processing technologies, finance, food safety standards, and business management practices
- Enhanced commercial linkages and partnerships between processors and small farmers for supplies of commodities
- Increased access to and consumption of high quality nutritious food by people living with HIV/AIDS (PLHA) and pregnant/lactating mothers and fortified weaning food for babies
- Strengthened institutions and industry groups supporting the agro-processing sector.

### **3.2.3 Sustainable Horticulture for Income and Food Security in Tanzania (SHIFT)**

*Description:* This sustainable agriculture program aims to increase demand by expanding market opportunities for smallholder horticultural producers and processors in domestic, regional and international markets, and will work with farmers to build supply by introducing sustainable agricultural practices, increasing productivity, and reducing postharvest losses. Activities will include farmer association capacity building, nutrition education, and developing market hubs. The geographic focus is in the southern regions, and falls within the SAGCOT.

*Expected outcomes:*

- Increase in farmers' incomes
- Increase in farmer capacity to operate commercially through two farmer-owned Market Service Centers built to achieve economies of scale in postharvest handling, marketing and distribution
- Increase in demand for smallholder production
- Increase in saleable volumes

### **3.2.4 Tanzania Agriculture Productivity Program (TAPP)**

*Description:* This program aims to increase smallholder farmer incomes through enhanced productivity and improved domestic and export marketing of agricultural products. This program provides business services to farmers and associations in six target zones in the northern regions (Arusha, Moshi/Hai, Lushoto, Morogoro, Coast and Zanzibar). The activities include management training, marketing tools, business lobbying skills, and technical assistance for developing and marketing policy reforms. In implementing these activities, the program focuses on strengthening producer associations and preparing them to graduate from TAPP support and sustain their activities. The program strengthens market linkages by expanding domestic and export market outgrower schemes.

*Expected outcomes:*

- Increase in household income for participants of targeted intervention, thereby contributing to the MDG goal of halving the number of people below the poverty line
- Increase in number of men and women farmers engaged in environmentally sustainable horticulture
- Increase in export revenue from direct agricultural trade in horticulture products in target areas
- Improved access and control of income and decision-making power of women in the production and marketing process
- Promotion of the strengthening of local institutions and their participation in the production and marketing processes as well as strengthened collaboration with Local Government Authorities for sustainability

#### Aligned U.S. Government Investments

USAID East Africa: The policies needed to facilitate the success of FTF strategy are being addressed by the East Africa Regional Mission, including transport corridors, harmonization of policies and regulations, and promotion of regional trade. Examples of USAID East Africa Regional Mission support through the Competitiveness and Trade Expansion (COMPETE) program include:

- Conducting a series of awareness raising workshops in EAC countries on harmonized standards for staple foods. The Tanzania workshop was held in conjunction with the Value Chain Analysis on Staple Foods. The workshop reviewed more than 20 staple food draft standards.
- Providing a grant to Rural Urban Development Initiatives (RUDI). RUDI has been working with farmer groups introducing and expanding warehouse receipts systems in central Tanzania (Stakabadhi Galani, Kiswahili for Warehouse Receipt System). RUDI has achieved high impact results from working with rice and maize farmers groups. RUDI has worked out financing arrangements for its WRS systems with the National Micro Finance Bank of Tanzania (NMB) and Stanbic Bank. RUDI issues WRS receipts to farmers which are honored by the participating banks. The banks advance funds to smallholder farmers and keep the WRS receipts as security
- Providing a grant to the Cereal Growers Association (CGA) which has established Model Satellite Stores in Tanzania. CGA facilitated purchase of surplus staple foods from smallholder

farmers in Tanzania in partnership with the World Food Program's Purchase for Progress (WFP P4P) initiative. CGA is working within the targeted regions, including Dodoma.

U.S. African Development Foundation: USADF promotes and supports excellence in sustainable community-based enterprise development. USADF provides technical and financial support to grassroots-based producers and entrepreneurs in growing industries and sectors of the economy. The goal of this support is to establish sustainable business and market linkages with local, regional and international buyers and investors, and to take advantage of regional and international trade protocols.

United States Department of Agriculture (USDA): The local procurement pilot project through the WFP P4P program takes place in FTF target areas, and will help to stimulate markets. This food aid agreement includes substantial purchases of maize from smallholder farmers.

USDA: A Food for Progress Agreement with Land O'Lakes as the implementing partner is designed to enhance the competitiveness of dairy producers. This program will strengthen producers' associations and market linkages. This value chain complements those targeted under FTF, and helps to provide animal proteins as a source of dietary diversity.

Peace Corps: Agriculture volunteers will work to develop the capacity of district extension workers through perma-gardening techniques and promotion, for example, of the AVRDC "Healthy Diet Gardening Kit" to improve household nutrition.

### **3.3 CORE INVESTMENT AREA IB: SYSTEMS TRANSFORMATION THROUGH MARKET ACCESS AND SUSTAINABLE NATURAL RESOURCE MANAGEMENT**

Contributes to IR 1: Improved agricultural productivity, IR 2: Expanding markets and trade, and IR 3: Increased private investment in agriculture- and nutrition-related activities.

Currently, poor transportation infrastructure significantly increases the cost of getting goods to market. Reducing transportation costs would prove beneficial both to the producer and consumer. The primary trunk roads must be developed in conjunction with feeder roads to maximize the impact for smallholder farmers. Irrigation, a major component of the TAFSIP, is also crucial to reducing dependency on unreliable rain-fed agriculture. Irrigation improves productivity, and also enhances the adoption of improved agronomic practices such as use of fertilizer. Irrigation schemes can serve as hubs for demonstration and dissemination of farm technologies, marketing, agro-processing and service providers. Tanzania has over 2.3 million ha of high-potential land for irrigation, but only 289,245 ha are developed. Morogoro Region is considered to have the highest irrigation potential, but remains the least developed in irrigation infrastructure with more than 350,000 agricultural families using traditional irrigation canals. The Ministry of Agriculture has completed feasibility studies for seven irrigation schemes identified in the National Irrigation Master Plan.

Long-term, sustainable agricultural growth must be done in the context of conservation of the natural resource base to sustain those activities for growing populations. Considering the potential near and longer-term impacts of climate change is fundamental to sustainability, particularly given that forecasts for East Africa show extremes in precipitation and temperature, two of the most important factors in understanding and mitigating agricultural risk. The Tanzania Agribusiness Climate Legal Institution Reform (AgCLIR) considered climate change for the first time as one of the issues to evaluate in regards to legal and institutional barriers to development. Water property and user rights are important issues to consider proactively in light of climate variability and change. The rights for users to water from rivers, streams, ponds, and wells is potentially quite contentious in Tanzania because water is a scarce

resource, and in some cases its availability is decreasing considerably due to increased productive and domestic use, largely linked to population growth. Increased climate variability due to deforestation and other forms of landscape modification are also likely to reduce water availability. A clear definition of water rights would contribute to interventions aimed at encouraging agricultural production and reducing the tension and potential conflict among crop producers, pastoralists, and other water resource users. The water rights and climate change impact assessment will be completed before any irrigation systems are constructed. That information will then be built into follow-on work with water user associations, the River Basin Management Officers, and irrigation system management.

### Connection to the Tanzania Agriculture and Food Security Implementation Plan

TAFSIP identifies priority areas related to market access and sustainable natural resource management. TAFSIP Program 3 focuses on rural infrastructure and market development, specifically through the development of marketing of agricultural products, rural roads and market infrastructure (roads, markets, storage facilities, electrification, etc.), marketing information systems, quality management and trade certification, and market-oriented cooperatives/associations. Program 4 addresses sustainable land and water resources management through irrigation developments, water resource management, and integrated agricultural land use management.

#### **3.3.1 Engineering Service Component**

*Description:* Provide design, management, monitoring and evaluation for the Irrigation and Rural Roads Activity. This includes providing detailed engineering designs and environmental assessments; construction monitoring services for infrastructure rehabilitation; and capacity development for host country institutions and local contractors in infrastructure development, rehabilitation and management.

*Expected outcomes:*

- Seven feasibility studies for irrigation schemes updated
- Detailed engineering designs for irrigation schemes and 100 km of rural roads completed
- Procurement documents for rehabilitation of irrigation schemes and rural roads developed
- A program to strengthen the capacity of local government institutions and contractors involved in irrigation and road rehabilitation and maintenance in the target districts developed

#### **3.3.2 Irrigation Infrastructure Component**

*Description:* Improve the productivity of the agricultural sector, particularly irrigated rice and horticulture, through rehabilitation of existing irrigation schemes and development of new schemes. In the past, irrigation schemes fell into disrepair because of the structure of ownership, as farmers were required to be part of cooperatives. This FTF investment puts special emphasis on a market-driven approach to the irrigation schemes which also develops the capabilities of the communities to continue maintenance of the schemes. This program will build institutional capacity for the maintenance of the irrigation schemes by first conducting a training and skills needs assessment, and designing training programs to build the human capacity of all relevant personnel involved in the project, including the identification of appropriate candidates for participation in training programs. Second, the program will organize study tours for GOT staff and water users on water management, site rehabilitation and management, and environmental management. Additionally, the investments will include training and technical assistance for the development of infrastructure management and maintenance procedures such as design of water tariff structures, collection of user fees, enforcement of noncompliance, and improved procedures for improving the efficiency of water use management.

*Expected outcomes:*

- Over 47,000 ha of irrigated land in 7 schemes developed
- Improved productivity
- Annual production of staples increased by 25 percent (1.25 million tons) in 5 years
- 100 percent of irrigation schemes operated by entrepreneurs without donor support by 2015

### **3.3.3 Rural Roads Infrastructure Component**

*Description:* This component aims to expand access to markets and services by improving the condition of certain strategic roads to reduce transportation time and costs. The program will collaborate with other USG partners, regional and local governments in prioritizing, designing, and supervising road construction in USG target regions.

*Expected outcomes:*

- Over 3,000 km of feeder road upgraded, to facilitate linkage of irrigation schemes with markets
- Time to market reduced

### **3.3.4 Climate Change Adaptation Component**

*Description:* This component will support applied research and capacity building for the water management and agriculture sectors in order to increase resiliency to climate change.

*Expected outcomes:*

- Vulnerability assessments for the targeted river basins and agriculture development regions within FTF
- Water user rights and climate change impact assessment on specific planned irrigation systems
- Improved understanding of climate variability and change at finer geographic scales in Tanzania
- Increased local capacity for integrated, multi-disciplinary research focused on creation of decision support tools and information systems for the water and agriculture sectors
- Increased resiliency to climate shocks in the water and agriculture sectors
- Improved climate and weather forecasting from the Tanzania Meteorological Agency that is utilized by decision-makers
- Improved water management systems, particularly with regards to surface water extraction, permitting for irrigated agriculture

#### **Aligned USG investments**

*Integrated Water, Sanitation & Hygiene (iWSH) Program Description:* This ongoing program works with the Wami-Ruvu and Rufiji River Basin Management Offices (the two most significant Water Basins in the SAGCOT) to help improve management of water resources throughout the basin. Through completion of Environmental Flow Assessments that work to improve water extraction and overall management practices, the iWSH program is ensuring the long-term availability and quality of water resources to meet competing demands for human consumption, agricultural development and ecosystem services. Under FTF, this existing program will work to mainstream climate change adaptation measures into long-term water management planning through use of innovative tools like water calendars based on seasonal and inter-annual forecasts. The program will also expand to create linkages between community-led sanitation education and behavior change efforts to have the greatest impact on nutrition interventions with the target populations.



*Millennium Challenge Corporation:* The \$698 million MCC Compact includes more than \$372 million in investments in key transport infrastructure that will enhance domestic and regional trade for staples and horticulture, by reducing transport costs. Over 430 km of mainland trunk roads are being upgraded along the following routes: Sumbawanga - Tunduma (224 km); Tanga – Horohoro (65 km); and two major segments of the Mtwara corridor (Peramiho Junction to Mbinga (78 km) and Songea-nantumbo (65 km). Tunduma is the main road transit point on the Tanzania–Zambia border for the SAGCOT. In addition, MCC is investing in strengthening electricity infrastructure in six regions around the country, including the Morogoro area, which will enhance power availability for agro-processing and increase opportunities for cold storage. MCC is also supporting significant improvements in Morogoro’s potable water supply by expanding existing infrastructure facilities.

*USAID East Africa Regional Mission:* The USAID/East Africa Regional Climate Change Program will enhance sustainable economic growth and environmental conservation in eastern and central Africa (ECA) by integrating issues of development and climate change. The main goal of the program is to increase the regional capacity to adapt to climate change. The main objectives of the regional climate change program are to:

- 1) Increase adoption of clean technologies that lead to reduced greenhouse gas emissions;
- 2) Reduce greenhouse gas emissions through carbon sequestration associated with land use and management; and
- 3) Increase the institutional capacity for regional organizations to respond to the effects of climate change.

The USAID East African Regional Mission strategy for meeting these goals will be developed to build the capacity of regional organizations to foster low carbon economic development and adaptation, and to packaging and disseminating information on best practices across the region. It will also serve to promote regional integration and add value to activities undertaken by the bilateral missions in the region.

*Donor Coordination:* Collaboration with other donors on climate change (including dialogue and joint-programing) will continue through the already well-established Donor Partner Group framework. Through this framework, various activities will be jointly implemented to address climate change vulnerabilities and support resilience and adaptation capacity in the agriculture sector, enhancing FTF impact potential. Illustrative activities to be implemented through this collaboration include:

- Regional Environmental Assessments (may include spatial planning) to meet not only the statutory environmental compliance requirements, but also to inform decision-making on agricultural investments in the SAGCOT in relation to climate change adaptation strategies.
- Strengthening of the institutional framework to support mainstreaming of climate change adaptation into the overall agriculture sector programming.
- Support to land use planning that incorporates climate impacts, adaptation analyses research and key vulnerability studies, promoting improved agricultural practices that are resilient to climate change, reducing the pressure on forest resources, and providing alternative livelihoods and energy sources.

Potential donors under this collaboration include, but are not restricted to, the World Bank, the UK Department for International Development and Norway.



### 3.4 CORE INVESTMENT AREA 2: IMPROVING NUTRITION

Contributes to IR 4: Increased resilience of vulnerable communities and households, IR 5: Improved access to diverse and quality foods, IR 6: Improved nutrition-related behaviors and IR 7: Improved utilization of maternal and child health and nutrition services.

The second set of core investments will focus on scaling up the delivery of a comprehensive package of nutrition interventions in regions of the country with the highest rates of chronic undernutrition among children under five (also referred to as stunting) and maternal anemia. It will also focus on raising the problem of undernutrition as a key development challenge and policy issue for Tanzania to address in order to meet the objectives set forth in the CAADP and the MKUKUTA II/ MKUZA II. Dodoma will be a primary focus regions, as it has the highest rates of child stunting in the country (56 percent).

Inadequate caring practices for children and mothers (especially poor breastfeeding and complementary feeding practices), poor hygiene, and poor access to quality health services, are recognized as the key contributors to child undernutrition in Tanzania. The recent Tanzania Demographic Health Survey and the Comprehensive Food Security and Vulnerability Assessment (2010) found that only 50 percent of infants are exclusively breastfed for the first 6 months, and 19 percent of children aged 6-23 months consume a minimum acceptable diet. Many infants in Tanzania are fed water or porridge from the age of one month or less which does not meet their nutritional requirements and often leads to illness caused by gastrointestinal infections. FTF investments will address the important cultural and behavioral issues, including the role of men in influencing decision making on nutrition, that influence food access and utilization by women and children at the household level. In FTF target regions, the vision is for households with children under five reached through agriculture and horticulture, as well as health and HIV/AIDS programs to also be reached with strategic nutrition interventions designed to improve household care and hygiene practices, infant and young child feeding practices, and access to nutrition and health services.

Another key priority area for nutrition under FTF Tanzania will be to maximize opportunities for “smart integration” with other USG investments under the Global Health Initiative. This will mean strengthening and building nutrition components into new and existing safety net, maternal and child health, HIV/AIDS, malaria and water/sanitation/hygiene programs in order to maximize synergies and leverages additional nutrition results in programs that may or may not have nutrition of children or pregnant women as a main focus of their work.

#### Connection to the Tanzania Agriculture and Food Security Implementation Plan

FTF Nutrition investments will support the national nutrition objectives, plans and priorities as outlined in the MKUKUTA II, CAADP and the National Nutrition Strategy. These nutrition investments are also included as priorities in TAFSIP Program I. Nutrition work under FTF will engage partners from government and nongovernmental organizations working in both the health and agriculture sectors for effective implementation.

#### 3.4.1 Flagship Nutrition Program

*Description:* The USG has developed a new program under FTF and the Global Health Initiative designed to reduce rates of chronic undernutrition (stunting) among children under-five and maternal anemia among women of reproductive age. The program will cover the following:

- **Build institutional capacity:** Through strengthening the institutions’ responsible for nutrition with a focus on the local government authorities, civil society organizations and district-level government nutrition focal points.

- **Improve nutrition behaviors:** Through the scaling up of social and behavior change to improve infant and young child feeding practices, including exclusive breastfeeding, complementary feeding, hand washing and importance of micronutrient supplementation for prevention of micronutrient deficiencies.
- **Increase access to a diverse diet:** Through investments in nutrition-friendly agriculture programs (e.g., horticulture, small livestock, dairy) and food processing.
- **Deliver improved maternal nutrition services:** Through strengthening of existing maternal health platforms that link facilities to communities and improve knowledge, attitudes and practices of women about the importance of taking iron-folate supplements during pregnancy as well as increasing consumption of iron-rich foods.
- **Document strategies for nutrition-focused development:** Through addressing key knowledge gaps identified for the delivery of more effective and coordinated health, agriculture and nutrition programs.

*Expected outcomes:*

- Reduce child stunting by 20 percent over the next 5 years in targeted regions
- Reduce maternal anemia by 20 percent using strengthened maternal health platforms that link facilities to communities and improve behavior change communication for anemia reduction

Aligned USG investments

*USAID HIV/AIDS FTF wraparound: Community Nutrition and Economic Strengthening of Vulnerable Households with OVCs and PLHIV:* PEPFAR/Tanzania, through community based partners working with orphans and vulnerable children (OVC) and people living with HIV/AIDS (PLHIV) will integrate community nutrition interventions into HIV/AIDS community programs. Also, PEPFAR will develop a new nutrition and economic strengthening wraparound, and will align nutrition and economic strengthening activities with FTF interventions in regions of overlap. This activity aims to address the nutrition and economic needs of vulnerable households with OVCs and PLHIV, and will maximize synergies and impact by linking with FTF. Some of the expected community- and household-related outcomes include:

- Strengthened local institutions and community-based structures for delivering nutrition services
- Stabilized income and consumption in vulnerable households
- Recovered, protected and increased key household assets
- Increased use of community micro-insurance and savings mechanisms among vulnerable households
- Expanded household income and consumption among vulnerable households with OVCs or PLHA
- Improved nutritional status and resilience of vulnerable households with OVCs and PLHIV

*USAID and USDA School Feeding and Food for Education:* USAID/Tanzania is supporting school feeding programs through WFP which provide a social safety net for school age children. Given that the evidence suggests that transfers are most effective in reducing malnutrition when they reach children early in life, other food aid and cash transfer projects supported by USAID will also be explored. The Food for Education program serves as an important social safety net for young school-age children in the Mara region. These programs also include nutrition education, and school gardens are part of the program design in some schools. USDA launched a new call for applications in July 2011 for new support that will align with and further support FTF efforts and objectives in Tanzania.

*State Department:* The GOT and development partners have expressed an interest in embracing the Scaling Up Nutrition Framework. In advance of the CAADP Business Meeting, USAID and the State Department will work with the GOT to support its request for increased donor collaboration and financing for nutrition services.

*Peace Corps:* The Peace Corps Country office in Tanzania has identified four new volunteers who will work with FTF programs, including those for nutrition, beginning in 2011. In this way, Peace Corps volunteers will further support nutrition education about dietary diversification, food fortification and care and feeding practices for children under five as part of their training and outreach work with communities.

### **3.5 CORE INVESTMENT AREA 3: CAPACITY BUILDING AND SUPPORT SERVICES**

Contributes to IR 1: Improved agricultural productivity, IR 2: Expanding markets and trade, IR 3: Increased private investment in agriculture- and nutrition-related activities, IR 4: Increased resilience of vulnerable communities and households, IR 5: Improved access to diverse and quality foods, IR 6: Improved nutrition-related behaviors, IR 7: Improved utilization of maternal and child health and nutrition services, and IR 8: Improved enabling policy environment for both agriculture and nutrition

Tanzania's food security and overall agricultural performance into the medium-term will be predicated upon the CAADP process and the accompanying Country Investment Plan (CIP). FTF investments will help support the drafting of the CAADP investment plan and also assist with its successful implementation in collaboration with all partners. FTF Tanzania will invest in building government capacity for policy-making, analysis, and interpretation and delivering on Tanzania's CAADP investment plan.

The investments will support host-country leadership and strategy planning to develop sustainability through a new generation of leadership. The USG will provide short- and long-term high-level policymaking support to GOT to develop and deliver on a robust, comprehensive CAADP investment plan and to build a formal mechanism for public-private sector dialogue. Investments will increase the capacity of Tanzanians to act as change agents for transforming the sector.

In addition, FTF will invest in research and development to build Tanzania's capacity to respond to challenges through innovations. FTF supports collaborative research to enhance Tanzania's ability to improve productivity, especially in light of climate change impacts and other constraints, both agronomic and economic.

Finally, one of the important parts of strengthening the capacity of Tanzanian agriculture is through supporting market-based financial services, including through a variety of loan programs. FTF Tanzania is utilizing innovative methods to increasing rural financing opportunities, especially through microfinance

FTF staff and partners involved in this component will ensure that gender equitable policies are included in the TAFSIP and in its implementation, that women participate in leadership and training programs, and that women are involved in program activities with Sokoine University of Agriculture and the National Agricultural Research System.

#### Connection to the Tanzania Agriculture and Food Security Implementation Plan

The TAFSIP includes Program 5 to bolster agricultural support services through research and technology development and dissemination, mechanization services, extension services, agriculture-based business development centers, and access to financial services. TAFSIP Program 6 is designed to

strengthen institutional capacity through institutional strengthening, human resource capacity, and communications system development.

### **3.5.1 Support to Comprehensive Africa Agriculture Development (CAADP) Post Compact Activities**

*Description:* This program will provide resources directly to the GOT to finalize the alignment of the ASDP with the CAADP. A diagnostic will be done together with the GOT and other donors to identify the specific critical capacity gaps and roles in the ministries related to the finalization and execution of CAADP. Short-term topical experts will assist in analyses related to nutrition and vulnerable populations. This program will fund research institutes to collect data and conduct analyses on areas relevant to the development of the CAADP investment plan, with actionable proposals. It will also fund research for jointly identified areas, including nutrition and cross-cutting themes.

*Expected outcomes:*

- ASDP is mainstreamed into the CAADP process
- A comprehensive CAADP investment plan integrating nutrition and cross-cutting objectives is approved
- An effective public-private sector engagement mechanism is developed
- Key CAADP/ASDP targets are attained by 2015

### **3.5.2 Africa Leadership Training and Capacity Building**

*Description:* Short-term training to build the capacity of food security implementing partners for training on issues pertaining to food security and nutrition; enabling environment policy issues; strategic planning; monitoring and evaluation; entrepreneurship and agribusiness; value chains; climate change adaptation; river basin management; safety nets; and outreach to vulnerable smallholder populations.

*Expected outcomes:*

- Increased capacity of senior and mid-career Tanzanian professionals to assume leadership roles in their own institutions
- Increased capacity of key high-ranking GOT officials involved in the management, programming and monitoring of food security initiatives
- Over 150 public staff and private sector actors trained in key areas critical to the CAADP investment plan development

### **3.5.3 Sokoine University of Agriculture Capacity Building**

*Description:* This program will expand and improve the quality of training in agricultural fields and research in support of FTF Tanzania. By supporting Sokoine University of Agriculture through a direct mechanism, FTF Tanzania will build the capacity of this Tanzanian institution to respond to agricultural issues.

*Expected impact:*

- Improved capacity for teaching and research at the Sokoine University of Agriculture

*Description:* This program will strengthen the training and research capacities of Sokoine University of Agriculture and the Tanzanian National Agricultural Research System. The program will support collaborative research, foster leadership in training and research through long-term training in

agriculture, strengthen the capacity of Sokoine University of Agriculture, and promote tripartite Sokoine University if Agriculture - U.S. University - South-South University Cooperation.

*Expected impact:*

- A program of faculty exchange developed between Sokoine University of Agriculture and the U.S. Land Grant system to give faculty greater exposure to new approaches to teaching, curricula, research methodologies, student interaction and counseling, and institutional innovation
- A total of 100 M.A. students and 20 PhD students are trained

Aligned USG investments

*DCA loan guarantees:* Backed by the full faith of the U.S. Treasury, the guarantee mechanism's goal is to stimulate local private investment in Tanzania. By mitigating the risks faced by the financial institutions issuing loans, the guarantee mechanism encourages financial institutions to extend credit to underserved borrowers in a wide range of sectors in health, education, microfinance and agriculture.

*USAID Pride Tanzania Loan Guarantee:* USAID/Tanzania will utilize a 75 percent bond guarantee to help PRIDE Tanzania, a Tanzanian microfinance institution, secure \$10 million from the Tanzanian capital markets. The direct impact of the global financial crisis greatly altered PRIDE's outlets for borrowing, and impacted Tanzanian micro-entrepreneurs – many of whom will be the ultimate beneficiaries of this guarantee. Fifty-two percent of PRIDE's portfolio includes agriculture-related enterprises. With the successful issuance of the bond, PRIDE will be able to maintain and increase lending to these hard-hit micro-entrepreneurs, particularly within the agricultural sector. The guarantee will also serve to deepen the capital markets in Tanzania, which have seen few bond issuances and none by a microfinance institution. Further, a bond guarantee to PRIDE will help facilitate the flow of much needed lending to micro and small enterprises along the agricultural value chain in Tanzania. Once the guarantee is in place, PRIDE will be able to increase its lending to at least 10,000 borrowers and agribusinesses.

*USDA: FINCA microfinance program:* The FINCA/Tanzania Microfinance Service Program monetized donated commodities valued at \$6.8 million to implement activities that would 1) introduce and expand microfinance services to microentrepreneurs in agriculture-related businesses, and 2) establish an impact assessment protocol to determine overall program impact. The program works in targeted, economically-deprived communities in Dar es Salaam and the coastal region, Morogoro, Dodoma, Ifakara, Iringa, Mbeya, Njombe, Mwanza, Mara, Shinyanga, Tabora, and Bukoba. FINCA now covers about 40 percent of the country overall, and 65 percent in population centers.

*USDA Cochran Fellowship Program:* The Cochran Fellowship Program provides two to six weeks of agricultural training in the United States for mid- and senior-level public or private professionals in areas that include agricultural trade, marketing, management, policy, food safety, and technology transfer. The knowledge and skills development helps countries develop their capacities to trade and strengthen trade links with the United States. Since 1984, almost 1,400 individuals from 26 countries in sub-Saharan Africa, including 53 Fellows from Tanzania, have received training under the Cochran Program.

*USDA Norman E. Borlaug International Science and Technology Fellows Program:* Established in 2004, the Borlaug Program provides short-term collaborative research training for promising international agricultural research scientists and policymakers to increase food production and improve food security. Mentors coordinate research and training with U.S. Land Grant universities, USDA and other government agencies, international agricultural research centers, private companies, and nonprofit institutions. Since 2005, approximately 190 Borlaug Fellowships have supported new research

partnerships that have strengthened scientific and human capacity in 16 different African countries. The Africa Women in Science (WIS) Borlaug Fellows Program has supported a total of 61 leading female scientists from sub-Saharan African countries.

*USDA Faculty Exchange Program:* The Faculty Exchange Program (FEP) brings university instructors to the United States for four to five months to upgrade their technical subject knowledge, improve teaching skills, and develop new and revised courses for introduction at their home institutions. FEP training in Africa focuses on horticultural phytosanitary issues, enhancing the capacity of African academic institutions to teach these subject areas to students and adults involved in risk assessment, pest and disease surveillance and detection, and border inspection. Since 2007, 27 participants from sub-Saharan Africa have completed the program.

*Norman Borlaug Research Initiative:* This joint effort by USDA and USAID will focus resources on research that will advance the productivity frontier, transform production systems, and enhance nutrition and food safety.

*State Department:* The International Visitors Program will be leveraged to support training and development of change agents.

### **3.6 CORE INVESTMENT AREA 4: ENABLING POLICY ENVIRONMENT**

Contributes to IR 8: Improved enabling policy environment and good governance for both agriculture and nutrition

FTF Tanzania will support policy reform and address major agricultural policy and governance issues by building the capacity of the government and private sector to conduct analyses and take action to identify and address the binding constraints to agricultural development. The USG will promote policies that provide an enabling environment for private sector investment in agriculture, create more certain and consistent trade policies, develop and assist in the implementation of more gender equitable policies and focus on policies that enable the implementation of key nutritional interventions. These will include policies and legal issues related to agricultural inputs, credit, markets, and land and trade policy. In order for any of the investments in food security to have the intended impact, a supportive policy environment is foundational.

Tanzania has overarching policy challenges that can seriously impact its performance with food security and its possible role as a regional provider into the future. The recent AgCLIR assessment for Tanzania identified several key policy issues that currently inhibit transformational agricultural growth, including: policy instability, multiplicity of local taxes, and a weak legal framework to protect property rights.

FTF will actively work to develop the GOT's capacity to analyze and implement policy instruments that address both short and long-term food security needs. Possible interventions include:

1. Assisting the GOT in the establishment of an inventory of private food-grain stocks alongside the public stock so that the government is able to make informed decisions on the status of food availability in the country. Currently the GOT market information service system monitors only food prices in over 50 markets across the country, but there is no information on volumes of commodities. The GOT also has information on stocks held by the National Food Reserve Agency (NFRA), but lacks information on private inventories.

2. Working with WFP and the Food Security Department of the Ministry of Agriculture to strengthen early warning systems to enhance the accuracy and timeliness of food security forecast.
3. Strengthening the capacity of NFRA to improve its efficiency in responding to emergency food relief needs while operating without distorting the market in a public-private partnership.
4. Analyzing the feasibility of a “Food Emergency Fund” in addition to physical stocks which could be invoked to facilitate emergency food procurement.
5. Strengthening regional market integration and promoting cross-border trade to take advantage of regional climatic differences in closing the food demand-supply gap with regional imports.

To ensure that policies that cause market distortion are avoided, FTF will create a robust monitoring system for policy reforms and will promote mutual accountability based on a consultative process rather than imposing conditionality.

One of the main challenges to promoting good governance in Tanzania is access to information by the public and by pressure groups, which is necessary for holding the government accountable in use of resources for provision of public services such as rural roads or extension. FTF will establish a communications strategy that will enhance access to information on food security and agriculture so as to foster public awareness on the program, and on state and private sector performance in the sector. The program will build upon the existing processes for “Agricultural Sector Review” and “Public Expenditure Review” which are held annually.

The participation of civil society, media and NGOs in shaping an agricultural development program is essential to ensuring that a program articulates the needs of the majority, including vulnerable segments of the population such as women and children. Civil society and NGOs can also assist in holding the government accountable for its performance. FTF Tanzania will support some local NGOs and civil society organizations to champion policy reforms. USG has started, and will continue, to engage civil society in the shaping of FTF, and encourage them to participate in the implementation process. The U.S. Government advocated for more engagement of civil society in the CAADP process, resulting in the engagement of the Agriculture Non-State Actors Forum (ANSAP) in the CAADP Task Force and the Drafting Team for TAFSIP. As the U.S. Government assumes the leadership of the donors’ group for agriculture in July 2011, it will engage more NGOs and civil society organizations in the Agricultural Sector and Public Expenditure Reviews.

FTF Tanzania will advocate for policies that will address gender disparities in access to resources. For instance, the “Secured Transactions Reforms” would create a legal framework to support the use of movable assets as collateral for accessing credit by small and medium enterprises. Such a system would enhance equitable access to credit, as the current system relies on the use of fixed assets such as land, and thereby often excludes women, who under traditional cultural practices have limited opportunity to land titling.

#### Connection to the Tanzania Agriculture and Food Security Implementation Plan

The GOT is committed to reforms, as evidenced by the number of initiatives to promote investment and trade. The Business Environment Strengthening for Tanzania (BEST) program is a donor supported basket fund for policy reform. The Financial Sector Reform Program (FSRP) and Business and Property Formalization Program are also making some progress. Despite these initiatives, concerns exist among

stakeholders regarding the slow pace of reform and a “one size fits all” approach, which has failed to yield significant impacts in targeted sectors such as agriculture.

### **3.6.1 Enabling Policy Environment for Agricultural Sector Growth**

*Description:* The project’s primary goal is to advance policy reform efforts in key areas identified as the critical barriers to transformation of the agriculture sector. The purpose of this project is to develop a policy partnership between government, private sector organizations, and research institutions to achieve key policy reforms in the agriculture sector and related business environment that will ensure successful implementation of the GOT’s agriculture investment plan and FTF. The project will: strengthen the capacities of GOT institutions, the private sector, and other stakeholders for policy research and implementation of policy change that informs the CAADP process and FTF on constraints to growth; promotes dialogue among all stakeholders and partners; identifies and develops consensus on specific policies that need to be analyzed and changed; and monitors the implementation and impact of reforms intended to enable increased private investments in agriculture and trade.

*Expected outcomes:*

- Key partnerships developed with government institutions, private sector associations, policy researchers/think tanks, and others with a defined strategy for achieving specific policy reforms
- Research and policy analysis conducted on priority policy issues to support the overall objective of transforming Tanzania’s agriculture sector and implementation of FTF
- Policy forums established for transparent and open policy dialogue and stakeholder advocacy and monitoring of policy reform implementation
- Linkages established between policy research centers of excellence in the region to assist in implementation
- Capacity developed for policy research, advocacy and reform

#### Aligned USG investments

*State Department:* The strategy’s proposed policy reforms will be facilitated through high-level interactions in Government, leveraging close contacts with local “champion” associations ACT and TAHA. Priority will be given to the following GOT policy reforms, based on insights from recent analysis by AgCLR:

- Urging consistency, competitiveness, and clarity in trade policy.
- Improving land policies to promote investment through exploring efficient ways to allow village land to be used as collateral, improving women’s access and rights to land, and easing access to land for foreign investors.
- Promoting access to formal financial services, and supporting advocacy to reduce cultural barriers to land tenure for women.

*USDA:* Collaboration with the Economic Research Service will enhance the GOT’s ability to evaluate policy options based on economic impacts.

*USAID East Africa Regional Mission:* The regional Mission will support policy reforms, especially as they pertain to the promotion of intraregional and international trade. The Regional Sanitary and Phytosanitary (SPS) Advisor will engage Tanzanian technical officials and policy makers to ensure that Tanzanian SPS regulations are consistent with international standards. The following activities will also be supported:



- To provide better information to decision makers, the COMPETE program is working with the Eastern Africa Grain Council (EAGC) to develop a new tool, a Regional Food Balance Sheet, which will help governments in East and Central Africa monitor the food situation in their countries. The Regional Food Balance Sheet is an extension of the national food balance sheets and focuses on key staples – maize, rice, wheat, millet, sorghum, and beans – in eight countries in Kenya, Uganda, Tanzania, Burundi, Ethiopia, Rwanda, Malawi, and Zambia. The Regional Food Balance Sheet helps provide the factual, quantitative basis for formulating policies to support structured trading systems and scaling back ad-hoc import and export restrictions that have been detrimental to long-term food security and have severely restricted intraregional trade.
- COMPETE is also supporting the EAC in its process of transforming to a full-fledged customs union. The regional program provided support to the EAC Trade and Investment Framework Agreement and has promoted best practices in customs for the EAC

## 4. MONITORING AND EVALUATION

### Overview

A participatory approach, which calls for active participation of all stakeholders, will be used to monitor and evaluate (M&E) FTF Tanzania. The design of the M&E system will be based on the usefulness of the data and information which is collected and processed at the different levels and intervals of program implementation and operationalization. M&E for FTF will involve on-going monitoring of program activities in the participating districts, annual evaluations, annual review workshops, beneficiary assessments, mid-term review and terminal evaluation.

Evaluations will be carried out using an independent entity to assess annual program performance. In addition, FTF Tanzania will organize annual review workshops for the duration of the program to enable implementing partners to share information on program implementation performance. FTF will also draw lessons and experiences from these workshops that can be taken into account when planning activities for subsequent years of implementation.

A matrix for the selected FTF indicators is attached as Annex A. FTF Tanzania has received assistance from USAID's Bureau for Food Security to provide M&E technical assistance. A preliminary M&E plan has been developed for FTF Tanzania which will be completed in September 2011 once the FTF M&E implementing partner, The Mitchell Group (TMG), has arrived in Tanzania and is fully operational.

### Performance Evaluations

Performance evaluations will be carried out for selected FTF Tanzania projects to ascertain the trends in achieving project results of the FTF interventions, to document the overall progress toward objectives, and to assess what is working and what is not and why. One evaluation will be done in project year one (PY 1), another in PY 3 and the last one in PY 5. A mid-term review is planned for the end of PY 2 to assess overall progress and impact of FTF implementation, to provide for corrective actions to enhance performance of FTF, and to provide recommendations for future program designs. These recommendations will be confirmed in the terminal evaluation to be carried out in PY 5.

Qualitative and participatory methods will be utilized for the performance evaluations. Evaluators will utilize methods such as observation, focus groups, key informant interviews, stakeholder interviews and rapid survey techniques to assess progress. These techniques often provide critical insights into beneficiaries' perspectives on the value of programs to them, the processes that may have affected outcomes, and a deeper interpretation of results observed. Specific targets for the indicators at the

outcome and output levels will be developed once FTF Tanzania has carried out the baseline survey in the FTF target areas along with the preparation of Performance Monitoring Plans.

### Impact Evaluation

In addition to performance evaluations, FTF Tanzania will design an impact evaluation to test a selected development hypothesis for FTF. Ideally the impact evaluation will utilize Experimental Methodology to design and conduct the impact evaluation. This methodology will incorporate a rigorously defined counterfactual and will utilize experimental design to test the development hypothesis. At a minimum, quasi-experimental methods will be utilized to test the selected hypothesis and to determine the attribution of FTF project impacts. The Impact Evaluation will be carried out under the guidance of TMG.

### Program Monitoring

All programs receiving resources under FTF Tanzania will be expected to use rigorous M&E systems that will feed into the broader FTF and GOT M&E frameworks. To the extent possible, examples of participatory methodologies built into program implementation to engage program beneficiaries in knowledge sharing, learning, and potential behavior change opportunities will be encouraged. In addition to the standard reporting requirements, the M&E program will develop and undertake baseline and other survey/assessment work (e.g. household, facility, market) to contribute to the larger M&E framework under FTF. Selected programs will designate a full-time M&E Specialist to appropriately monitor progress and engage in reporting systems for FTF as they are developed. These M&E Specialists will work to ensure that program results are jointly monitored with the ASDP and contribute to their reporting systems. The M&E Specialists will participate in annual meetings that include all implementing partners for FTF Tanzania, the FTF working group, and GOT representatives from relevant ministries.

### Baselines

Baseline surveys will be required for several of the indicators listed in the annex. During 2011, a comprehensive baseline survey will be carried out by the Tanzania National Bureau of Statistics under the guidance of TMG. This baseline data will assist FTF Tanzania to set targets, monitor progress toward those targets and to initiate mid-course corrections for its programs and activities. The baseline will inform FTF Tanzania with data to determine whether or not selected activities are likely to achieve their targets.

### Links to Government Monitoring Systems

The GOT will conduct rigorous M&E of their CAADP plan and supporting strategies such as the ASDP. To the extent possible, the FTF M&E framework is intended to utilize information that GOT already collects, especially at the national level. The M&E program will provide direct support to the GOT's National Bureau of Statistics. FTF investments in M&E will also be linked with the GOT monitoring mechanisms to build host country capacity and ability to analyze and report on results. A monitoring conceptual framework will set the stage for ensuring progress against targets, provide opportunities for learning, and employ participatory methods. Monitoring activities will support GOT analytical capacity building.

## 5. FINANCIAL PLANNING

The Tanzanian CAADP plan is currently being drafted and will include costing of proposed investments. The high-level business meeting is scheduled for September 2011. At that point, the strategic planning and commitments from the various development partners will be clarified.

Based on CAADP commitments, the Government of Tanzania will increase its budget share for agriculture from the current level of approximately 6percent to 10percent. Much of this funding will support the Agriculture Sector Development Plan (ASDP). Key donors on food security in Tanzania are the World Bank, IFAD, AfDB, FAO, Japan, Ireland, and the EU. These development partners contribute to general budget support and in some cases specific projects. Tanzania has expressed interest in applying for funding from the World Bank Global Agriculture and Food Security Program trust fund following the finalization of the CAADP plan.

USG Contributions to the Tanzanian country plan consist of both FTF and aligned investments.

### Aligned Investments

In addition to FTF funding to the Economic Growth program at the bilateral USAID/Tanzania Mission, other USG programs will be aligned to support FTF objectives. At USAID/Tanzania, these include programs in health and natural resource management. Regional programs from the East Africa Regional Mission also complement the bilateral investments.

In 2008, MCC signed a 5-year, \$698 million Compact with Tanzania aimed to reduce poverty and stimulate economic growth by increasing household incomes through targeted investments in transportation, energy, and water. The investments in three projects will help Tanzanians address the inadequate transportation network by improving roads that will increase commerce and help connect communities with markets, schools, and health clinics; improve the reliability and quality of electric power and extend electricity service to communities not currently served; and increase the availability and reliability of potable water for domestic and commercial use which will increase health and productivity. These investments will take place during the period of the FTF multi-year strategy.

The U.S. African Development Foundation expects to make \$5 million of new agriculture sector investments under the FTF strategy through FY 2015. Peace Corps will leverage its volunteers and community-level engagement to support FTF. Expectations for annual progress against nutrition and poverty indicators, including number of targeted beneficiaries and agricultural growth projections over the next five years, are based upon having the anticipated amounts of funding for the Tanzanian CAADP investment plan.

## 6. MANAGEMENT

USAID leads the coordination of USG activities through the FTF Working Group, which meets on a quarterly basis to discuss, plan and implement both technical and managerial issues for FTF. It is envisioned that the group will move beyond information sharing and coordination to realize the full benefits of integrated assistance programs. USAID will communicate the full range of USG efforts under the new initiative to both GOT and donors through the Agriculture, Private Sector and Environment Donor Partner Groups.

## 7. ANNEX: FEED THE FUTURE INDICATORS

Objective hierarchy	Indicators	Base -line	Target
<b>Goal</b> : Sustainably reduce poverty and hunger	• Prevalence of Poverty: Percent of people living on less than \$1.25/day	TBD	TBD
	• Percentage decrease in prevalence of underweight children under five	TBD	TBD
<b>Assistance Objectives:</b> 1. Inclusive agricultural sector growth	• Percent change in agricultural sector growth rate	3.2%	6.3%
	• Per Capita expenditures of rural households (proxy for income) of USG targeted beneficiaries	TBD	TBD
	• Gender perceptions index	TBD	TBD
2. Improve nutritional status especially of women and children	• Prevalence of stunted children under 5 years of age	49%	39%
	• Prevalence of wasted children under 5 years of age	5.9%	<5%
	• Prevalence of underweight women (body mass index <18.5kg/sqm)	10%	<10%
<b>Intermediate Results</b>			
<b>IR 1:</b> Improved Agricultural Productivity	• Gross margin per unit of land of selected crops (rice, maize and horticulture)	TBD	TBD
	• Percent increase in farm incomes of participating smallholder farmers as a result of USG assistance		
	• Percent increase in staples production (rice and maize) of participating smallholder farmers as a result of USG assistance	TBD	TBD
<b>Sub IR 1.1:</b> Enhanced human and institutional capacity development for increased agricultural sector productivity	• Number of individuals who have received USG supported long-term agricultural sector productivity or food security training	TBD	TBD
	• Number of individuals who have received USG supported short-term agricultural sector productivity or food security training	TBD	TBD
	• Number of national agricultural research institutions supported under USG assistance	TBD	TBD
<b>Sub IR 1.2:</b> Enhanced Technology Development, Dissemination, Management and Innovation	• Number of additional hectares under improved technologies or management practices as a result of USG assistance	TBD	TBD
	• Number of new research programs developed by national agricultural research institutions under USG assistance	TBD	TBD
	• Number of farmers who have applied new technologies or management practices as a result of USG assistance	TBD	TBD
	• Number of new technologies or management practices made available for transfer as a result of USG assistance	TBD	TBD
	• Number of new technologies or management practices under field testing as a result of USG assistance	TBD	TBD

Objective hierarchy	Indicators	Base -line	Target
	<ul style="list-style-type: none"> <li>Number of private enterprises, producers organizations, water users associations, trade and business associations, and community-based organizations (CBOs) receiving USG assistance</li> </ul>	TBD	TBD
<b>Sub IR 1.3:</b> Enhanced institutional capacity development for increased agricultural sector productivity	<ul style="list-style-type: none"> <li>Number of institutions/organizations undertaking capacity/competency strengthening as a result of USG assistance</li> </ul>	TBD	TBD
<b>Sub IR 1.4:</b> Agricultural producer organizations strengthened <ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li>Number of producers organizations, water users associations, trade and business associations, and community-based organizations (CBOs) receiving USG assistance</li> </ul>	TBD	TBD
	<ul style="list-style-type: none"> <li>Number of members of producer organizations and community based organizations receiving USG assistance</li> </ul>	TBD	TBD
	<ul style="list-style-type: none"> <li>Training and capacity building programs for producers and processors developed</li> </ul>	TBD	TBD
	<ul style="list-style-type: none"> <li>Number of rural households benefiting directly from USG interventions</li> </ul>	TBD	TBD
<b>Sub IR 1.5</b> Improved irrigation systems/schemes for rice and other crops.	<ul style="list-style-type: none"> <li>Number of hectares under improved irrigation(Change in actual irrigable area)</li> </ul>	306,000	353,000
	<ul style="list-style-type: none"> <li>Number of irrigation schemes developed</li> </ul>	7	TBD
<b>IR 2:</b> Expanding Markets and Trade	<ul style="list-style-type: none"> <li>Percentage change in volume and value of traded agricultural commodities</li> <li>Percent change of value of intra-regional trade in targeted agricultural commodities</li> </ul>	TBD	TBD
<b>Sub IR 2.1:</b> Enhanced Agricultural Trade	<ul style="list-style-type: none"> <li>Value of incremental sales (collected at farm-level) attributed to FTF implementation</li> </ul>	TBD	TBD
	<ul style="list-style-type: none"> <li>Value of exports of targeted agricultural commodities as a result of USG assistance</li> </ul>	TBD	TBD
<b>Sub IR 2.2:</b> Enhanced private sector participation in input and output markets, and in provision of services to rural communities	<ul style="list-style-type: none"> <li>Increased availability of agricultural specific goods and services to the farming communities as a result of USG assistance</li> </ul>	TBD	TBD
<b>Sub IR 2.3:</b> Property Rights to Land and Other Productive Assets Strengthened	<ul style="list-style-type: none"> <li>Number of rural hectares formalized</li> </ul>	TBD	TBD
	<ul style="list-style-type: none"> <li>Number of rural hectares mapped and adjudicated</li> </ul>	TBD	TBD
<b>Sub IR 2.4:</b> Improved Postharvest market information	<ul style="list-style-type: none"> <li>Postharvest losses as a percent of overall harvest</li> </ul>	TBD	TBD
	<ul style="list-style-type: none"> <li>Kilometers of roads improved or constructed</li> </ul>	TBD	TBD
<b>Sub IR 2.5:</b> Improved access to business development and affordable financial and risk management services	<ul style="list-style-type: none"> <li>Value of agricultural and rural financing loans</li> </ul>	TBD	TBD
	<ul style="list-style-type: none"> <li>Number of MSMEs receiving USG assistance to access bank loans</li> </ul>	TBD	TBD
	<ul style="list-style-type: none"> <li>Number of MSMEs receiving business development services from USG assisted sources</li> </ul>	TBD	TBD
<b>IR 3:</b> Increased private sector investment in agriculture and nutrition related activities	<ul style="list-style-type: none"> <li>Value of new private sector investment in the agriculture sector or food chain leveraged by FTF implementation</li> </ul>	TBD	TBD
<b>Sub IR 3.1:</b> Increased access to credit for investment in the agricultural sector	<ul style="list-style-type: none"> <li>Number of farmers receiving credit and value of the credit</li> </ul>	TBD	TBD

Objective hierarchy	Indicators	Base-line	Target
<b>Sub IR 3.2:</b> Enhanced public-private partnerships	<ul style="list-style-type: none"> <li>Number of public-private partnerships formed as a result of FTF assistance</li> </ul>	TBD	TBD
<b>IR 4:</b> Increased agricultural value chain productivity leading to greater on- and off-farm jobs	<ul style="list-style-type: none"> <li>Number of jobs attributed to FTF implementation</li> <li>Value chain in agricultural products (Maize and Rice) defined and developed</li> </ul>	TBD	TBD
<b>Sub IR 4.1:</b> Increased commercial food processors specialized in fortified and blended foods	<ul style="list-style-type: none"> <li>Number of new commercial food processors specialized in fortified and blended foods</li> </ul>	TBD	TBD
<b>IR 5:</b> Increased resilience of vulnerable communities and households	<ul style="list-style-type: none"> <li>Prevalence of households with moderate or severe hunger (Average score of household hunger index)</li> </ul>	TBD	TBD
<b>Sub IR 5.1</b> Improved food access by households in target area	<ul style="list-style-type: none"> <li>Percentage of households with adequate food consumption</li> </ul>	TBD	TBD
	<ul style="list-style-type: none"> <li>Number of vulnerable households benefiting directly from USG interventions</li> </ul>	TBD	TBD
	<ul style="list-style-type: none"> <li>Number of USG social assistance beneficiaries participating in productive safety nets</li> </ul>	TBD	TBD
<b>Sub IR 5.2</b> Nutrition outreach and behavior change programs developed	<ul style="list-style-type: none"> <li>Number of vulnerable households benefiting directly from USG assistance</li> </ul>	TBD	TBD
<b>IR 6:</b> Improved access to diverse and quality foods	<ul style="list-style-type: none"> <li>Prevalence of children 6-23 months receiving a minimum acceptable diet</li> <li>Dietary Diversity: Mean number of food groups consumed by women of reproductive age</li> </ul>	TBD	TBD
<b>Sub IR 6.1:</b> Increased household access to staples, fruits, green and yellow vegetables, and poultry/livestock farming.	<ul style="list-style-type: none"> <li>Number of households with access to a home, community, school garden</li> </ul>	TBD	TBD
<b>Sub IR 6.2</b> Improved food preservation and processing techniques (e.g., through drying and granaries??)by smallholder farmers.(households)	<ul style="list-style-type: none"> <li>percent households adopting improved food preservation and processing technologies</li> </ul>	TBD	TBD
<b>IR 7:</b> Improved nutrition-related behaviors	<ul style="list-style-type: none"> <li>Prevalence of exclusive breastfeeding of children under six months</li> </ul>	TBD	TBD
<b>Sub IR 7.1 :</b> Nutrition outreach (media campaigns) and behavior change activities that target pregnant and lactating mothers and children under two years conducted	<ul style="list-style-type: none"> <li>Increase prevalence of appropriate infant and young child feeding practices from 6-23 months</li> </ul>	TBD	TBD
<b>Sub IR 7.2 :</b> Trained community workers on nutrition behavior change	<ul style="list-style-type: none"> <li>Number of community workers trained on nutrition behavior change</li> </ul>	TBD	TBD
<b>IR 8:</b> Improved utilization of maternal and child health and nutrition services	<ul style="list-style-type: none"> <li>Prevalence of maternal anemia among women of reproductive age</li> <li>Proportion of mothers who take iron supplementation for more than 90 days during pregnancy and the post-partum period</li> </ul>	TBD	TBD

Objective hierarchy	Indicators	Base-line	Target
<b>Sub IR 8.1:</b> Increased access to and awareness of the importance of iron rich foods and iron folate supplements	<ul style="list-style-type: none"> <li>Number of people trained in child health and nutrition through USG-supported health area programs</li> <li>Number of children under five years of age who received vitamin A from USG-supported programs</li> </ul>	TBD	TBD
<b>IR 9:</b> Improved enabling policy environment for both agriculture and nutrition	<ul style="list-style-type: none"> <li>Ease of Doing Business rank</li> </ul>	TBD	TBD
<b>Sub IR 9.1:</b> Conducted research on institutional barriers and simultaneously equipping private sector entities with the analytical skills to articulate the needs for reform.	<ul style="list-style-type: none"> <li>Number of policies/regulations/administrative procedures analyzed as a result of USG assistance</li> </ul>	TBD	TBD
<b>Sub IR 9.2</b> Initiated agriculture- and nutrition-related policy reforms/regulations/administrative procedures	<ul style="list-style-type: none"> <li>Number of policy reforms/regulations/administrative procedures drafted and presented for public/ stakeholder consultation as a result of USG assistance</li> </ul>	TBD	TBD
	<ul style="list-style-type: none"> <li>Number of policies/regulations/administrative procedures prepared with USG assistance</li> </ul>	TBD	TBD
	<ul style="list-style-type: none"> <li>Number of policies/regulations/administrative procedures passed for which implementation has begun USG assistance</li> </ul>	TBD	TBD

\*Region specific baseline data for the above indicators will be collected prior to commencement of the program. High-level targets are based on the historical trend from the National Bureau Statistics reports.