



FEED ^{THE} FUTURE

The U.S. Government's Global Hunger & Food Security Initiative



2015 **ACHIEVING IMPACT**

Leadership and Partnership to Feed the Future

U.S. GOVERNMENT EFFORTS TO FIGHT
HUNGER, POVERTY AND MALNUTRITION

This document highlights progress under Feed the Future, President Obama's signature initiative to combat global hunger, food insecurity and malnutrition, as well as other major U.S. Government food security efforts, through fiscal year 2014. This constellation of activities puts into practice the principles embodied in the U.S. Global Development Policy, the Rome Principles for Sustainable Global Food Security, the Presidential Policy Directive on Global Development, the Paris Declaration on Aid Effectiveness, and subsequent aid effectiveness resolutions. Additional information and previous progress reports are available at feedthefuture.gov/progress.

CONTENTS

RESULTS SUMMARY

Introduction	2
Delivering on Agriculture's Promise through Feed the Future	6
Feed the Future Global Results	8
Contributing to a Broader Impact	10
Leveraging Efforts to Improve Lives	14
Major U.S. Government Global Food Security Programs Beyond Feed the Future	16

FEED THE FUTURE IN AFRICA

Introduction	20
Select Feed the Future Results in Africa	22
Broader Impacts in Africa	23
New Alliance for Food Security and Nutrition	24
Building Resilience in Africa	25
Spotlight: Ethiopia	26
Spotlight: Kenya	30
Spotlight: Uganda	34
Select Countries	38

FEED THE FUTURE IN ASIA

Introduction	40
Select Feed the Future Results in Asia	42
Broader Impacts in Asia	43
Spotlight: Bangladesh	44
Spotlight: Cambodia	48
Spotlight: Nepal and Tajikistan	52

FEED THE FUTURE IN LATIN AMERICA AND THE CARIBBEAN

Introduction	56
Select Feed the Future Results in Latin America and the Caribbean	57
Broader Impacts in Latin America and the Caribbean	58
Spotlight: Honduras and Guatemala	60
Spotlight: Haiti	66

CONCLUSION 70

Annex	72
Select Feed the Future and Related Food Security Funding	75
Feed the Future Funding by Region	76
Feed the Future Investments in Africa, FY2010–FY2015	76
Feed the Future Investments in Asia, FY2010–FY2015	77
Feed the Future Investments in Latin America and the Caribbean, FY2010–FY2015	77

RESULTS SUMMARY: INTRODUCTION



Santos Manuel Luxpu relaxes at home with his family (*pictured above*) in the Western Highlands of Guatemala after a long day of work. Life is better now, but it wasn't always like this. Luxpu used to be one of the many farmers who seasonally migrated to the coast of Guatemala or neighboring countries to harvest sugar cane for a living. Wages were insufficient and the work was backbreaking, often performed in oppressive heat from the sun and smoke as laborers set fire to the fields to aid in the harvest. Yet this was Luxpu's best option to earn a secure living and support his family.

Now, thanks to training and support from Feed the Future, the President's initiative to reduce global hunger, food insecurity and malnutrition, Luxpu is not only able to stay with his family all year, but he also makes more money than he did in the sugar cane fields. With his new knowledge, Luxpu improved both the quality and yield of his crops and has access to better markets. He rotates different crops, including corn, beans and high-value horticulture crops, on his own farm so that he can harvest and sell produce throughout the year.

This is just one story of the many millions of smallholder farmers reached in countries where Feed the Future has a presence. But the benefits from U.S. Government efforts that leverage the principles of Feed the Future around the world extend beyond individual households. The initiative is helping farmers, businesses, policymakers and others to create better policy environments so that farm innovations and investments can extend to create off-farm jobs, increase production and open new markets.

Taken together, these stories demonstrate the breadth of U.S. Government contributions to meaningful progress against hunger, poverty and malnutrition, and represent significant U.S. Government foreign assistance efforts in the fight to end extreme poverty in the world. **Data demonstrate that these efforts are contributing to substantial reductions in both poverty and childhood stunting.**

Feed the Future reflects a coordinated U.S. Government focus on building more productive, resilient agricultural systems through country ownership, accountability and partnership. Feed the Future's public-sector investment and commitment to host-country leadership have

Food security is more than agriculture, and agriculture is more than farming

Agriculture includes “the science and practice of activities related to production, processing, marketing, distribution, utilization, and trade of food, feed and fiber,”¹ which is much broader than farming and markets. Food security, which the Food and Agriculture Organization of the United Nations defines as “when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life,” plays a critical role in poverty reduction. Feed the Future is a food security, poverty and nutrition initiative, incorporating agricultural production and markets, rural economic growth, institutional capacity building, land tenure security, nutrition promotion, gender, value chain development, trade, employment and resilience programming. Feed the Future is one of the U.S. Government’s primary tools to reduce poverty through development assistance.



also promoted improved policies to facilitate expanded private-sector contributions to ending hunger and poverty, a critical ingredient for long-term success. Feed the Future engages the private sector in a meaningful, comprehensive way to meet the global food security challenge. The resulting strategic alliances with the private sector speak to core business interests while also addressing critical development objectives. In Fiscal Year (FY) 2014, the initiative formed more than 2,000 public-private partnerships to help build food security.

In countries supported by Feed the Future and other large-scale U.S. Government efforts, local capacity to support food security, agricultural productivity and good nutrition continues to grow stronger: In 2014,² Feed the Future-supported farmers experienced more than half a billion

dollars in new agricultural sales, representing a 200 percent increase over the previous year.³ The number of individuals receiving agriculture and food security training through Feed the Future increased by 40 percent, new agriculture-related public-private partnerships increased by 90 percent, and the number of people trained to support child health and nutrition increased by 150 percent. Feed the Future also reached more than 12 million children with nutrition interventions and helped nearly 7 million farmers gain access to new tools or technologies such as high-yielding seeds, fertilizer application, soil conservation and water management. These increases represent the maturation and full mobilization of the initiative through its many partnerships with host-country governments, the private sector, the research community and others.

¹ As defined by Title XII of the Foreign Assistance Act.

² FY2014 results from Feed the Future are reported through the Feed the Future Monitoring System or annual reports. All results reported are for programs supported by Feed the Future in the countries where it works. For a more complete list of global Feed the Future results in FY2014, see the table on p. 8.

³ Incremental sales can also be described as “new sales” because they reflect increases in sales above the value at baseline. In FY2014, significant increases in incremental sales were seen as a result of increased productivity of horticultural and climate-resilient commodities, which have been scaled up over the past several years.



Cambodian fish farmer Thai Meng (*pictured at left*) is helping contribute to this progress. He smiles as he looks at his fish hatchery. Five years ago, he had all but given up on aquaculture, his main source of income, because rising costs and inefficient systems made his business unprofitable. Things changed after a Feed the Future project introduced him to simple and cost-effective technologies to help improve hatcheries. He began raising young fish to sell in the local market, and now his business is thriving. He increased his annual income from \$125 to \$2,096 and is now “paying it forward” by supplying hatchlings to other local fish farmers, a boost to the local economy that is also promoting a nutritious protein source. “Without this technology, I wouldn’t be running a hatchery,” Thai says. “It’s helped make my business a success.”

New data indicate that the successes realized by individual farmers and communities reached by Feed the Future and other U.S. Government-led efforts are contributing to impacts in stunting and poverty: Bangladesh has seen considerable reductions in both poverty and child stunting over the past 3 years in the areas where Feed the Future works⁶ and in Ethiopia, U.S. Government food security efforts contributed to a 9 percent reduction in stunting over the past 3 years.⁷ Stunting has declined by 33 percent nationwide in Ghana in recent years. In Honduras, average incomes of Feed the Future beneficiaries increased 55 percent between 2012 and 2014, which helped 36,000 extremely poor Feed the Future beneficiaries rise above the extreme poverty⁸ threshold.⁹ (See table on pages 11 and 12.)

In Cambodia, where Feed the Future’s array of partnerships have promoted nutrition, horticulture, vegetables and other food security-related work for more than 4 years, child stunting has decreased by 21 percent in Feed the Future’s zones of influence.^{4, 5}

The successes realized by individual farmers and communities reached by Feed the Future and other U.S. Government-led efforts are contributing to impact against stunting and poverty.

4 Areas where Feed the Future works within focus countries are referred to as “zones of influence.”

5 Cambodia Demographic and Health Surveys, 2010 and 2014.

6 Bangladesh Demographic and Health Surveys, 2011 and 2014; IFPRI 2015 Bangladesh Integrated Household Survey.

7 Ethiopia Demographic and Health Surveys, 2011 and 2014.

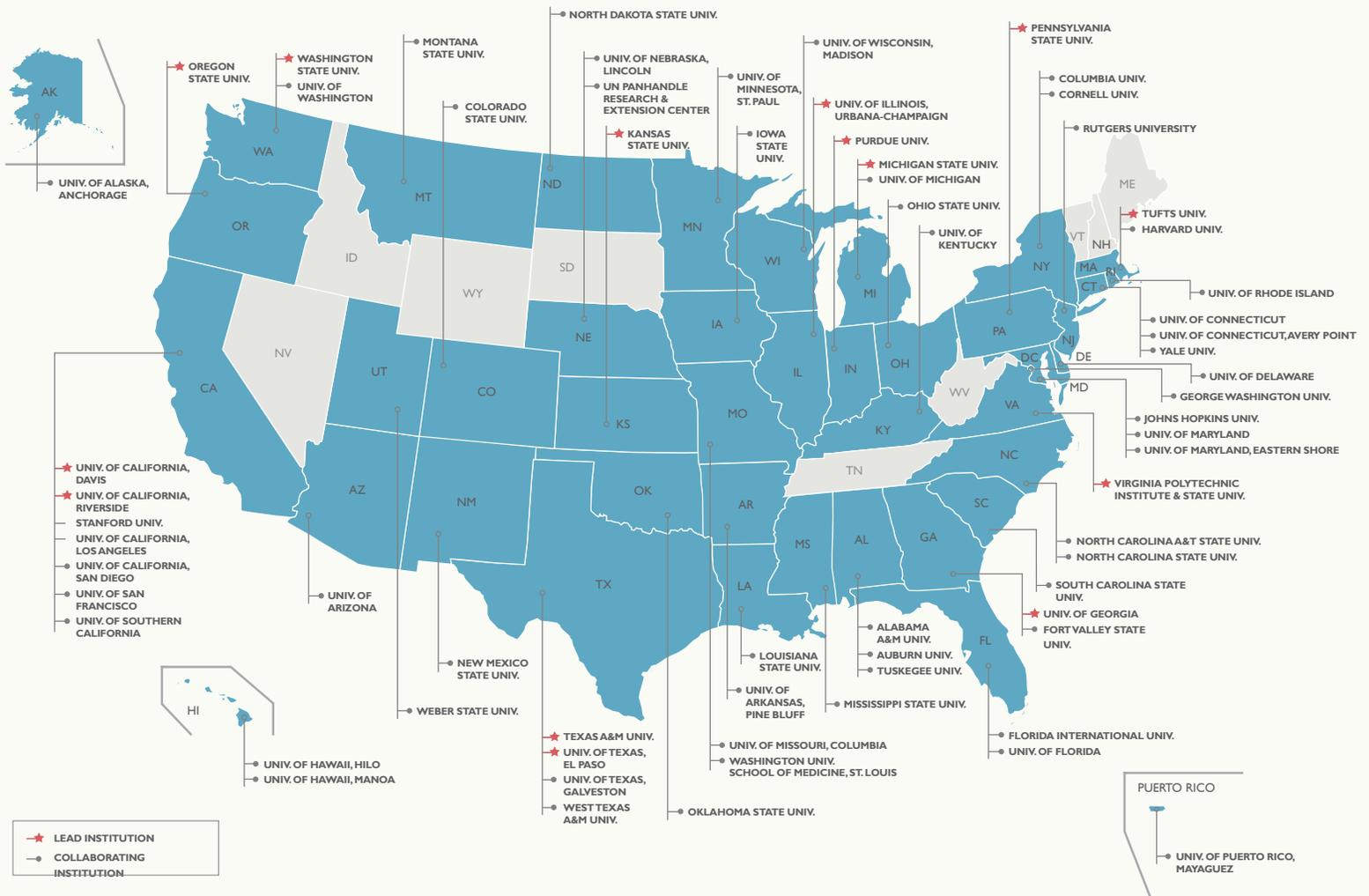
8 US\$1.25/person/day.

9 Data from survey representing more than 180,000 beneficiaries in the Feed the Future implementation area.

SPURRING INNOVATION

Teaming up with more than 50 top U.S. universities, and collaborating with partner-country research and educational institutions, the **23 Feed the Future Innovation Labs are on the cutting edge of efforts to research, develop and take to scale safe and effective technologies** that address current and future challenges posed by a changing climate and the need to feed a growing global population while training the next generation of scientists. Using advanced genomics, integrated pest management and other new tools, the Innovation Labs are developing stress-tolerant wheat, sorghum, millet and legume crops, and improved livestock, aquaculture and horticultural systems. These innovations boost production, decrease post-harvest losses and increase food safety to provide smallholder farmers with better market linkages. Better market linkages in turn raise incomes, increase food security and improve household nutrition.

FEED THE FUTURE PARTNERS WITH U.S. UNIVERSITIES TO FIGHT GLOBAL HUNGER



The Feed the Future initiative partners with universities throughout the world. This is a sampling of university partners located in the United States.



DELIVERING ON AGRICULTURE'S PROMISE THROUGH FEED THE FUTURE

Nearly 800 million people suffer from chronic hunger, and by 2050, the world's population is projected to increase to more than 9 billion. Ensuring that everyone has enough nutritious food to eat will require at least a 60 percent increase in agricultural production¹⁰ without adversely affecting the environment. Investments in global agriculture and nutrition are the key to addressing these issues.

Hadija Ramiya (*pictured above*), a smallholder farmer in Tanzania's Morogoro Region, knows that food security and nutrition are more than just numbers. She watches as her son and daughter, Sam and Tunda, run around her home garden, making faces at the small colony of rabbits that she now raises as a highly nutritious food source. Chronic malnutrition afflicts about 44 percent of Morogoro's children, but a Feed the Future-supported project has helped Ramiya and her family improve their nutrition by teaching her to grow a home vegetable garden and breed rabbits, and by providing access to health and other nutrition

services. "With my first child, I followed the conventional local wisdom about child nutrition," Ramiya says. "But he was too small, and often fell ill. Through what I learned with Feed the Future, I took a different approach with Tunda, who is now a strong and healthy 3-year-old."

Cases like Ramiya's exemplify why, for generations, the United States has been a leader in providing development assistance across the globe to alleviate suffering and build shared progress and prosperity. But global food price spikes and resulting instability in 2007 and 2008 were a wake-up call: A renewed push was needed to break the vicious cycle of hunger and poverty. To address this challenge, President Barack Obama called upon global leaders in 2009 at the G-8 L'Aquila Summit to unlock the potential of agricultural development as the key to reducing hunger, extreme poverty and malnutrition. He pledged that the U.S. Government would do more to advance global food security, building on resources allocated during the George W. Bush Administration

¹⁰ Food and Agriculture Organization of the United Nations (FAO).

to boost agricultural productivity in Africa. President Obama's leadership in L'Aquila helped spur commitments from other donors, totaling more than \$22 billion, as well as new and expanded financial commitments in host countries. Feed the Future emerged from this commitment as the center of U.S. Government efforts to end global hunger, poverty and malnutrition.

Led by USAID, Feed the Future leverages the expertise and programs of 10 additional U.S. Government departments and agencies to work in partnership with host-country governments, businesses, smallholder farmers, research institutions and civil society organizations to promote a comprehensive approach to global food security and nutrition. **With an emphasis on smallholder farmers, particularly women, Feed the Future supports 19 focus countries,¹¹ along with aligned and regional programs,¹² that are making progress toward sustainably developing their own agriculture sectors as a catalyst to economic growth and trade to reduce poverty and hunger.**

The momentum created by President Obama's commitment at L'Aquila has helped inspire a series of related development efforts centered around inclusive, collective global action. For example, it helped pave the way for the 2010 establishment of the Global Agriculture and Food Security Program (GAFSP), an innovative multi-donor trust fund that to date has allocated about \$1.4 billion to 25 low-income countries to help boost agricultural productivity. And in 2012, recognizing the critical role of the private sector in sustainable agricultural transformation, President Obama, African leaders and other G-8 members announced the New Alliance for Food Security and Nutrition to significantly expand responsible private-sector investment in African agriculture and nutrition. National governments made specific policy commitments

to improve the enabling environment for responsible private sector investment. As a result, more than 200 global and African companies have committed to invest \$10.2 billion to benefit 8.7 million smallholders through sourcing or services, with \$1.8 billion invested through 2014.

Then, in 2013, the United States and the United Kingdom launched the Global Open Data Initiative for Agriculture and Nutrition (GODAN) to support international partners in making agriculturally and nutritionally relevant data available for global public use. Just last year, the United States and other global leaders participated in the launch of the Global Alliance for Climate-Smart Agriculture, a multi-stakeholder coalition dedicated to addressing the challenges to food security and agriculture under a changing climate.

Collectively, these and other efforts are reducing hunger and poverty, improving nutrition, building a strong foundation for continued economic growth, and promoting resilient communities.

Food security and land tenure

Land is one of the most important assets for people throughout the world. It is a source of food and income generation, as well as social and cultural identity. However, secure and transparent land rights are lacking in many developing economies, where a large percentage of rural land rights remain undocumented. Feed the Future and New Alliance programming have integrated land tenure measures at both the national and community level, and in line with the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security.

¹¹ Feed the Future focus countries currently include: Bangladesh, Cambodia, Ethiopia, Ghana, Guatemala, Haiti, Honduras, Kenya, Liberia, Malawi, Mali, Mozambique, Nepal, Rwanda, Senegal, Tajikistan, Tanzania, Uganda, and Zambia.

¹² Feed the Future also funds programs through USAID's regional Missions, including Asia Regional (RDMA), West Africa, Southern Africa, East Africa, and Central America and Mexico, as well as through investments in "aligned" countries. In FY2014, Feed the Future aligned countries included Burma, the Democratic Republic of the Congo, Egypt, Georgia, Kyrgyz Republic, Lebanon, Nigeria, South Sudan, Timor-Leste, Yemen and Zimbabwe.

FEED THE FUTURE GLOBAL RESULTS

The output and outcome data below are directly attributable to U.S. Government funding.

SELECT ANNUAL FEED THE FUTURE GLOBAL RESULTS, FY2011–2014 ^{a,b}				
INDICATOR	2011 ^c	2012	2013	2014
	ACTUAL	ACTUAL	ACTUAL	ACTUAL
Improved Agricultural Productivity				
Rural households benefiting directly from U.S. Government interventions ^d	5,588,674	8,580,458	11,406,015	18,982,327
Value of incremental sales (collected at farm-level) attributed to Feed the Future implementation (USD) ^e	\$38,080,821	\$100,366,589	\$174,302,362	\$532,082,927
Farmers and others who have applied improved technologies or management practices as a result of U.S. Government assistance	1,226,119	5,248,659	6,525,677	6,799,319
% males and females applying ^f	55% M 45% F	73% M 27% F	71% M 29% F	64% M 36% F
Hectares under improved technologies or management practices as a result of U.S. Government assistance	2,397,456	3,241,549	3,747,065	3,177,123 ^g
% male-, female-, and association-managed hectares	n/a	68% M 25% F 6% A	80% M 15% F 4% A	64% M 27% F 9% A
Individuals who have received U.S. Government-supported long-term agricultural sector productivity or food security training	905	932	928	1,300
% males and females supported	58% M 42% F	58% M 42% F	56% M 44% F	55% M 45% F
Improved Use of Nutrition Services				
Children under 5 reached by U.S. Government-supported nutrition programs ^h	8,814,584	12,038,528	12,699,186	12,343,776
% males and females reached	n/a	50% M 50% F	50% M 50% F	56% M 44% F
Health facilities with established capacity to manage acute undernutrition	85	1,141	848	2,029
People trained in child health and nutrition through U.S. Government-supported programs	9,865	221,962	566,242	1,441,042
% males and females trained	41% M 59% F	42% M 58% F	22% M 78% F	19% M 81% F

SELECT ANNUAL FEED THE FUTURE GLOBAL RESULTS, FY2011–2014^{a,b} (continued)

INDICATOR	2011 ^c	2012	2013	2014
	ACTUAL	ACTUAL	ACTUAL	ACTUAL
Expanded Markets and Investments in Agriculture and Nutrition				
Public-private partnerships formed as a result of Feed the Future assistance	442	544	1,149	2,209
Food security private enterprises (for-profit), producers organizations, water users associations, women's groups, trade and business associations, and community-based organizations receiving U.S. Government assistance	13,856	44,100	59,866	95,952
Number of micro-, small-, and medium-sized enterprises, including farmers, receiving U.S. Government assistance to access loans	6,740	205,991	332,489	883,423
% male- and female-owned enterprises	n/a	52% M 48% F	64% M 35% F	51% M 49% F
Value of agricultural and rural loans (USD)	\$208,750,220	\$121,925,081	\$184,813,765	\$671,831,928
% males and females who received ⁱ	70% M 30% F	88% M 12% F	55% M 32% F	71% M 28% F
Value of new private sector investment in the agriculture sector or food chain leveraged by Feed the Future implementation (USD)	\$26,876,561	\$115,301,742	\$162,985,629	\$151,752,806

a Indicators are reported for Feed the Future focus and aligned countries. (Aligned countries are those in which the U.S. Government supports ongoing agricultural development programs but are not designated as Feed the Future focus countries.) Participating agencies do not necessarily report on all countries where they have programs and may only report on certain common indicators.

b U.S. Government agencies reporting into the Feed the Future Monitoring System (FTFMS) include USAID, the United States Department of Agriculture (USDA), Millennium Challenge Corporation (MCC), Treasury, Peace Corps and the U.S. African Development Foundation (USADF). Feed the Future began tracking results in FY2011, when the initiative developed multi-year strategies, defined its zones of influence, and implemented its monitoring and evaluation system. Some results from FY2011 to FY2013 have been adjusted based on additional information provided after publication for previous years. For more detailed information, visit the Feed the Future Indicator Handbook: http://feedthefuture.gov/sites/default/files/resource/files/ftf_handbook_indicators_october2014.pdf

c Reporting was incomplete in 2011, the first year of the FTFMS. Figures do not reflect the full impact of Feed the Future programs that year.

d This indicator counts households with at least one member who is a beneficiary of a Feed the Future activity, meaning the member directly receives goods or services provided by the activity. The intervention must be significant, and an individual is not to be counted if merely reached by an activity through brief attendance at a meeting or gathering. For more detailed information, visit the Feed the Future Indicator Handbook.

e Incremental sales can also be described as "new sales" because they reflect increases in sales above the value at baseline. They comprise a portion of total sales, which equaled more than \$1.4 billion in FY2014.

f Disaggregates—including by sex—are not reported for all activities and therefore often represent only a subset of activities.

g The decrease in the number of hectares under improved technologies and management practices from FY2013 to FY2014 is due to refinements in the indicator definition and improved data quality control measures in FY2014, in addition to the phasing out or transitioning of some large-scale value chain programs across Feed the Future. The initiative is developing a monitoring approach to better track all farmers applying the technologies and practices that programs are promoting over time, not just those receiving direct assistance in a given year.

h Some double-counting is anticipated among overlapping projects working in the same regions of some countries but cannot be calculated with precision due to the logistics of working in the field. Individual USAID projects are instructed to count children only once even if they are reached several times. Nutrition interventions are delivered through Feed the Future, Food for Peace Development, and Global Health Nutrition programs as part of a multi-sectoral effort to combat malnutrition.

i In a few cases, the percentages between male and female disaggregates will not add up to 100% because another disaggregate (e.g. "joint" or "not applicable") is an option.

CONTRIBUTING TO A BROADER IMPACT¹³



Feed the Future annual results highlighted on the previous pages reflect the outputs and intermediate outcomes directly attributable to the initiative. These results, combined with host-country and other global efforts, are

Feed the Future's results, combined with host-country and other global efforts, are contributing to early impact on reducing poverty and childhood stunting rates.

contributing to **early impact** on reducing poverty and childhood stunting rates, Feed the Future's top two goals. To help measure this progress, Feed the Future has begun a second round of indicator assessments and population-based surveys in its 19 focus countries. The data currently available on this early impact are captured in the following tables, with more to come throughout 2015.

Stunting, a marker of chronic malnutrition, inhibits the body's immune system from fighting disease, impedes cognitive, social-emotional, and motor development, is associated with reductions in educational attainment and lifelong earnings, and contributes to as much as 45 percent of child deaths worldwide.¹⁴ **The magnitude and consistency of stunting reductions in every Feed the Future focus country with available data are strong evidence that the initiative can meet its ambitious target of reducing stunting by an average of 20 percent across the zones of influence in focus countries.** In Feed the Future focus countries, there was an annual average rate of reduction in stunting of around 2 percent per year prior to 2010.¹⁵ However, the five survey results on the next page reflect a population-weighted annual average rate of reduction of more than 4 percent over the years that Feed the Future has been active.

Over the course of the coming year, Feed the Future will report on additional impact data as it becomes available. At the time of this printing, currently available nutrition- and poverty-related measures have been included.

¹³ This report presents the percent change in impact indicator values for poverty and stunting, which captures the proportional change from the baseline value, not the percentage point change.

¹⁴ Black R.E., Victora C.G., Walker S.P., Bhutta Z.A., Christian P., de Onis M., Ezzati M., ... Maternal and Child Nutrition Study Group (2013). Maternal and child undernutrition and overweight in low-income and middle-income countries. *Lancet*, 382 (9890), 427-451.

¹⁵ Based on a USAID calculation of data from Demographic and Health Surveys.

FROM RESULTS TO IMPACT: STUNTING

COUNTRY	IMPACT
BANGLADESH 	<p>↓ 14.4% reduction in childhood stunting from 2011 to 2014 across the two major divisions (regions) where Feed the Future programs are concentrated, from 38.2% to 32.7%.^a</p> <p>BEHIND THE IMPACT</p> <p>In support of the Government of Bangladesh's efforts, the U.S. Government implements large-scale nutrition projects, Food for Peace development programs, and maternal and child health activities across the Feed the Future zone of influence. Collectively, these projects have reached more than 2 million children annually with nutrition interventions.</p>
CAMBODIA 	<p>↓ 21% reduction in childhood stunting from 2010 to 2014 in the Feed the Future zone of influence, from 41.2% to 32.6%.^b</p> <p>BEHIND THE IMPACT</p> <p>This impact is dramatic given a previous period of little progress in improved nutrition. The U.S. Government contributed to this progress through support for nutrition counseling for caregivers of undernourished children, mass media nutrition education campaigns, growth monitoring, and nutrition-sensitive horticulture. USDA's McGovern-Dole Food for Education and Child Health and Nutrition programs also provided take-home rations to families and training in child health and nutrition. The U.S. Government reached more than 130,000 children in Cambodia with nutrition interventions in 2014.</p>
ETHIOPIA 	<p>↓ 9% reduction in stunting nationally between 2011 and 2014, from 44.4% to 40.1%.^c</p> <p>BEHIND THE IMPACT</p> <p>These results reflect the leadership and efforts of the Government of Ethiopia to address stunting as well as the full range of Feed the Future, the former U.S. Initiative to End Hunger in Africa,^d and other U.S. Government investments. For example, in 2014 the U.S. Government trained more than 20,000 people in nutrition and reached more than 1.3 million children under 5 with evidenced-based nutrition interventions, such as micronutrient supplementation.</p>
GHANA 	<p>↓ 33% decline in stunting nationally between 2008 and 2014, from 28% to 18.8%.^e</p> <p>BEHIND THE IMPACT</p> <p>In partnership with the Government of Ghana, Feed the Future, the former U.S. Initiative to End Hunger in Africa, other U.S. Government agricultural efforts, and maternal and child health programs implemented nutrition-specific activities (such as management of severe malnutrition) and nutrition-sensitive agriculture (including promotion of household water and sanitation, horticulture, livestock and safety net programs). In 2014, approximately 230,000 children were reached directly with such interventions.</p>
HONDURAS 	<p>↓ The prevalence of underweight children under 2 years in 230 target communities has decreased by 56.4% between 2011 and 2014, from 22% to 9.6%. Of the 4,329 children under 2 being reached by Feed the Future health and nutrition interventions on average every month, only 415 were reported as underweight at the end of FY2014.</p> <p>BEHIND THE IMPACT</p> <p>The promotion of improved feeding practices for children under 2 years (diversified food groups, nutrient balance, and food preparation), improved hygiene practices, and the introduction of the "healthy household" component is having a positive effect on transforming caregivers' feeding practices and reducing the prevalence of underweight children. The ACCESO project, USAID's core Feed the Future activity in Honduras, aims to lift rural households out of poverty and undernutrition through access to economic development opportunities, including new markets and improved health and nutrition practices. ACCESO's "healthy household" component works to eliminate indoor smoke from cooking fires, cover dirt floors and walls with a cement mix, provide clean water access inside the house, ensure use of waste disposal methods, and keep animals outside.</p>

FROM RESULTS TO IMPACT: STUNTING

COUNTRY	IMPACT
KENYA 	 More than 25% reduction in stunting in the areas of the former Eastern and Nyanza provinces, where Feed the Future programs have been concentrated, ^f from 36.25% in 2009 to 26.3% in 2014. ^g
	BEHIND THE IMPACT Working with the Government of Kenya, U.S. Government programs contributed substantially to these results. For example, in 2014 alone, U.S. Government efforts reached more than 3 million children under 5 with nutrition interventions and provided nutrition training to more than 6,000 health care providers, community health workers, agriculture extension agents and others.

a Bangladesh Demographic and Health Survey, 2011 and 2014.

b Cambodia Demographic and Health Survey, 2010 and 2014.

c Ethiopia Mini-Demographic and Health Survey, 2014.

d The President's Initiative to End Hunger in Africa (IEHA) was a multi-year effort to help fulfill the Millennium Development Goal of reducing the number of hungry people on the continent by 2015.

e Ghana Demographic and Health Survey, 2008 and 2014.

f The Feed the Future Zone of Influence is larger than the areas included in this calculation. At the time of publication, data were only available for the areas referenced.

g Kenya Demographic and Health Survey, 2009 and 2014.

FROM RESULTS TO IMPACT: POVERTY

COUNTRY	IMPACT
BANGLADESH 	 Nearly 16% reduction in poverty in the Feed the Future zone of influence, from 40.5% in 2011 to 34.1% in early 2015, according to preliminary estimates. ^a
	BEHIND THE IMPACT The U.S. Government provided more than \$200 million in assistance to the zone of influence, including more than \$100 million in Food for Peace development programming. In FY2014 alone, Feed the Future helped more than 1.97 million smallholder farmers utilize new technologies or management practices, including efficient fertilizer techniques, high-yielding rice varieties and improved practices for horticulture and aquaculture.
UGANDA 	 16% decrease in poverty in rural areas, including where Feed the Future works, from 27.2% in 2009–2010 to 22.8% in 2012–2013. ^b National poverty levels declined from 24.5% in 2009–2010 to 19.7% in 2012–2013. ^c
	BEHIND THE IMPACT Over the past 5 years, USAID, through Feed the Future, has provided more than \$150 million to improve agricultural productivity (especially for beans, maize, coffee and horticulture), nutrition, and other aspects of food security. USDA has improved market linkages, trained smallholder farmers in conservation farming and farm management, increased access to financial services, provided financial literacy training to agribusinesses, and increased access to improved inputs and output markets.
HONDURAS 	 Average income increases of 55% among Feed the Future beneficiaries between 2012 and 2014, which helped nearly 27% of the more than 135,000 extremely poor beneficiaries to rise above the \$1.25/person/day extreme poverty threshold. Incomes of the extremely poor increased by an average of 95%, from \$0.62 to \$1.21/person/day. ^d
	BEHIND THE IMPACT Feed the Future efforts focus on coffee and horticulture value chains, improved land preparation, crop and water management practices, and diversified livelihoods.

a Data from the IFPRI Bangladesh Integrated Household Survey, 2011 and 2015 (preliminary).

b Using the national poverty threshold, as defined by the Government of Uganda.

c Data from the 2012–2013 Uganda National Household Survey.

d Data from a survey representing more than 180,000 beneficiaries in the Feed the Future implementation area.



LEVERAGING EFFORTS TO IMPROVE LIVES

Eleven U.S. Government departments and agencies contribute to Feed the Future:

FEED THE FUTURE PARTNER AGENCIES AND ROLES



U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT: Provides overall leadership of Feed the Future. Coordinates, implements and assesses Feed the Future programming at country and regional levels, while also directly programming agriculture, nutrition and development food assistance funding. Also has provided support to the U.S. Government contribution to the Global Agriculture and Food Security Program (GAFSP), a multi-donor trust fund to boost agricultural productivity in low-income countries.

RESULTS: In FY2014, reached nearly 7 million farmers with improved technologies or management practices, reached more than 12 million children with nutrition interventions, and helped increase sales by more than half a billion dollars (see p. 8 for more). Through the Food for Peace development programs, implemented development food assistance projects in 15 countries, reaching more than 9 million beneficiaries.



U.S. DEPARTMENT OF STATE: Uses diplomatic means to keep food security and nutrition high on the global political agenda, to improve strategic coordination, and to increase global resources from other donors for food security and nutrition. Advances policy reforms that strengthen the effectiveness of food security investment, strengthens national frameworks for adoption and regulation of agricultural biotechnology, and partners with relevant United Nations agencies and other international organizations on global food security, nutrition, and the Feed the Future agenda.

RESULTS: In 2014, played a central role in launching the Global Alliance for Climate-Smart Agriculture, which brings together countries, civil society, the private sector, researchers, farmers, and others in a platform designed to advance climate-smart practices in food and agriculture systems, taking account of agriculture's impact on climate, and climate change's impacts on agriculture and food security. Also played a key role in the International Conference on Nutrition (ICN-2), which encouraged world leaders to establish national policies to eradicate malnutrition and to transform food systems to make nutritious diets available to all.



U.S. DEPARTMENT OF AGRICULTURE: Supports agricultural development through research and extension, data and economic analysis, market information systems and statistics, and in-country and U.S.-based capacity building, including enhancing implementation of trade-related sanitary and phytosanitary standards. USDA also leads the U.S. Government's open data in agriculture efforts through the Global Open Data for Agriculture and Nutrition initiative (GODAN), which supports global efforts to make agricultural and nutritionally relevant data available, accessible and usable for unrestricted use worldwide. USDA further supports the U.S. Government's global food security efforts through the McGovern-Dole (MGD) International Food for Education and Child Health and Nutrition program focused on improving literacy of school-aged children and children's health and nutrition, and through the Food for Progress (FFPr) program focused on improving agricultural productivity and expanding trade and markets.

RESULTS: In FY2014, USDA provided training to 566 fellows through the Borlaug and Cochran Fellowship Programs, 98 of them from Feed the Future focus countries. Through MGD and FFPr programs, training was provided to over 132,000 health professionals, primary health care workers, community health workers, volunteers, and non-health personnel such as teachers, school administrators and parents on child health and nutrition, and to 220,000 food producers on food security and agricultural productivity.



U.S. DEPARTMENT OF THE TREASURY: Coordinates multilateral development bank (MDB) support for food security, including contributions to GAFSP. Promotes rigorous monitoring and evaluation of MDB projects and GAFSP investments. Encourages alignment of GAFSP investments with U.S. food security priorities. Oversees other MDB funding for agriculture, including activities of the International Fund for Agricultural Development (IFAD), the African Development Bank, the Asian Development Bank and the World Bank.

RESULTS: In Bangladesh, through GAFSP, helped over 110,000 farmers increase crop productivity by 35 percent over the life of the project, and in Tajikistan, reached 4,335 project beneficiaries, of whom 25 percent are women, with improved/rehabilitated irrigation and drainage services.

FEED THE FUTURE PARTNER AGENCIES AND ROLES *(continued)*



U.S. DEPARTMENT OF COMMERCE: Promotes trade and investment through the International Trade Administration and provides weather and climate forecasting and guidance to some Feed the Future countries on climate change mitigation and sustainable fisheries through the National Oceanic and Atmospheric Administration.

RESULTS: In 2014, organized an educational seminar on innovative financing models that lower barriers in agricultural purchase transactions, hosted during 2014 World Food Prize to an audience of international agriculture businesses.



MILLENNIUM CHALLENGE CORPORATION: Supports country-led programs for agriculture and food security-related investments through MCC compacts including irrigation, roads, ports, post-harvest infrastructure, property rights and land policy, productivity and business training, agriculture finance, institutional and policy reform, and nutrition.

RESULTS: In FY2014 in Senegal, completed a 450-hectare irrigated perimeter to help increase farmer productivity; in Senegal and the Philippines, made significant progress in the construction of rural roads, which will help smallholder farmers transport products to market. In Indonesia, rolled out investments in training and block grant support for its community-based health and nutrition project to reduce stunting.



OVERSEAS PRIVATE INVESTMENT CORPORATION: Supports U.S. private investments in some Feed the Future countries through political risk insurance, debt financing, and support to private equity funds.

RESULTS: In Sub-Saharan Africa, funded a \$106.5 million investment fund and a \$140 million political risk insurance policy to focus on investments in the agriculture sector with the Silverlands Fund. In Senegal, funded a \$50 million loan and \$34 million in political risk insurance to support firms providing cold storage and harvesting services with Aventura Investment Partners LLC.



OFFICE OF THE U.S. TRADE REPRESENTATIVE: Advances work on trade and investment policy, including trade facilitation and other efforts to reduce barriers to efficient markets consistent with international obligations in the World Trade Organization, through bilateral discussions such as Trade and Investment Framework Agreements, and through free trade agreements.



U.S. AFRICAN DEVELOPMENT FOUNDATION: Builds the capacity of local farmer associations and food processors in some African Feed the Future countries. Also expands economic activities in rural communities and involves smallholders in local, regional and international markets.

RESULTS: In FY2014, invested nearly \$6.6 million in nine Feed the Future focus countries, directly benefiting approximately 23,000 people. Since 2010, has invested a total of \$39.29 million to Feed the Future projects. USADF's whole FY2014 investment in 18 countries was \$11.655 million, funding 87 new food security projects and indirectly benefiting 219,300 people. USADF's total current portfolio contains over 325 active grants and is impacting more than 1.5 million people affected by extreme poverty.



PEACE CORPS: Dedicates Peace Corps Volunteers to support community economic development, agriculture, environment, and nutrition.

RESULTS: In FY2014, reached 38,257 farmers with improved technologies or management practices, and provided more than 47,000 individuals with short-term agricultural training.



U.S. GEOLOGICAL SURVEY: Offers scientific and technical expertise to enhance resilience to recurring drought. Provides remotely sensed seasonal forecast-derived products on crop performance indices for more informed recovery, response and preparedness. Provides expertise on an integrated approach for sustainable water resources and management.

RESULTS: Created and released several datasets related to land use and climate change, now available for scientific and public use.

MAJOR U.S. GOVERNMENT GLOBAL FOOD SECURITY PROGRAMS BEYOND FEED THE FUTURE



Feed the Future encompasses the work of the 11 agencies described above; of these, the 6 agencies that support field activities report into the initiative's annual results.¹⁶ Other U.S. Government efforts are also major contributors to the goal of reducing hunger, poverty and malnutrition. **The U.S. Department of State** is using multilateral diplomatic initiatives to promote climate-smart food security best practices through the Global Alliance for Climate Smart Agriculture. These initiatives aim to mobilize all three streams of development financial assistance—overseas development assistance, domestic resource mobilization, and foreign direct investment—to accelerate the implementation of country-led development strategies in regional and sub-regional contexts. For example, through the COAST (the Caribbean Oceans and Aquaculture Sustainability Facility) initiative the Department of State is leading a collaborative effort to increase access to climate-risk insurance as a means of improving food security within the fisheries sector for the region. Similarly, the State Department is leading a Central America Climate Smart Food Security

Initiative wherein the United States, Mexico and Canada will seek to raise the profile and urgency of climate-smart food security issues, drive additional political attention and financial resources to the sector, utilize innovative development finance mechanisms, and partner with multilateral technical agencies. By applying Feed the Future's principles to these diplomatic initiatives, they further advance the broad range of sustainable development goals.

The U.S. Department of Agriculture (USDA) has a long history of undertaking the basic and applied research that has the ability to unlock long-term solutions to the many agricultural and food-related challenges the world faces today. USDA focuses on enhancing the sustainability of agriculture while increasing productivity by generating new, fundamental knowledge through research in genomic science and applying it to crop and animal production. The primary goal of this research is to promote practices and systems to safely and sustainably increase animal and crop production, as well as food's nutritional value, in the United States and abroad.

¹⁶ These include USAID, USDA, MCC, Treasury, Peace Corps and USAIDF.

USDA researchers, for example, sequenced the genome of wheat and the wheat stem rust pathogen, which threatens to destroy wheat crops worldwide, and then were able to distribute new wheat germplasm globally to reduce the risk of unproductive harvests. USDA also continues to conduct research to combat aflatoxin (mycotoxins can be lethally toxic in high dosages or cause dilatory health effects over the long-term in smaller dosages) through genetic resistance in maize and using RNAi approaches in peanut.

Much like foundational research, agricultural trade is vital to reducing global food insecurity. **USDA's Foreign Agricultural Service** plays an important role in agricultural trade and food security policy negotiations at the bilateral and multilateral levels. Through these negotiations, the United States works to reduce market barriers, post-harvest loss and food waste, as well as improve food safety and data quality and availability.

Working with its partner countries, the **Millennium Challenge Corporation (MCC)** has been on the forefront of addressing food security priorities since its first compact in 2005. MCC partner countries develop 5-year compact programs to address their most significant barriers to economic growth and poverty reduction. To date, MCC has obligated more than \$4.5 billion to strengthen rural economies in poor countries and address the many sources of food insecurity. MCC projects take an integrated approach and seek to remove key constraints in the value chain to allow the agricultural sector to grow and farmers to increase their incomes. These projects have included irrigation infrastructure, rural road construction, land tenure, air and sea port improvements, agricultural finance, nutrition, and farmer training activities. To date, 22 of 29 signed compacts have included food security-related investments, and 62 percent of MCC's food security portfolio takes place in 12 African countries.

The **Office of the United States Trade Representative** works with all international trading partners to open markets and lower barriers to trade, improving the availability and affordability of food and increasing economic opportunities for producers in global markets through lowered tariffs. Through free trade agreements and trade preference programs, reduced tariffs make agricultural products more affordable and more competitive in new markets, creating more opportunities for farmers and ranchers from the United States and partner countries to sell their food and feed around the world. Reductions in tariffs and procedural and administrative barriers have expanded agricultural trade globally, including U.S. agricultural exports, improving access to food in countries that reduce barriers. Implementation of the World Trade Organization's Trade Facilitation Agreement will build on this momentum by addressing delays at borders, and is expected to cut trade costs by roughly 15 percent and 10 percent for developing and developed countries, respectively, reducing the costs of global trade by hundreds of billions of dollars annually.

Feed the Future encompasses the work of 11 federal departments and agencies, with additional U.S. Government efforts also supporting major contributions toward reductions in hunger, poverty and malnutrition.

The **U.S. Department of the Treasury** oversees multilateral development bank funding to projects that enhance food security, including activities of the International Fund for Agricultural Development (IFAD), the African Development Bank, the Asian Development Bank, the Inter-American Development Bank and the World Bank. In response to the 2007–2008 global food crisis, Treasury played a key role in the development of the Global Agriculture and Food Security Program (GAFSP), an innovative multi-donor trust fund housed at the World



Bank. Since its founding, GAFSP has allocated approximately \$1.4 billion to 25 low-income countries to support their efforts to improve food security for smallholder farmers and their families. Treasury also works with partner governments and multilateral development banks to promote rigorous monitoring and evaluation of MDB projects and GAFSP investments in food security projects around the world.

Supplementing the longer-term interventions financed through Feed the Future, USAID's Office of Food for Peace (FFP) provides emergency food assistance to those affected by conflict and natural disasters. These complement the Food for Peace development programs that directly support Feed the Future food security efforts.

RESULTS TO IMPACT REPORT OVERVIEW

Taken together, these efforts are making a difference for millions of smallholders and burgeoning entrepreneurs like Luxpu, Thai and Ramiya. U.S. Government leadership, focused through the Feed the Future initiative, has helped ensure that their farms—and families—flourish. Since 2009, global leaders have committed to increasing investments in agriculture and nutrition. With help from the American people, these individuals—and their communities—now have more opportunities to grow and thrive. This report demonstrates how Feed the Future and other U.S. Government efforts to fight hunger are contributing to their progress, and that of countless others like them, and are leading to impact that will benefit generations to come.



FEED THE FUTURE IN AFRICA: INTRODUCTION



Feed the Future is based on the belief that investing in smallholder farmers is the key to unlocking the transformative potential in African agriculture, connecting more people to the global economy and paving a path out of poverty. Eighty percent of all farms in Africa exist on two hectares or less and more than two-thirds of Africans depend directly on agriculture for their incomes. But this enormous opportunity has yet to be realized: Despite the fact that more than a quarter of the world's arable land is on the African continent, African agriculture accounts for only 10 percent of global agricultural output,¹⁷ a shortfall attributed in large part to low use of modern agricultural tools, practices and technologies.¹⁸

Fortunately, the past two decades have shown a progression toward a more coordinated focus on agriculture on the continent. In 2003, through the Comprehensive Africa Agriculture Development Program (CAADP), African leaders committed to a common vision to increase economic growth and participation in global markets through agriculture-led development. In just a few years,

the CAADP model has boosted African ownership in agricultural policies and catalyzed significant funding. Inspired by the CAADP model of country ownership already rooted in Africa, and building on resources allocated during the George W. Bush Administration to the Initiative to End Hunger in Africa, President Obama in 2009 called on global leaders to break the cycle of poverty and hunger by seizing the opportunity to promote growth in the agriculture sector. This leadership mobilized additional global action, leveraging more than \$22 billion from donors and positioning food security at the top of the global agenda after decades of decline in investment. From this commitment emerged Feed the Future, the U.S. Government's cornerstone global hunger initiative working to reduce hunger, poverty and malnutrition.

Guided by host countries' own priorities, Feed the Future is working across 12 countries in Africa, helping farmers, entrepreneurs, policymakers, scientists and civil society capitalize on Africa's agricultural potential.

¹⁷ Kartik Jayaram, Jens Riese and Sunil Sanghvi. "Agriculture: Abundant opportunities" in *Africa's path to growth: Sector by sector*. June 2010. McKinsey & Company. http://www.mckinsey.com/insights/economic_studies/africas_path_to_growth_sector_by_sector

¹⁸ Africa Agriculture Status Report: Focus on Staple Crops, 2013. The Alliance for a Green Revolution in Africa (AGRA).



By creating new income opportunities for small-holder farmers, providing access to resources for improved nutrition, and supporting **robust civil society and private-sector engagement and policy reforms that promote** agricultural growth, Feed the Future and related U.S. Government efforts are helping **communities become more resilient** and better able to respond to emergencies. In fact, ongoing Feed the Future and Food for Peace programs at the time of the 2014 Ebola outbreak in West Africa allowed some affected communities to be more resilient than would otherwise have been the case. Feed the Future's efforts also include an emphasis on innovative and climate-smart agricultural approaches to confront ongoing and future challenges.

Last year alone, Feed the Future helped nearly **2.5 million African farmers use new technologies and management practices and spurred over \$306 million in new sales** over the baseline on the continent. Nearly **\$600 million in new agricultural and rural loans** brought small-scale entrepreneurs increased income opportunities.

Feed the Future helped families grow stronger by reaching nearly 9 million **children under 5 through nutrition programs** in Africa.

African leaders recently reaffirmed their commitment to agricultural development with the 2014 Malabo Declaration, which builds on the CAADP principles of agriculture-led growth, regional cooperation, evidence-based planning and policy, partnership, and expanded African financial commitments. The Declaration also sets out an ambitious agenda for Africa's food security and nutrition for the next decade that is consistent with and will help achieve Feed the Future's goals.

The commitments and achievements of the public and private sectors paint only part of the picture of Africa's food security promise. The stories highlighted in this chapter help show the impact that Feed the Future and other U.S. Government efforts are having on individuals and their families across the continent.

SELECT FEED THE FUTURE RESULTS IN AFRICA, FY2013–2014^{a,b}

INDICATOR	2013	2014
	ACTUAL	ACTUAL
Value of incremental sales (collected at farm-level) attributed to Feed the Future implementation (USD) ^c	\$73,880,100	\$306,000,713
Global Feed the Future countries and programs	\$174,302,362	\$532,082,927
Value of agricultural and rural loans (USD)	\$145,986,089	\$593,170,752
Global Feed the Future countries and programs	\$184,813,765	\$671,831,928
Value of new private sector investment in the agriculture sector or food chain leveraged by Feed the Future implementation (USD)	\$109,161,747	\$113,307,729
Global Feed the Future countries and programs	\$161,985,629	\$151,752,806
Food security private enterprises (for-profit), producers organizations, water users associations, women's groups, trade and business associations, and community-based organizations receiving U.S. Government assistance	46,392	75,258
Global Feed the Future countries and programs	59,866	95,952
Children under 5 reached by U.S. Government-supported nutrition programs	9,666,120	8,704,461
Global Feed the Future countries and programs	12,699,186	12,343,776

a The output and outcome data included here are directly attributable to U.S. Government funding and represent reporting from USAID, the United States Department of Agriculture (USDA), Millennium Challenge Corporation (MCC), Treasury, Peace Corps and the U.S. African Development Foundation (USADF). Participating agencies do not necessarily report on all countries where they have programs and may only report on certain common indicators.

b Global indicators in this chart are reported for Feed the Future focus and aligned countries. (Aligned countries are those in which the U.S. Government supports ongoing agricultural development programs but are not designated as Feed the Future focus countries.)

c Incremental sales can also be described as "new sales" because they reflect increases in sales above the value at baseline. They comprise a portion of total sales, which equaled more than \$1.4 million in FY2014 globally.

BROADER IMPACTS IN AFRICA^a

FROM RESULTS TO IMPACT: STUNTING AND POVERTY

COUNTRY	IMPACT
ETHIOPIA 	<p>↓ 9% reduction in stunting nationally between 2011 and 2014, from 44.4% to 40.1%.^b</p> <p>BEHIND THE IMPACT</p> <p>These results reflect the leadership and efforts of the Government of Ethiopia to address stunting as well as the full range of Feed the Future, the former U.S. Initiative to End Hunger in Africa,^c and other U.S. Government investments. For example, in 2014 the U.S. Government trained more than 20,000 people in nutrition and reached more than 1.3 million children under 5 with evidenced-based nutrition interventions, such as micronutrient supplementation.</p>
GHANA 	<p>↓ 33% decline in stunting nationally between 2008 and 2014, from 28% to 18.8%.^d</p> <p>BEHIND THE IMPACT</p> <p>In partnership with the Government of Ghana, Feed the Future, the former U.S. Initiative to End Hunger in Africa, other U.S. Government agricultural efforts, and maternal and child health programs implemented nutrition-specific activities (such as management of severe malnutrition) and nutrition-sensitive agriculture (including promotion of household water and sanitation, horticulture, livestock and safety net programs). In 2014, approximately 230,000 children were reached directly with such interventions.</p>
KENYA 	<p>↓ More than 25% reduction in stunting in the areas of the former Eastern and Nyanza provinces, where Feed the Future programs have been concentrated,^e from 36.25% in 2009 to 26.3% in 2014.^f</p> <p>BEHIND THE IMPACT</p> <p>Working with the Government of Kenya, U.S. Government programs contributed substantially to these results. For example, in 2014 alone, U.S. Government efforts reached more than 3 million children under 5 with nutrition interventions and provided nutrition training to more than 6,000 health care providers, community health workers, agriculture extension agents and others.</p>
UGANDA 	<p>↓ 16% decrease in poverty in rural areas, including where Feed the Future works, from 27.2% in 2009–2010 to 22.8% in 2012–2013.^g National poverty levels declined from 24.5% in 2009–2010 to 19.7% in 2012–2013.^h</p> <p>BEHIND THE IMPACT</p> <p>Over the past 5 years, USAID, through Feed the Future, has provided more than \$150 million to improve agricultural productivity (especially for beans, maize, coffee and horticulture), nutrition, and other aspects of food security. USDA has improved market linkages, trained smallholder farmers in conservation farming and farm management, increased access to financial services, provided financial literacy training to agribusinesses, and increased access to improved inputs and output markets.</p>

a This report presents the percent change in impact indicator values for poverty and stunting, which captures the proportional change from the baseline value, not the percentage point change.

b Ethiopia Mini-Demographic and Health Survey, 2014.

c The President's Initiative to End Hunger in Africa (IEHA) was a multi-year effort to help fulfill the Millennium Development Goal of reducing the number of hungry people on the continent by 2015.

d Ghana Demographic and Health Survey, 2008 and 2014.

e The Feed the Future zone of influence is larger than the areas included in this calculation. At the time of publication, data were only available for the areas referenced.

f Kenya Demographic and Health Survey, 2009 and 2014.

g Using the national poverty threshold, as defined by the Government of Uganda.

h Data from the 2012-2013 Uganda National Household Survey.



NEW ALLIANCE FOR FOOD SECURITY AND NUTRITION

Given the overwhelming importance of African agriculture in rural livelihoods and its potential to bring people out of poverty, public investment in food security and agriculture has significantly increased over the last decade. But in 2012, recognizing that governments and donor resources alone cannot achieve lasting impact, African governments and development partners, including the United States, engaged private sector partners in a new and substantial way to drive transformative growth in agriculture.

The **New Alliance for Food Security and Nutrition** helps African countries undertake key policy reforms to spur agricultural and private-sector growth and to deepen responsible private-sector engagement around a shared set of goals to reduce hunger, poverty and malnutrition.

Since its launch, the New Alliance has catalyzed investments from more than 200 companies around the world—two-thirds of them African—to accelerate agricultural growth, with private-sector commitments totaling more than \$10 billion. Of this, more than \$1.8 billion has been implemented to date, reaching over 8.6 million smallholder farmers and creating 58,000 jobs. A full progress report for the New Alliance will be released in 2015.

Feed the Future serves as the primary vehicle through which the United States contributes to the New Alliance. Updates about the New Alliance can be found at www.new-alliance.org.

Feed the Future and Food for Peace in Africa

Food for Peace development programs comprise a critical component of Feed the Future and contribute significantly to the initiative's annual results and longer-term impact. Feed the Future and Food for Peace programs are working toward strategic integration in six Feed the Future focus countries in Africa (Ethiopia, Kenya, Liberia, Malawi, Mali, and Uganda), one "aligned" country (the Democratic Republic of the Congo) and two "resilience focus" countries (Niger and Burkina Faso). Food for Peace agriculture and livelihood activities aim to provide poorer households the "hand-up" they require to participate in and benefit from Feed the Future's value chain activities—either in sequence ("graduating" Food for Peace program participants into Feed the Future programming), or, in the case of targeted resilience efforts, in tandem. Feed the Future "Community Development Funds" represent a direct investment of the USAID Bureau for Food Security in Food for Peace programs, and help to ensure coordination and collaboration in program planning and design. In Africa, these funds are used in Uganda, Malawi, Niger and Burkina Faso.



BUILDING RESILIENCE IN AFRICA

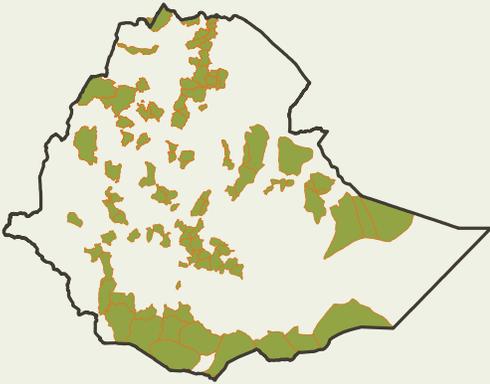
In the wake of devastating, large-scale humanitarian emergencies in the drylands of the Horn of Africa and Sahel in 2011–2012, the U.S. Government, other donors, humanitarian and development partners, and African governments collectively committed to building resilience to these recurrent crises. The U.S. Government is working to build resilience in Kenya, Ethiopia, Uganda, Somalia, Niger, Burkina Faso and Mali by expanding on- and off-farm economic opportunities, strengthening natural resources, managing conflict and disaster risk, and improving human capital.

Early returns on these investments are already evident and include a 40 percent increase in the value of livestock trade in targeted dryland areas in Ethiopia and Kenya. In addition, U.S. Government investments in Ethiopia have helped to facilitate over \$10 million in private-sector investment and helped to ensure year-round access to safe drinking water for more than 250,000 people.

In Kenya, participatory, community-based planning efforts have directly assisted target communities in mobilizing more than \$12 million in non-program resources from the public and private sectors for education, health, markets and other types of infrastructure. USAID resilience programming is supported collectively by Feed the Future, other development assistance, Food for Peace, international disaster assistance, and child and maternal health funds. In the Sahel, a partnership between USAID and the U.S. Geological Survey (USGS) has resulted in innovative land-use mapping that is enabling our partners to make use of historic and real-time satellite imagery in promoting and monitoring progress on agro-forestry practices at a landscape scale and mitigating conflicts over natural resources.

SPOTLIGHT:
ETHIOPIA





COUNTRY CONTEXT

More than a third of Ethiopia's people live in poverty and 40 percent of all children under 5 are stunted. **Feed the Future is targeting 16.8 million Ethiopians in select parts of the country** with programs to reduce hunger, poverty and malnutrition. These interventions helped spur over \$44.5 million in new agricultural sales last year in Ethiopia, mainly of sesame seed, maize, livestock, and wheat, as well as over **\$45 million worth of agricultural and rural loans**, opening up new opportunities for smallholders to grow their businesses and future. **Among those receiving U.S. Government assistance last year were more than 550,000 vulnerable households¹⁹** whose families live in constant fear of the next crisis that could spell disaster for their livelihoods and well-being.

Value chain focus: Maize, wheat, sesame, coffee, honey, chickpea, live animals, meat, dairy, Irish/orange-fleshed sweet potatoes

Zone of influence: Woredas in four regions are the focus for intensive agricultural growth (pictured above)

Key objectives:

- Enabling environment that supports increased investment and broad-based agricultural growth
- Improved productivity and commercialization
- Improved resilience to and protection from shocks and disasters with increased livelihood opportunities
- Improved nutritional status of women and young children

Feed the Future efforts have led to a more than 20 percent increase in wheat and maize yields for more than half a million farmers. In FY2014, more than 210,000 farmers utilized improved technologies, such as high-yielding seed varieties and small-scale irrigation. A public-private partnership with DuPont Pioneer contributed to these results by reaching more than 10,000 farmers, who obtained yields on average 50 percent higher than they had with traditional crop varieties. More than 400,000 women of reproductive age and children were reached with interventions, including training and the delivery of messages to promote improved nutrition, hygiene, and child feeding and caring practices.

¹⁹ The definition of "vulnerable" varies across countries and contexts. For this indicator, U.S. Government agencies and USAID operating units are to use the definition used in formulating their Results Framework and activities related to assisting vulnerable populations. Possible examples include but are not limited to: HIV/AIDS sufferers and their families, households affected by drought, conflict and low assets (poverty traps), single adult households, and marginalized ethnic groups.

Birtukan Dagnachew is the head of a household that used to rely on food aid to survive. A hero not only in her home region of Amhara, but among food security advocates around the world, Dagnachew transformed from a young widower struggling to feed herself and her four children to a prosperous farmer growing sorghum, coffee and other produce on a small patch of land over the course of 4 years. A safety-net program supported by USAID helped Dagnachew escape poverty and learn skills to convert a little more than 2 hectares into the vehicle for her family's sustenance and income. She says she would not have succeeded without U.S. assistance, along with loans and financial management training from the Ethiopian government.

South of Amhara, in a town called Mojo 50 miles from the capital city of Addis Ababa, Yetemwork Tilahun manages a successful dairy farm with her husband and son. The operation used to rely on a single dairy cow, but USDA's Food for Progress program helped her scale up to a herd of 10 Holstein cows, each valued at \$2,000. Today, Tilahun's farm is a self-sustaining community pillar that serves nearby restaurants and hotels, employs local workers and sells a staple grain, teff, on the side for extra income.

Like Dagnachew and Tilahun, farmers across Ethiopia are proving that smart, targeted investments in food security can help move

vulnerable families from a state of urgent need to self-sufficiency and long-term resilience. Food for Peace development programs are an important component of the broader Feed the Future initiative and are becoming closely coordinated with other food security programming. This coordination means that even in the most disaster-prone, food-insecure parts of Ethiopia, vulnerable households are enjoying greater opportunity and agricultural investments and are less likely to be derailed by unforeseen emergencies.

A brighter future is most evident among Ethiopia's youngest citizens. Over the last 3 years, **Ethiopia has experienced a 9 percent reduction in stunting among children under 5.** This is the result of leadership on the part of the Ethiopian government, as well as the full range of Feed the Future and other U.S. Government investments. In support of vulnerable families, the United States has helped increase access to vitamin A and fortified foods and promoted breastfeeding while helping mothers understand the importance of good nutrition, particularly in the first 1,000 days from pregnancy to a child's second birthday.

These improvements in nutrition go hand in hand with Feed the Future's efforts to grow Ethiopia's agriculture sector, which employs about 85 percent of the population. A thriving agriculture sector needs high-quality fertilizers and seeds that enable farmers to grow healthy crops. That's why Feed the Future support helped the Ethiopian government rescind an outmoded fertilizer policy in 2012 and helped fund the construction of the country's first fertilizer blending factory in Oromia. The facility, which began production in 2014, can customize fertilizer so it is ideal for the soil on a particular plot of land, optimizing harvests and more efficiently using this expensive resource.

Specialized fertilizer is a proven factor in agricultural productivity—which may explain why the facility's fertilizer blends sold out in its first year. More than 11 million farmers are expected to double their yields using customized products from this and other planned factories. This effort, backed by Ethiopia's Agricultural Transformation Agency and developed in part



by a local farmers union that will staff the Oromia facility, is also supported by the Ethiopian Ministry of Agriculture. Yargus, an Illinois-based firm, built and maintains the necessary factory equipment.

Two farmers from Oromia are demonstrating another way Feed the Future boosts agricultural productivity: partnering with the private sector to expand the use of improved seeds. Brothers Bedasa and Debela Ofosea, both in their 50s (pictured on page 8), have each farmed four hectares in their small village for their entire lives. Beginning in 2013, the Ofoseas began planting hybrid maize seeds designed to improve yields and attended classes on proper planting, weeding, fertilizing and harvesting. These days, their maize plants grow deep green leaves encasing an extra ear or two on each stalk.

“The growth of the corn is faster and more vigorous this year,” Bedasa said in 2014. “We expect better yields than we had before.”

The Ofosea brothers’ success can be traced back to a partnership among the U.S. and Ethiopian governments and DuPont Pioneer, a private-sector developer and supplier of high-quality seeds. Feed the Future is supporting the training of extension workers, farmer cooperatives, and agriculture training centers to disseminate information on the improved seeds, post-harvest loss prevention, storage, marketing and best practices in farm management. Farmers report that their yields have doubled using these hybrid seeds and that the post-harvest techniques they have learned are reducing crop spoilage and food waste.

With the ultimate goal of connecting small-scale farmers like the Ofoseas to regional and international markets, Feed the Future is also brokering relationships between producers and processing companies that convert crops into value-added food products. In 2014, a Feed the Future-supported agreement led Ethiopian company Guts Agro Industry to source



300 metric tons of chickpeas from 600 farmers (most of whom farm less than one hectare) in order to manufacture shiro flour, a staple food, as well as a new dry-roasted chickpea snack. Under the agreement, Feed the Future helped farmers access a more marketable, high-yielding chickpea variety, and Guts Agro, in turn, is working with USAID through Feed the Future and the U.N. World Food Program to sell its products in Ethiopia and internationally, dramatically expanding the chickpea value chain.

“The growth of the corn is faster and more vigorous this year. We expect better yields than we had before.”

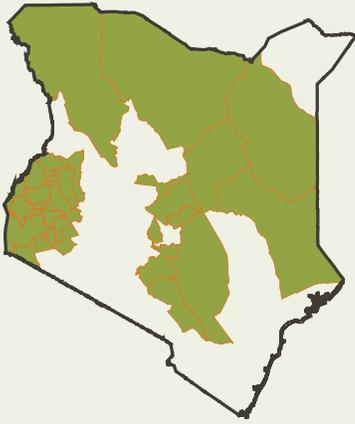
— BEDASA OFOSEA, ETHIOPIA

All of this progress is made possible through the ongoing commitment of the Ethiopian government. Despite the 2007–2008 global financial crisis that plunged many economies into years of recession, Ethiopia still met the CAADP goal of **devoting 10 percent of national spending on average to its agriculture sector between 2008 and 2013,**²⁰ ensuring that agriculture-led growth has stayed on track.

²⁰ ReSAKSS based on SPEED Database (IFPRI 2013); AUC, 2008; World Development Indicators (World Bank 2014); and national sources. 2014. ReSAKSS, IFPRI, Washington, DC. (<http://www.resakss.org>)

SPOTLIGHT: KENYA





COUNTRY CONTEXT

Despite having the largest, most diversified economy in East Africa, Kenya faces many challenges. **Over 40 percent of its rapidly growing population lives in poverty and more than a quarter of children under 5 are stunted.** Drought and other climate-related crises are persistent, particularly in the country's arid lands.

Already one of the largest African exporters of fresh produce to Europe and boasting the largest dairy herd in eastern and southern Africa, Kenya has great potential to meet local and regional demand for nutritious food. Its agricultural labor force, representing 75 percent of the population, is rising to the challenge: **In 2014, nearly 935,000 Kenyan farmers applied new technologies or management practices as a result of Feed the Future assistance**, which directly benefited more than **1.4 million rural Kenyan households**.

Value chain focus: Horticulture, dairy and maize (and other staples) in the high-rainfall areas; drought-tolerant crops, horticulture and dairy in the semi-arid areas; and livestock in arid and semi-arid lands

Zone of influence: High-rainfall areas; arid and semi-arid lands (ASALs) (pictured above)

Key objectives: Promote value chain growth and diversification to increase incomes, enhance food security, and improve nutritional status for women and children.

Targeting nutritious horticultural crops—bananas, cabbage, green beans, mango, passion fruit, potatoes, sweet potatoes and tomatoes—Feed the Future worked with more than 130,000 farmers to increase productivity through training and the use of improved technologies, achieving new crop sales of \$15 million in 2014.

In the maize sector, which provides a critical cereal for food security, Feed the Future partnered with almost 80,000 farmers, half of whom were women, to improve crop management practices and introduce high-yielding maize varieties. As a result, farmers were able to decrease fertilizer use while increasing average yields by 30 percent.

The U.S. Government's Feed the Future and global health programs collectively reached more than 3 million children under 5 with nutrition services such as vitamin A supplementation. These activities contributed to a decline in child stunting rates within the former Eastern and Nyanza provinces, where Feed the Future programs have been concentrated, by more than 25 percent from 2009 to 2014.

Feed the Future’s modern approaches to agriculture are particularly important to young adults like David Rotich, a father of two who was struggling to make a living. Frustrated that he had no time to spend with his wife and children, Rotich decided to try earning extra income by raising cabbage seedlings. But his first crop performed poorly, battered by heavy rain, birds and pests, and only a small percentage of his seedlings grew successfully.

“The money I get has really been a boost for my family. The youth were all looking to get white collar jobs, but lately I have seen a shift in that trend because they are slowly realizing farming can also generate good money.”

— DAVID ROTICH, KENYA

Rotich decided to join other members of his local youth group at a Feed the Future-supported training that encourages budding entrepreneurs to pursue agricultural businesses by teaching them to raise high-quality vegetable seedlings for profit. He learned better ways to care for his crop and sold nearly four times the number of seedlings using the techniques he learned, charging three times as much for their superior quality. Today, he earns a higher monthly income growing seedlings than he did in his restaurant business.

“The money I get has really been a boost for my family,” Rotich says. “The youth were all looking to get white collar jobs, but lately I have seen a shift in that trend because they are slowly realizing farming can also generate good money.”

Examples of forward-leaning approaches to food security abound. Last year, Kenya’s Ministry of Agriculture, Livestock and Fisheries broke ground

on a plant that will manufacture Aflasafe KE01, a biocontrol agent²¹ developed with support from USDA and the Bill & Melinda Gates Foundation, that has been shown to reduce aflatoxin contamination by up to 98 percent. Aflatoxins are poisonous substances produced by fungi that colonize crops and can be devastating to both humans and animals. The new plant is expected to make maize production safer and more profitable throughout Kenya.

Feed the Future is also helping Kenyans adapt and build resilience to the effects of a warming climate. In the rangelands of Kenya, erratic rainfall and frequent drought have forced pastoral communities to seek out drought-resilient plant species to feed the livestock they rely on for survival. In response to this challenge, Margaret Syomiti, a Kenyan researcher with the Feed the Future Innovation Lab for Adapting Livestock Systems to Climate Change, led by Colorado State University, came up with an imaginative solution: battling an invasive shrub species by feeding it to herds that are vulnerable to drought.

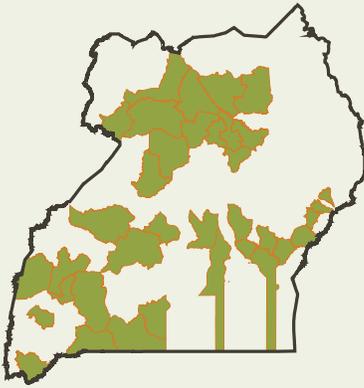
Prosopis juliflora has been aggressively taking over Kenya’s grazing lands; in some cases, it has blocked access to water sources for years. So Syomiti, who has been interested in livestock since childhood and received a Feed the Future-supported fellowship for her research in 2010, decided it was time to kill two birds with one stone. Grinding up seed pods from *Prosopis* plants and incorporating them into fortified feed blocks results not only in a highly nutritious feed supplement for small livestock, but a source of income for farmers who collect and process the pods. Inexpensive to make and easy to transport, the feed blocks have the potential to slow the invasion of *Prosopis* in crucial grazing lands while building the resilience of families whose animals are central to their livelihoods. Syomiti’s solution is also opening up entrepreneurship opportunities for women, who can manufacture the blocks and market them in areas of scarcity.

²¹ Biopesticides are made of organic materials such as animals, plants, or bacteria. See: <http://www.epa.gov/pesticides/biopesticides/whatarebiopesticides.htm>.



SPOTLIGHT:
UGANDA





COUNTRY CONTEXT

Uganda is roughly the size of the state of Oregon, but home to more than 35 million people. Feed the Future focuses on improving the lives of Ugandans in 38 districts with a total population of 14 million. Uganda is urgently addressing the **one-third of its population that lives in poverty as well as the one-third of all children under 5 who suffer from stunting due to undernutrition**, which contributes to 60 percent of deaths among children in this age group.

The good news is that these numbers are rapidly improving. In Uganda, U.S. Government investments through Feed the Future and other food security efforts to support improved agricultural productivity have contributed to marked declines in poverty. In rural areas, including many where Feed the Future works, **poverty decreased by 16 percent between 2010 and 2013 according to the national threshold**. In 2014, Feed the Future interventions directly benefited more than **440,000 rural households and helped bring almost \$3 million in new private-sector investments** to the agriculture sector.

Value chain focus: Coffee, maize and beans

Zone of influence: 38 districts representing 40% of the total population; secondary zone of influence including an additional 7 districts (pictured above)

Key objectives:

- Increased productivity and access to markets
- Improved nutritional status
- Integrated nutrition and agriculture impacts at household level

In Uganda, where maize is considered a food staple and provides a large portion of calories in the family diet, Feed the Future helped more than 100,000 maize farmers increase yields by more than 50 percent and incomes by an average of \$200. Feed the Future also assisted 127,320 coffee farmers with improved practices and market access, increasing yields by 16 percent over the past year.

Beans are an important source of protein among smallholder farmers in Uganda, yet average productivity is low. Working with farmers to adopt improved bean varieties and better farm management practices, Feed the Future helped approximately 95,000 bean farmers double their yields since 2011. In the last year, Feed the Future nutrition programs reached nearly 250,000 Ugandan children with high-impact interventions, including food fortification and treatment of acute malnutrition.

The proof can be measured in pounds, according to Welsy Anena's mother, who is convinced that nutrient-dense orange-fleshed sweet potatoes improved her daughter's health. When the little girl was 18 months old, she weighed nine pounds and had been in and out of hospitals. Now, with orange-fleshed sweet potatoes supplementing her diet, the 3-year-old is a vivacious and healthy 30 pounds—and her mother could not be more pleased.

An ongoing international effort to expand consumption of orange-fleshed sweet potato is answering an urgent need in countries like Uganda: **One of every three Ugandan children under 5 has a vitamin A deficiency**, which can cause blindness and increases the risk of death from common childhood infections that would otherwise be easily survivable. Biofortified crops like beta carotene-packed orange-fleshed sweet potatoes and iron-rich beans can help reduce these types of micronutrient deficiencies that limit children's lifelong health and potential.

In Uganda, Feed the Future is partnering with HarvestPlus, Makerere University in Kampala, Africa 2000 Network, and other research and civil society organizations to introduce more nutritious, biofortified crops. **Already, more than 60,000 farmers have been trained to grow orange-fleshed sweet potatoes and iron-rich beans.** Country leaders have taken notice and are doing their part to build momentum, with the Speaker of Uganda's Parliament kicking off a campaign in 2015 to get orange-fleshed sweet potatoes to more Ugandan families.

Improving the status of women like Oyuku is integral to Feed the Future's work in Uganda and around the world.

That buy-in from the Ugandan government is critical for the country's long-term food security, and the benefits can be seen in other sectors as well. With support from the U.S. African Development Foundation (USADF), Uganda's

Ministry of Finance is assisting dairy farmers such as Gulu Community Dairy Farmers Cooperative Society Ltd., matching every dollar USADF invests in small-scale agricultural enterprises through Feed the Future grants. Since receiving one of these grants in 2010, Gulu Dairy has increased its net income from sales by 221 percent and now sources raw milk from up to 212 farming families per year. The group also gives back to the community, donating fresh milk and yogurt to local hospitals and primary schools to help boost nutrition in children's diets. Last year, Gulu Dairy's success was formally recognized by Uganda's Dairy Development Authority.

This public-sector commitment to food security is essential, but it is not enough on its own. A vibrant private sector must also be part of Uganda's long-term success in the fight against hunger, which is why Feed the Future focuses on all stages of the agricultural value chain—including the traders, processors, input suppliers and extension service operators on whom farmers in Uganda depend for products and advice to improve their yields. To strengthen this relationship and make Uganda's market system more sustainable, Feed the Future is working with **over 10,000 small companies and organizations to improve the services and products they provide to farmers.**

Nangobi Agnes, a 50-year-old mother of eight who operates a coffee nursery, is one entrepreneur who has benefited from this approach. Agnes had struggled to grow her business, so she linked up with the Bugiri Agribusiness Development Association, which offers training in basic business planning and record keeping with Feed the Future support. After receiving training and cleaning up her record books, Agnes was able to qualify for loans that she invested back into her nursery. With this additional capital, she dug a shallow well to irrigate her coffee seedlings, eventually expanding her business from 24,000 to 100,000 seedlings per year with expected annual earnings of approximately \$10,000. Today, Agnes uses her nursery to provide training and sell seedlings to hundreds of nearby farmers, boosting their productivity and incomes as well.



Feed the Future programs also enable small-scale farmers to invest in their own success. Stella Oyuku, a mother of four and a member of the Obol Neno Women's Group in northern Uganda, welcomed the chance to participate in a Feed the Future-supported effort to help women save money to buy agricultural assets that can boost productivity on their small farms. The project works like a traditional savings and loan co-op, but with a twist: Members sign pledge cards stating how much they will save each month and what they will buy with the loan. The women hold each other accountable and an executive committee keeps track of the money, ensuring members like Oyuku will meet their goals.

Improving the status of women like Oyuku is integral to Feed the Future's work in Uganda and around the world. In 2012, Feed the Future's Women's Empowerment in Agriculture Index identified that 40 percent of women in Feed the Future target areas in Uganda were disempowered, in large part due to credit constraints, heavy

workloads and a lack of control over income. Women's savings groups like Obol Neno can help many of these women overcome significant barriers to full participation in the agriculture sector.

After nearly a year of depositing \$6 each month, Oyuku was ready to cash out. "After realizing my targeted amount of \$65, I spent about half of the money on a goat" whose milk and offspring she can sell for income, she explains. The rest went to equipment, and a subsequent loan went to purchase groundnut seeds for planting.

Simple yet innovative approaches like these helped over 2,500 Ugandans acquire savings accounts or insurance policies last year, and Feed the Future assistance has increased the value of agricultural and rural loans in Uganda to more than \$360,000, helping small-scale entrepreneurs and farmers to expand businesses and adopt available technologies. In areas where financial access is limited, these new opportunities are transforming the profits, productivity and potential of farming communities.

SELECT COUNTRIES



SENEGAL

Breeding more tolerant and high-quality seeds continues to pay off in Senegal with the expansion of New Rice for Africa (NERICA) rice, as well as millet and maize. NERICA is a cross between a hardy indigenous strain of African rice and a high-producing Asian variety. Yields are as much as three times higher than those from traditional rice seeds, which require more water to thrive than NERICA seeds. The rice is central to Feed the Future's aim to improve agricultural productivity in the country. In 2014, Feed the Future reached **91,715 Senegalese farmers and entrepreneurs** and provided access to NERICA and other improved seeds, new

technologies and better management practices. As a result, Feed the Future farmer groups sold almost **136,700 metric tons of processed grains valued at \$19.1 million.**

This work is part of a broader Feed the Future strategy to drive inclusive agriculture sector growth and improved productivity in key value chains in Senegal, supported by complementary infrastructure investments from partners such as the Millennium Challenge Corporation (MCC). In 2014, MCC completed a 450-hectare irrigated perimeter in Senegal, in addition to other activities to help improve key crop production.

RWANDA

In Rwanda, where Feed the Future is strengthening small-scale producers' links to markets, the dairy industry is proving to be an economic engine, increasing the number of farmers who supply raw milk to be processed into yogurt, cheeses and other products for sale in supermarkets. Meanwhile, the informal dairy sector is dominated by entrepreneurial women who singlehandedly

ferment, package and sell their own milk products to village households. Feed the Future assistance works at both levels, helping the Rwandan government build its capacity to enforce dairy regulations to increase the supply of safe, high-quality milk while also engaging local cooperatives to help small-scale dairy producers improve yields and access financing to increase their herds.



LIBERIA

The fallout linked to the 2014 Ebola outbreak has been severe. Agriculture in Liberia, Guinea and Sierra Leone was hit particularly hard. While emergency aid was paramount to containment and relief efforts, earlier Feed the Future and USAID Office of Food for Peace investments led to demonstrated resilience and internal capacity to mitigate some of the secondary impacts of the outbreak. While farmers harvested their fields in smaller groups and for longer hours to limit contact with others, many of those farmers who had benefited from Feed the Future support were able to sell over **340 metric tons of rice, valued at over \$248,000**, to the U.N. World Food Program for emergency distribution—thus helping their neighbors and supporting faster access than imported food aid alone would have provided, while pooling incomes to help sustain their own livelihoods in a time of uncertainty. Feed the Future has been working with Liberian leaders to ensure the country pivots toward

long-term food security and away from reliance on food assistance. This reach also extends to neighboring Guinea and Sierra Leone, where Feed the Future has developed new programs. The new Feed the Future Ebola Recovery Partnership will harness expertise from the private sector, foundations, the West African diaspora and others to revitalize food production, support businesses all along the agricultural value chain and increase the quantity of nutritious foods citizens can buy, reducing vulnerability when disasters strike.

Feed the Future has been working with Liberian leaders to ensure the country pivots toward long-term food security and away from reliance on food assistance.

FEED THE FUTURE IN ASIA: INTRODUCTION



Asia currently sits on the precipice of economic success. The developing economies of Asia and the Pacific grew an average of 7.6 percent annually between 1990 and 2010, which far outpaced the 3.4 percent global average.²²

Despite this surge, there is still much progress to be made. Economic growth in Asia, though strong, has been uneven, and hundreds of millions of people in the region still live in poverty and face chronic hunger and undernourishment. Asia and the Pacific are home to more than 60 percent of the world's 795 million hungry.²³

While Asia's per capita food consumption remains below the world average, rising incomes coupled with increasing urbanization and industrialization are driving both greater demand for food and diversity of diets, putting pressure on the agricultural systems and natural resources required to grow food. Asia's population alone is expected to reach 5.3 billion by 2050, requiring

a 77 percent increase in food production to accommodate increasing demand.²⁴

Feed the Future is playing a key role in helping to sustainably meet rising demand through strategic agriculture and nutrition interventions that align with host countries' own investment plans. In countries where Feed the Future works, U.S. Government programs have supported dramatic improvements in agricultural production. Increases in productivity are particularly timely, as weather patterns become progressively volatile and resilience to the worst effects of climate change is increasingly necessary. To combat these effects, Feed the Future and its partners are introducing improved technologies and modern agricultural practices that help small-scale farmers sustain and increase production while also adapting and building resilience. For example, in Asia, which accounts for more than 90 percent of the world's rice production and consumption,²⁵ Feed the Future reached 634,929 rice farmers in 2014 with high-yielding rice varieties that are less

22 Asian Development Bank. "Food Security in Asia and the Pacific." 2013. <http://www.adb.org/sites/default/files/publication/30349/food-security-asia-pacific.pdf>

23 Ibid.

24 United Nations Food and Agriculture Organization. "Asia and the Pacific must increase food production to meet future demand." March 10, 2014. <http://www.fao.org/news/story/en/item/216042/icode/>

25 Ibid.



susceptible to climate-related stresses such as flooding, drought, and soil salinity.

At the same time, Feed the Future and other U.S. Government programs help families diversify their food production both to increase incomes and improve nutrition. Programs that introduce aquaculture, horticulture and fortified staple crops like iron-rich pearl millet have been key to helping small-scale farmers transform vulnerability into entrepreneurship and empowering women in particular to secure a reliable source of nutritious food for their households.

In FY2014, more than 2.7 million households in Asia benefited directly from Feed the Future support, which in turn helped increase incremental farm sales by nearly \$150 million, a dramatic increase over the previous year. Early data from Bangladesh and Cambodia indicate that these and other efforts are contributing to impressive reductions in stunting and poverty. Bangladesh saw a 14.4 percent reduction in childhood stunting from 2011 to 2014 across the two major

regions where Feed the Future programs are concentrated. In the same time period, preliminary estimates indicate that Bangladesh has experienced a nearly 16 percent reduction in poverty in areas where Feed the Future works. In Cambodia, where Feed the Future reached more than 130,000 children with nutrition interventions in 2014, data show a 21 percent reduction in childhood stunting from 2010 to 2014 in the Feed the Future zone of influence.

The following stories of farmers and their families—in Bangladesh, Cambodia, Nepal, and Tajikistan—demonstrate that a world without hunger and poverty is indeed within our grasp.

In FY2014, more than 2.7 million households in Asia benefited directly from Feed the Future support, which in turn helped increase incremental farm sales by nearly \$150 million.

SELECT FEED THE FUTURE RESULTS IN ASIA, FY2013–2014^{a,b}

INDICATOR	2013	2014
	ACTUAL	ACTUAL
Rural households benefiting directly from U.S. Government interventions ^c	1,931,821	2,777,886
Global Feed the Future countries and programs	11,406,015	18,982,327
Value of incremental sales (collected at farm-level) attributed to Feed the Future implementation (USD) ^d	\$74,744,633	\$143,349,982
Global Feed the Future countries and programs	\$174,302,362	\$532,082,927
Value of agricultural and rural loans (USD)	\$2,955,048	\$3,873,406
Global Feed the Future countries and programs	\$184,813,765	\$671,831,928
Number of micro-, small-, and medium-sized enterprises, including farmers, receiving U.S. Government assistance to access loans	2,403	11,841
Global Feed the Future countries and programs	332,489	883,423
Value of new private sector investment in the agriculture sector or food chain leveraged by Feed the Future implementation (USD)	\$5,370,358	\$15,312,058
Global Feed the Future countries and programs	\$162,985,629	\$151,752,806

a The output and outcome data included here are directly attributable to U.S. Government funding and represent reporting from USAID, the U.S. Department of Agriculture (USDA), Millennium Challenge Corporation (MCC), U.S. Department of the Treasury, and Peace Corps. Participating agencies do not necessarily report on all countries where they have programs and may only report on certain common indicators.

b Global indicators in this chart are reported for Feed the Future focus and aligned countries. (Aligned countries are those in which the U.S. Government supports ongoing agricultural development programs but are not designated as Feed the Future focus countries.)

c This indicator counts households with at least one member who is a beneficiary of a Feed the Future activity, meaning the member directly receives goods or services provided by the activity. The intervention must be significant, and an individual is not to be counted if merely reached by an activity through brief attendance at a meeting or gathering. For more detailed information, visit the Feed the Future Indicator Handbook.

d Incremental sales can also be described as “new sales” because they reflect increases in sales above the value at baseline. They comprise a portion of total sales, which equaled more than \$1.4 billion in FY2014 globally.

BROADER IMPACTS IN ASIA

FROM RESULTS TO IMPACT: STUNTING AND POVERTY

COUNTRY	IMPACT
BANGLADESH 	 14.4% reduction in childhood stunting from 2011 to 2014 across the two major regions where Feed the Future programs are concentrated, from 38.2% to 32.7%. ^a
	BEHIND THE IMPACT <p>In support of the Government of Bangladesh's efforts, the U.S. Government implements large-scale nutrition projects, Food for Peace development programs, and maternal and child health activities across the Feed the Future zones of influence. Collectively, these projects have reached more than 2 million children annually with nutrition interventions.</p>
COUNTRY	IMPACT
CAMBODIA 	 21% reduction in childhood stunting from 2010 to 2014 in the Feed the Future zone of influence, from 41.2% to 32.6%. ^b
	BEHIND THE IMPACT <p>This impact is dramatic given a previous period of little progress in improved nutrition between 2005 and 2010. The U.S. Government contributed to this progress through a combination of nutrition-sensitive and nutrition-specific interventions, the latter of which included support for nutrition counseling for caregivers of undernourished children, mass media nutrition education campaigns, and growth monitoring. USDA's McGovern-Dole Food for Education and Child Health and Nutrition programs also provided take-home rations to families and training in child health and nutrition. The U.S. Government reached more than 130,000 children in Cambodia with nutrition-specific interventions in 2014.</p>
COUNTRY	IMPACT
BANGLADESH 	 Nearly 16% reduction in poverty in areas where Feed the Future works, from 40.5% in 2011 to 34.1% in early 2015, according to preliminary estimates. ^c
	BEHIND THE IMPACT <p>The U.S. Government provided more than \$200 million in assistance to the zone of influence, including more than \$100 million in Food for Peace development programming. In FY2014 alone, Feed the Future helped more than 1.97 million smallholder farmers utilize new technologies or management practices, including efficient fertilizer techniques, high-yielding rice varieties and improved practices for horticulture and aquaculture.</p>

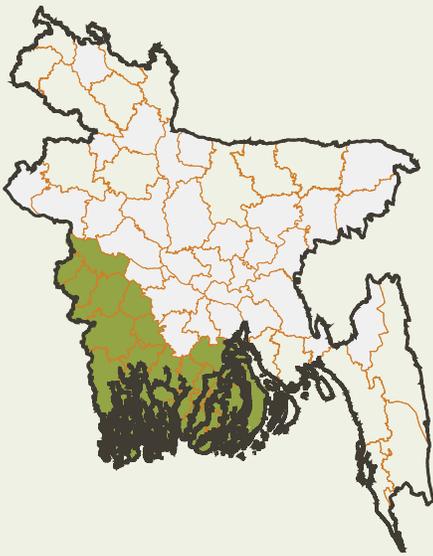
a Bangladesh Demographic and Health Survey, 2011 and 2014.

b Cambodia Demographic and Health Survey, 2010 and 2014.

c Data from the IFPRI Bangladesh Integrated Household Survey, 2011 and 2015 (preliminary).

SPOTLIGHT:
BANGLADESH





COUNTRY CONTEXT

In Bangladesh, more than **45 million people live in poverty**,²⁶ a number that accounts for approximately one-third of the population. U.S. Government assistance supports more than **three million vulnerable households** that are threatened by forces over which they have no control, including rising sea levels, frequent flooding, and extreme weather patterns. These environmental challenges are particularly acute for **workers in the agriculture sector**, who comprise nearly half of Bangladesh's total workforce, as 80 percent of the country falls within a low-lying river delta prone to flooding. Furthermore, Bangladesh is losing up to 1 percent of its arable land each year as sea levels rise.

Value chain focus: Rice, horticulture and aquaculture

Zone of influence: 20 districts in the Southern Delta region of Bangladesh, including areas with the greatest growth potential for rice production and crop diversification, with prioritized high-value agricultural production, and with high levels of poverty and malnutrition

Key objectives:

- Increase on-farm productivity
- Increase investment in value chains
- Increase incomes
- Improve nutritional status of children and mothers
- Enhance policy and planning capacity
- Enhance agriculture innovation capacity

Feed the Future has introduced innovative technologies to help farmers tackle serious obstacles. For example, new stress-tolerant rice varieties that can withstand flooding, increased salinity, and other adverse conditions have increased yields and allowed farmers to utilize land that would otherwise be fallow. Fertilizer deep placement technology, which nourishes crops closer to the root and places the fertilizer underneath the soil

where it cannot be washed away, resulted in a **7 percent increase in average rice yields per hectare** between 2012 and 2014. In a country where rice is the main source of calories,²⁷ Feed the Future brought improved technologies to **1 million hectares of land under rice cultivation in 2014**, contributing to an increase in the rice supply for a rapidly growing population.

In addition to rice, Feed the Future programs have increased production and consumption of foods that complement the nutritional value of rice, like fruits, vegetables, fish, shrimp, and legumes. Spurring over **\$103 million in incremental sales** in fish and shrimp alone in 2014, Feed the Future has opened up new opportunities for smallholders to grow their businesses and build a brighter future.

In Feed the Future's zone of influence, 37 percent of children under the age of 5 face stunting due to undernutrition. Programs including combined nutrition-sensitive and nutrition-specific interventions have made a difference: nutrition-sensitive agriculture in Bangladesh reached **2.1 million out of the 2.7 million children under 5 years of age** in the targeted region in FY2014. Collaborating with other U.S. Government programs, Feed the Future has contributed to the **14.4 percent decline in stunting for children under 5** between 2011 and 2014 across the two predominant divisions where the initiative is focused. Additionally in 2014, as part of Feed the Future, USAID established **2,560 farmer nutrition schools** and conducted **nutrition messaging sessions with 21,840 women**, encouraging them to establish small-scale gardens for home consumption and income generation, as well as educating them about optimal feeding and hygiene practices for mothers, infants, and children.

²⁶ Data from IFAD Bangladesh Rural Poverty Portal (based on a national poverty line and not on the \$1.25 per day standard).

²⁷ The Asia Foundation. "Food Security in Asia and the Changing Role of Rice." 2010. <https://asiafoundation.org/resources/pdfs/OccasionalPaperNo4FoodSecurityFinal.pdf>



Though it took more than 10 years for the Bangladesh Rice Research Institute to research, develop and test a new rice variety that could withstand the country's frequent flooding and resulting ponds of highly salty water, those saline- and submergence-tolerant seeds were a lifesaver for Mohammad Mofizul Islam Gazi. Feed the Future funding supported the development of these seeds over part of this period. Back-to-back cyclones had destroyed Gazi's modest rice fields and his attempts to rebuild went nowhere.

"The water didn't move for months," he says, "and when we tried to grow crops, we couldn't. We were spending money and energy in vain."

Then he and his neighbors in Sutarkhali heard about the new seeds and put them to the test. They found that the seeds withstood submersion for 12 to 14 days, whereas the old seeds could only survive between 3 and 4 days. They also required less fertilizer and produced up to 50 percent more at harvest than the old seeds.

"Before," says Gazi, "I used to grow about 150 kilograms of rice in one bigha [rice field]. Now, with less fertilizer, seeds, and pesticide, I can grow more than double what I used to grow in the same piece of land before [Cyclone] Aila hit."

Gazi is not alone. Since 2013, about 350,000 farmers in southern Bangladesh planted the more flood-tolerant seeds after the initial success in Sutarkhali, increasing incomes and providing an important source of food to farm families.

Other improved crops supported by Feed the Future have also proved successful. The orange-fleshed sweet potato that has been a nutritional powerhouse in Africa is also being grown in Bangladesh. In 2014, the country became the first in South Asia to approve and plant a genetically engineered food crop—eggplant, or *brinjal*, a popular staple in the Bangladeshi diet—that is more resilient than its conventional counterpart. This success was made possible in part through a partnership between the Indian seed company Mahyco and other private companies; the Government of Bangladesh; Cornell University; Bangladeshi, Indian and Philippine educational institutes; and the Bangladesh Agriculture Research Institute. These improved varieties are resistant to the fruit and shoot borer, an insect pest that burrows into the fruit and forces farmers to spray pesticides on a nearly daily basis. As a result of this cooperation, Bangladeshi researchers and farmers now have access to some of the same technologies that nearly two dozen other countries, both developed and developing, are using to increase productivity while reducing the use of insecticides.

Aquaculture is also a strong driver of both increased income and improved nutrition. In the last fiscal year, Feed the Future worked with 1 million producers to improve fishery and hatchery management and increase production. This helped grow fish yields by 82 percent per hectare and shrimp yields by 56 percent per hectare.

Another important aspect of Bangladesh's success is increased use of mechanized equipment to increase agricultural productivity. Through a collaboration with the Cereal Systems Initiative of South Asia, farmers such as Monowara Begum can purchase equipment that make farming easier, more productive and less costly.

Begum purchased a seeder and a machine called a fertilizer drill, which simultaneously tills, plants and fertilizes crops. She rents it out to the 25 women farmers who are members of a local cooperative. They all share in the profits, with Begum taking a slightly larger portion as the main investor. "The seeder and fertilizer drill are benefiting both the farmers and service providers," she says. "Besides, the machine saves two times the cultivation cost for the farmer."

This story reflects successes made possible not just through technology, but also by ensuring the inclusion of women farmers, whose contributions to the agriculture sector in Bangladesh are hampered by limited land and asset ownership; limited access to extension services and inputs such as seeds and fertilizer; and few opportunities to leave home and directly market their products.

Feed the Future systematically supports efforts to correct this imbalance, from farmers to policy makers. For example, women farmers are being trained to use fertilizer deep placement technology, which increases crop yields while reducing fertilizer use and its damaging environmental impacts, through a grant awarded by the Walmart Foundation, a Feed the Future partner.

At the policy level, Feed the Future's capacity-building support has helped cement Marina Jabunnaher's leadership as a senior monitoring and

evaluation officer at the Ministry of Agriculture's Department of Agricultural Extension. After collaborating with U.S. subject matter experts, Jabunnaher created an inspection manual to help ensure that import and export inspection practices are aligned with international standards, increasing Bangladesh's opportunities for agricultural trade.

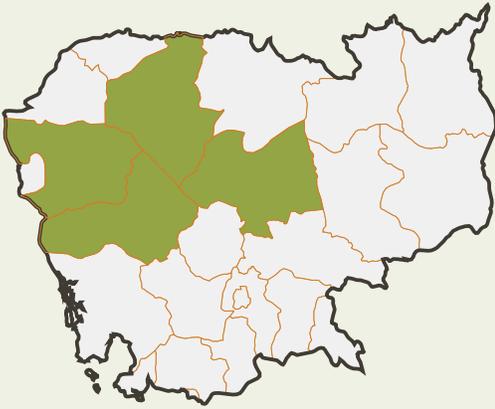
The Government of Bangladesh is taking notice of women as key players in the agriculture sector. Recently, it requested information from the Women's Empowerment in Agriculture Index (WEAI) to better understand and address the constraints women face. USAID, under Feed the Future in partnership with the International Food Policy Research Institute and the Oxford Poverty and Human Development Initiative, helped launch the WEAI in February 2012. This index is the first-ever direct measure of women's empowerment and inclusion in the agriculture sector, allowing Bangladeshi policy makers to develop sound, effective strategies for better and more inclusive agricultural development and nutrition.

The Government of Bangladesh is taking notice of women as key players in the agriculture sector. Recently, it requested information from the Women's Empowerment in Agriculture Index (WEAI) to better understand and address the constraints women face.

Taken together, Feed the Future's multifaceted efforts to strengthen agriculture and nutrition in Bangladesh are laying the groundwork for one outcome: better lives through improved quality of food.

SPOTLIGHT:
CAMBODIA





COUNTRY CONTEXT

In Cambodia, a country of 15 million, **32 percent of children under 5 are stunted**. Despite rapid economic growth over the past decade, approximately **10 percent of Cambodians still live on less than \$1.25 a day²⁸** while many more remain vulnerable, hovering just above the extreme poverty line.

Value chain focus: Rice, horticulture and aquaculture

Zone of influence: Four provinces—Battambang, Kampong Thom, Pursat and Siem Reap—with a population of approximately 3.2 million, or 21 percent of the total population

Key objectives:

- Improve food security
- Enhance capacity to improve sustainable agricultural production
- Improve rural income generation
- Enhance capacity to meet food and other nutritional needs of targeted population

Feed the Future targets 3.2 million people²⁹ in four rural provinces of northwestern Cambodia with programs to reduce hunger, poverty and malnutrition. Projects aim to help farm households increase the production of rice, vegetables and fish, improve profitability, and diversify diets for improved nutrition. In 2014, **Feed the Future helped over 63,000 rice farmers** adopt improved seeds and good agricultural practices to **increase their yields by 50 percent** since 2012. Partnerships with rice mills and agricultural input suppliers led to **an almost \$9 million increase in farm-level incremental sales**. In horticulture, over 31,000

beneficiary farmers raised their yields by 273 percent from the 2012 baseline. Across all three focus value chains in 2014, **nearly 100,000 Feed the Future farmers used improved agricultural practices, inputs and technologies**, including bringing 38,000 hectares under new practices to improve adaptation to climate change.

The work of Feed the Future's Innovation Lab for Sustainable Agriculture and Natural Resource Management, led by Virginia Tech, exemplifies some of the win-win scenarios that can result from partnerships. The Innovation Lab introduced farming practices to Cambodian farmers that both reduce labor hours and reduce damage to the environment. Lab researchers asked a group of Cambodian women vegetable farmers to divide their farm plots into four, employing different farm practices in each to compare outcomes of conservation versus traditional agricultural techniques. While yields and income were the same, there were substantial differences in the labor required to maintain each of the four plots. The researchers estimated that growing vegetables using traditional methods required hauling about 1,300 pounds of water per day during the dry season, compared to drip irrigation and conservation agriculture that freed the women farmers from the drudgery of carrying water, tilling and weeding. Many of the women were so pleased with the new practices that they asked to end the experiment early to avoid the extra labor required to maintain the field tests.

²⁸ World Bank National data, not zone of influence.

²⁹ There are 3.2 million people living in Feed the Future's zone of influence in Cambodia, which includes both direct and indirect beneficiaries of Feed the Future.

Beyond introducing improved agronomic practices, Feed the Future has also promoted interventions to improve nutrition, especially among children, contributing to a dramatic reduction in child stunting since the initiative's start. The 2014 Cambodia Demographic and Health Survey showed that stunting levels had fallen by 21 percent in the Feed the Future zone of influence³⁰ since 2010 (compared to an 18 percent reduction outside the zone), exceeding the Feed the Future stunting target initially set for 2017. This change translates to nearly 18,900 fewer stunted children thanks to improvements in aquaculture, horticulture and rice. Despite this impressive decrease, stunting levels remain high, and, in 2014, Feed the Future programs continued efforts to improve nutrition, training over 132,000 individuals in child health and nutrition, helping nearly 45,000 beneficiaries diversify the crops they grow, and reaching over 13,000 children under 5 with growth monitoring programs.



30 From 41 to 33 percent.

Ream Nheb and her daughter, Chhong Kemhuan, put the nutrition lessons learned from Feed the Future into action. Together, they prepare healthy meals, such as a stew called samlor kakow that includes pork, leafy greens, papaya and eggplant. Chhong, who buys ingredients for the family's meals at the market, explains that because of what she learned through Feed the Future's outreach, "I think about using as many food groups as possible when I plan meals."

Beyond introducing improved agronomic practices, Feed the Future has also promoted interventions to improve nutrition, especially among children, contributing to a dramatic reduction in child stunting since the initiative's start.

In another effort that established 218 food security and nutrition groups, group members—mostly women—identify a need in their community and address it with training events or other activities. These activities promote a variety of important concepts, including food safety and growth monitoring. The latter is a technique that promotes monitoring children's development in the 1,000 days between conception and age two.

In Battambang Province and elsewhere in Cambodia, Peace Corps Community Health Volunteers work on activities focusing on nutrition, gardening, agriculture, and child and maternal health. With a grant from USAID, one volunteer worked closely with local health center staff members to increase the nutritional capacity of families in the area. Meeting monthly with each family, volunteers help monitor children's weight, assess hygiene and educate individuals on proper nutrition. As a result of the project, community members are planting vegetable



gardens that provide families with much-needed produce. Peace Corps Volunteers are also providing vital training workshops to mothers and pregnant women, who are learning about the importance of hygiene, breastfeeding and preparing nutritious foods for their children.

Complementing these nutrition efforts is Feed the Future-supported programming that builds the capacity of local private sector actors, including small-scale agricultural input dealers who are vital in the process of getting crops from farms to markets to tables. Strengthening linkages like these provides smallholder farmers with the means to grow enough food to feed their families and generate income.

Ly Touch, an input supplier in Battambang Province, has seen her business boom as the result of new market connections and training provided through Feed the Future. Over the past two years, her sales have increased by 70 percent and her customer base has grown as she has expanded her services. “Thanks to the training I received

“Thanks to the training I received through Feed the Future, I’m not only a better businesswoman, I’m also a mentor and an advisor to others within our local market.”

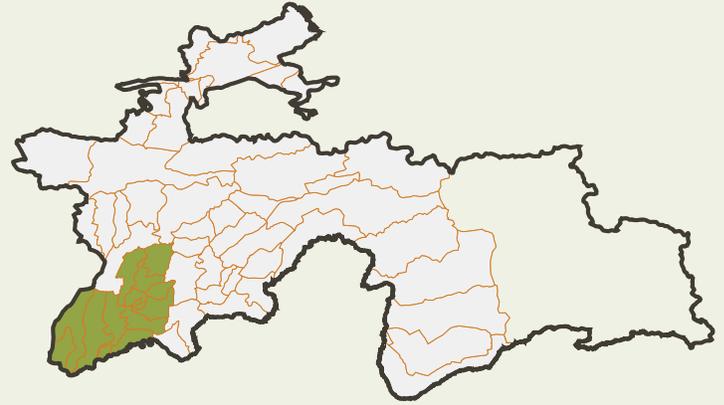
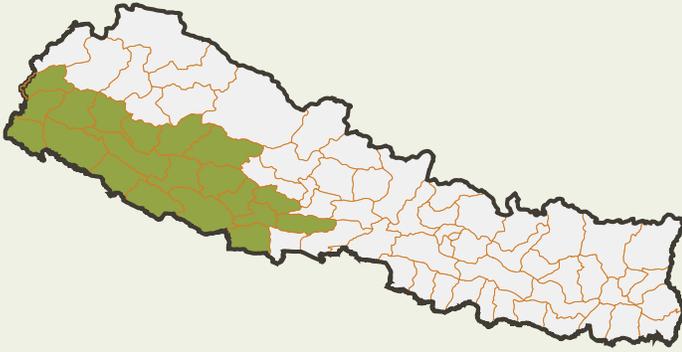
— LY TOUCH, CAMBODIA

through Feed the Future, I’m not only a better businesswoman, I’m also a mentor and an advisor to others within our local market,” Ly says.

Meanwhile, in the neighboring province of Pursat, input supplier Nup Nouv has grown his inventory by over 50 percent to respond to customer demand, which he can better meet now that he is connected to large distributors in the region and has improved his inventory management skills, thanks to training from Feed the Future.

SPOTLIGHT:
NEPAL AND TAJIKISTAN





COUNTRY CONTEXT

Like Bangladesh and Cambodia, Nepal suffers from **low agricultural productivity**. Further compounding this problem is unpredictable water sourcing due to changing rainfall patterns, increased frequency of extreme floods, and rapidly melting glaciers in the Himalayas resulting from a changing global environment. Nonetheless, like its Asian neighbors, Nepal has **great potential to boost production** through training and improved agricultural practices, along with adoption of new techniques in a changing climate.

Nepal

Value chain focus: Vegetables, cereals (maize and rice), pulses (lentils), and livestock

Zone of influence: 20 Terai and hill districts in the far-western, mid-western, and western regions with a population of 6.8 million, or 24.87% of the total population

Key objectives:

- Enhance agricultural productivity
- Increase livelihood opportunities
- Facilitate access to markets
- Improve nutrition and hygiene

Tajikistan

Value chain focus: Fruits and vegetables, dairy

Zone of influence: 12 districts of Khatlon Province, a lowland region with a population of 1.54 million people, or 19.25% of the total population; Khatlon Province borders Afghanistan and Uzbekistan and has high undernutrition and poverty rates, but also significant potential for agricultural production

Key objectives:

- Expand markets and strengthen value chains
- Increase productivity of smallholder farms
- Implement agricultural reform, including land and water sector policies
- Support national agriculture and nutrition policy reform
- Improve nutrition and health
- Develop the capacity of local institutions and community-based organizations

Through a Feed the Future project in Nepal, which included government and private sector partners, Ram Prasad Chaudhary found that by diversifying into commercial crops—such as green chili—and rotating them, he could produce two high-value harvests in a year instead of only one. With Feed the Future support, he was able to begin commercial vegetable production instead of subsistence farming alone, tripling his income. Where he once had to decide between stretching his income to cover food or education for his sons, Chaudhary has now broken out of a recurring cycle of poverty. He says his family’s story of hardship has transformed to one of prosperity. As many as 52,000 farmers have been through the same program, most doubling their incomes in just a few years. Others are seeking out Chaudhary for advice. “Today, I actually have followers,” he exclaims. “Can you believe it?”

Nepalese farmers are also learning to adapt to increasing water insecurity with the support of bucket drip irrigation, introduced to farmers through the Feed the Future Innovation Lab for Adapting Livestock Systems to Climate Change, led by Colorado State University. Bucket drip irrigation ensures that every drop of water goes directly to the plant roots, irrigating more land

with less water. The system also provides direct application of water-soluble fertilizers and nutrients, reduces weed encroachment, and lessens crop loss from wilting. Most importantly, this technology helps farmers save time while increasing yields.

“I used to spend about an hour every morning watering my small kitchen garden, but now just five minutes is enough,” says Durga Bhushal, a farmer from Kapilvastu. “It also saves about half of the water. The bucket technology is very simple, and my children can also use it in our garden.”

This project aims to help scale up drip irrigation and disseminate the technology to reach more farmers. Local companies are considering producing the entire system to make the kit more affordable, as well as building partnerships with women’s groups and farmer cooperatives to expand production throughout Nepal.

In Tajikistan, women play a key role not just in the health of their children, as is common in many countries, but also in agriculture, where they comprise 80 percent of the workforce. However, only 12 percent manage their own individual or family farms, called *dehkans*. The link between food security and access to land is evident when women have secured rights to land: equitable access to land increases agricultural productivity, which in turn improves household food security.

That’s why Feed the Future is promoting women’s involvement in *dekhan* management, while also providing legal assistance for women to acquire land through project-supported aid centers, where lawyers provide support to file petitions in court. Women who aspire to run their own *dekhan* have an opportunity to speak with other women *dekhan* owners, who share their farm management experience and lessons learned, and also highlight the need to understand and defend their land rights. This work has empowered women to invest in their land plots and farms, transition from cotton to fruit and vegetable production, and generate income and improve family welfare and nutritional status.



Driving Recovery and Building Resilience in the Face of Uncertainty

In April 2015, a magnitude 7.8 earthquake struck Nepal. The initial earthquake and subsequent aftershocks caused numerous casualties and extensive damage, particularly in Nepal's rural communities in remote hill and mountain areas. To help Nepal recover and build resilience, the U.S. Government is implementing a multi-sectoral approach that includes efforts led by Feed the Future and USAID's Food for Peace program. These programs, which complement existing global health and Global Climate Change Initiative projects in affected areas, are responding to recovery needs through agriculture, disaster risk reduction, and livelihood activities. The projects are working to improve nutrition, water, sanitation and hygiene; restore poultry farms and vegetable gardens; and support the government and local communities in restoring livelihoods and biodiversity with resilient practices. Following the earthquake, Feed the Future also participated in developing the USAID Mission in Nepal's plan for earthquake recovery and supporting the expansion of a USAID program into five earthquake-affected districts, thereby opening a second Feed the Future zone of influence. Feed the Future funds, managed by the Sustainable Action for Resilience and Food Security project, will strengthen market-oriented maize, horticulture and livestock value chains. Additionally, the USAID Mission in Nepal awarded \$1 million to the International Maize and Wheat Improvement Center through the Cereal Systems Initiative for South Asia project. This support addresses the immediate needs of farm communities in earthquake-affected districts, including grain storage, farm power, horticultural hand tools, and advice on better-bet agriculture.



Feed the Future also collaborates with partners to raise awareness among Tajik women about good nutrition practices before, during and after pregnancy. In addition to community training on good health and nutrition practices, one maternal and child health project is supporting community health educators who provide one-on-one prenatal and postnatal home visits for women like 9-month pregnant Marjona, who had previously suffered a miscarriage due to health complications. "I lost my baby because I didn't know simple self-care during pregnancy," she explains. Marjona feels she has gained an invaluable ally in Zarina, a health educator trained through the project who advises her on baby care, diet and nutrition during regular home visits.

"The project has influenced my life a lot; I have learned important skills that help me to take care of myself and my future child," Marjona says. She

"I used to spend about an hour every morning watering my small kitchen garden, but now just five minutes is enough. The bucket technology is very simple, and my children can also use it in our garden."

— DURGA BHUSHAL, NEPAL

plans to continue attending community health classes even after her baby is born to build her knowledge of good health and nutrition practices.

The project is helping Tajik women in 12 Feed the Future target districts, where nearly one-third of children under 5 years are stunted, and many mothers and children are affected by micronutrient deficiencies.



FEED THE FUTURE IN LATIN AMERICA AND THE CARIBBEAN: INTRODUCTION

In parts of Latin America and the Caribbean, food insecurity and poor nutrition together pose one of the greatest obstacles to economic growth and social development. The scourge of coffee leaf rust, a plant disease, has devastated livelihoods in parts of the region. Recent drought has further exacerbated the problem for small-scale agribusinesses and farmers and their families. While poverty in Latin America and the Caribbean has declined since 2002, extreme poverty, defined by the World Bank as individuals living on less than \$1.25 per day, has risen in the last two years.³¹

Despite these challenges, the region has made major strides in achieving the Millennium Development Goal to halve the number of undernourished people by 2015, which has fallen from 14.7 percent in 1990–92 to 5.5 percent in 2014–16.³² These and other notable improvements in the food security and nutrition landscape have been achieved through the countries' own political commitments to fighting food insecurity and undernutrition.

Feed the Future has worked with partner countries in Latin America and the Caribbean to develop rigorous, peer-reviewed agricultural investment plans, similar to those in Africa, that follow the example set by the Comprehensive Africa Agriculture Development Program. Together, we are making progress, and many crucial elements are already in place to accelerate progress in food security, agriculture and nutrition.

Together, we are making major progress, and many crucial elements are already in place to accelerate progress in food security, agriculture, and nutrition.

³¹ <http://www.fao.org/3/a-i4636e.pdf>

³² Ibid.

SELECT FEED THE FUTURE RESULTS IN LATIN AMERICA AND THE CARIBBEAN, FY2013–2014^{a,b}

INDICATOR	2013	2014
	ACTUAL	ACTUAL
Health facilities with established capacity to manage acute undernutrition	44	136
Global Feed the Future countries and programs	848	2,029
Hectares under improved technologies or management practices as a result of U.S. Government assistance	40,750	73,971
Global Feed the Future countries and programs	3,747,065	3,177,123 ^c
Food security private enterprises (for-profit), producers organizations, water users associations, women's groups, trade and business associations, and community-based organizations receiving U.S. Government assistance	1,127	3,450
Global Feed the Future countries and programs	59,866	95,952
Value of incremental sales (collected at farm-level) attributed to Feed the Future implementation (USD) ^d	\$20,980,681	\$38,250,694
Global Feed the Future countries and programs	\$174,302,362	\$532,082,927
Value of agricultural and rural loans (USD)	\$29,500,692	\$40,300,131
Global Feed the Future countries and programs	\$184,813,765	\$671,831,928

a The output and outcome data included here are directly attributable to U.S. Government funding and represent reporting from USAID, the United States Department of Agriculture (USDA), Millennium Challenge Corporation (MCC), Treasury and Peace Corps. Participating agencies do not necessarily report on all countries where they have programs and may only report on certain common indicators.

b Global indicators in this chart are reported for Feed the Future focus and aligned countries. (Aligned countries are those in which the U.S. Government supports ongoing agricultural development programs but are not designated as Feed the Future focus countries.)

c The decrease in the number of hectares under improved technologies and management practices from FY2013 to FY2014 is due to refinements in the indicator definition and improved data quality control measures in FY2014, in addition to the phasing out or transitioning of some large-scale value chain programs across Feed the Future. The initiative is developing a monitoring approach to better track all farmers applying the technologies and practices that programs are promoting over time, not just those receiving direct assistance in a given year.

d Incremental sales can also be described as "new sales" because they reflect increases in sales above the value at baseline. They comprise a portion of total sales, which equaled more than \$1.4 billion in FY2014 globally.

BROADER IMPACTS IN LATIN AMERICA AND THE CARIBBEAN

FROM RESULTS TO IMPACT: STUNTING AND POVERTY

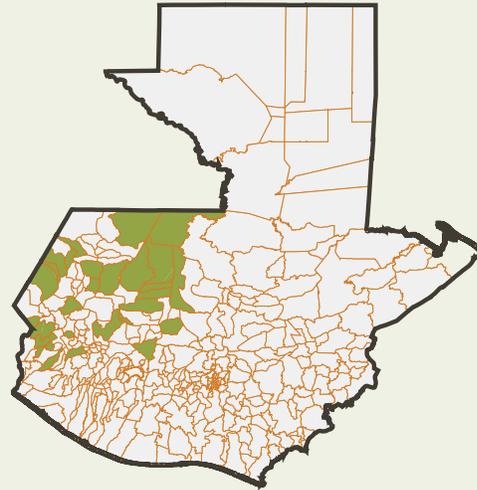
COUNTRY	IMPACT
HONDURAS 	 The prevalence of underweight children under 2 years in 230 target communities has decreased by 56.4% between 2011 and 2014, from 22% to 9.6%. Of the 4,329 children under 2 being reached by Feed the Future health and nutrition interventions on average every month, only 415 were reported as underweight at the end of FY2014.
	BEHIND THE IMPACT <p>The promotion of improved feeding practices for children under 2 years (diversified food groups, nutrient balance, and food preparation), improved hygiene practices, and the introduction of the “healthy household” component is having a positive effect on transforming caregivers’ feeding practices and reducing the prevalence of underweight children. The ACCESO project, USAID’s core Feed the Future activity in Honduras, aims to lift rural households out of poverty and undernutrition through access to economic development opportunities, including new markets and improved health and nutrition practices. ACCESO’s “healthy household” component works to eliminate indoor smoke from cooking fires, cover dirt floors and walls with a cement mix, provide clean water access inside the house, ensure use of waste disposal methods, and keep animals outside.</p>
COUNTRY	IMPACT
HONDURAS 	 Average incomes increased 55% among Feed the Future beneficiaries between 2011 and 2014, which helped nearly 27% of the more than 135,000 extremely poor beneficiaries to rise above the \$1.25 per person per day extreme poverty threshold. Incomes of the extremely poor increased by an average of 95%, from \$0.62 to \$1.21 per person per day. ^a
	BEHIND THE IMPACT <p>Feed the Future efforts focus on coffee and horticulture value chains, improved land preparation, and crop and water management practices to confront increasingly frequent droughts and to diversify livelihoods.</p>

^a Data from a survey representing more than 180,000 beneficiaries in the Feed the Future implementation area.



SPOTLIGHT:
**HONDURAS
AND GUATEMALA**





COUNTRY CONTEXT

In 2014, Honduras experienced moderate economic growth, a continued coffee leaf rust pandemic, severe violence, and a serious drought followed by a flood. Feed the Future targets extreme poverty and stunting in western Honduras, where **more than 600,000 people live on incomes below \$1.25 person per day, and 40 percent of children are stunted.** Working through coffee, maize and horticultural value chains, **Feed the Future helps over 30,000 families, or more than 180,000 people.**

Honduras

Value chain focus: Coffee, horticulture, maize and beans

Zone of influence: Six western-most departments—La Paz, Intibucá, Lempira, Copán, Santa Bárbara, Ocotepeque—which are among the poorest in the country; total zone population is 1,523,044, of which 608,761 earn less than \$1.25 per day

Key objectives:

- Lift 30,000 families out of poverty
- Reduce poverty by 20% in the zone of influence by 2017 (people living below \$1.25 per day)
- Reduce stunting of children younger than 5 years old by 20% in the zone of influence by 2017

Guatemala

Value chain focus: Coffee and horticulture

Zone of influence: 30 municipalities in 5 departments of the Western Highlands: Totonicapán, San Marcos, Huehuetenango, Quetzaltenango, and Quiché; total zone population is 1,545,765

Key objectives:

- Increase market-led agricultural development
- Prevent and treat chronic malnutrition
- Improve access to food and health services
- Reduce extreme poverty in the zone of influence by 15% by 2017
- Reduce stunting of children under 5 years old by two percentage points per year in the zone of influence by 2017

By 2014, with Feed the Future's assistance, horticulture production in the Honduras zone of influence increased by 39 percent above the 2011 baseline—from 92,769 metric tons to 128,941 metric tons—even though nearly seven in eight participating farmers had never grown horticultural crops before receiving Feed the Future assistance.

Since 2012, coffee rust has decimated coffee crops in Latin America, racking up US\$1 billion in losses. The pathogen is not new, but it is the worst occurrence in the region's history, impacting two Feed the Future focus countries—Guatemala and Honduras. By 2013, an estimated 374,000 jobs were lost due to coffee rust in the impacted countries—175,000 of those in Guatemala and Honduras. These job losses are concentrated among laborers on larger coffee plantations as well as smallholder farmers whose livelihoods rely on their coffee crops. Already struggling to make a living, they can ill afford to fight poverty and coffee rust at the same time.

In response to the coffee rust crisis in Honduras, Feed the Future helped growers add value to offset production declines. Feed the Future tripled the number of coffee bean solar dryers in the zone of influence in FY2014, enabling growers to sell dried beans at a 15 percent price premium due to better processing. Feed the Future facilitated partnerships with buyers, helping to secure prices 25 to 50 cents higher per pound via specialty markets.

After the President of Guatemala declared the coffee rust outbreak a national emergency in 2013, Feed the Future increased its presence there, teaming up with local partners to implement a pest control program where local workers were trained on the safe use, handling and storage of pesticides that have helped contain the disease. Feed the Future also assisted coffee nurseries—often operated by women and youth—to replenish seedlings, in part with rust-resistant varieties. Land for producing seedlings increased from 770 hectares to 1,350 hectares.

In Honduras, incomes of Feed the Future beneficiaries increased by an average of 55 percent since 2011, from \$0.89 to \$1.38 per person per day. Incomes for extremely poor families (approximately 125,000 people) nearly doubled, from an average of \$0.62 to \$1.21 per person per day. Nutrition-sensitive agricultural investments cut the prevalence of underweight children under 2 by more than half in 230 targeted communities.

In addition, Feed the Future helped to leverage \$200 million from outside sources including the Government of Honduras, other donors, and the private sector for the Dry Corridor Alliance, an effort that aims to accelerate sustainable economic development in the geographic corridor that stretches along Honduras's southern and western borders, characterized by pervasive extreme poverty and erratic climatic conditions. It additionally aims to lift 50,000 families out of extreme poverty, reduce undernutrition of children by 20 percent, and improve more than 280 kilometers of secondary and tertiary roads, providing market access to thousands. Through the Alliance, Feed the Future plans to work over the next five years to increase incomes and reduce stunting for the extremely poor living in those parts of the Dry Corridor that overlap with Feed the Future's focus areas.

Environmental challenges persist in this region. Drought, in particular, has hurt maize and other crops in Honduras and Guatemala. Feed the Future is promoting better seeds and irrigation techniques that help farmers withstand both normal and extreme seasonal variability—ranging from drought to tropical storms and hurricanes. At the household level, the initiative is promoting clean energy products such as solar dryers and efficient cook stoves.



Coffee production is key to livelihoods in regions where Feed the Future works. That is why the initiative is tackling the recent threats to this high-value crop from multiple angles and through multiple partners.

Feed the Future has joined national and regional institutions to coordinate a sector-wide response to the coffee rust outbreak. Immediate efforts include providing farmers with healthy seedlings, better ways to control coffee rust, and technical assistance for alternative agricultural activities.

For long-term solutions, Feed the Future is partnering with the Norman Borlaug Institute for International Agriculture at Texas A&M University to research rust-resistant coffee varieties. Feed the Future is also supporting an early warning system to alert coffee farmers to the disease's spread and to better monitor the current crisis. In Guatemala and other countries, Starbucks and Keurig Green

Mountain, Inc. have joined USAID and other organizations to support efforts to fight this disease through Root Capital's Coffee Farmer Resilience Fund, which provides financial assistance to 40,000 coffee growers throughout the region. The Fund is designed to increase farmers' access to financial products and capital so they can replant with disease-resistant varieties and adapt to changing climates.

In the near term, Feed the Future is assisting Honduran coffee farmers like Orbelina Vasquez, who lives in Santa Rosita, Siguatepeque. Her 1.5-hectare farm suffered from years of neglect and poor harvests before assistance through the U.S. Department of Agriculture's (USDA) Food for Progress program helped to coax the plants back to life. It took more targeted use of fertilizer, better pruning strategies and improved knowledge of what her soil needed for the plants to thrive. Now, she reports that her tree productivity has

doubled, using less fertilizer. Furthermore, she fetches prices 150 percent higher than in previous years, thanks to support for her and other farmers to access financing and credit. This has allowed them to grow their businesses and join the lucrative export market by linking directly with buyers who are exporting through a cooperative export scheme. Last year, more than 1,000 farmers participated.

Coffee, while a major export crop, is a big seller domestically as well. Recognizing women's potential as entrepreneurs and their vital role in investing in the well-being of their families, Feed the Future is partnering with women in Honduras to meet this high demand. Through a program supported by USAID, women receive training in basic business skills and processing practices, and their husbands receive on-farm training in improved production practices.

Among these entrepreneurs are Melida Velasquez, Victoria Manueles, Francisca Chinchilla, and Maria Felix, who formed a coffee processing business in 2012 and have been working with Feed the Future

ever since. Their business has diversified and increased its sales every year, from 5,000 to 8,000 pounds of coffee annually. They are projecting sales in excess of 10,000 pounds for 2015.

With their increasing profits, they purchased a thresher, roaster and grinder and plan to invest in an industrial toaster and a solar dryer, all of which will help to increase production capabilities.

Women participating in this program earn on average \$2,000 per year to complement their families' incomes. By contributing significantly to household earnings, women have more authority in deciding how their family's money is spent. Many have chosen to invest in their children's education and to purchase small plots of land.

While coffee is a significant cash crop in the region and is garnering attention in the wake of the rust epidemic, other crops in the region are substantial export earners as well. For example, while Guatemala is the third largest exporter of snow and snap peas, exports to the United States could come to an abrupt halt if food safety practices and systems are not quickly upgraded to ensure compliance with relatively new U.S. regulations under the Food Safety Modernization Act. The Act requires all exporters to provide data to trace their produce to the field where it was grown. Though some traceability protocol exists in Guatemala, the current system does not provide the required level of detail—which could lead to nearly \$280 million in snow pea exports getting shut out of the U.S. market every year.

Through the Feed the Future Partnering for Innovation program, USAID is helping bring the system up to speed by partnering with a consortium that initiated a modern traceability system using Farmforce, a web-based software created by the Syngenta Foundation that replaces pen-and-paper systems and links smallholder farmers to others in the agricultural value chain. Farmforce increases management information and transparency, promotes compliance, and simplifies auditing and traceability, allowing exporters to track products from farmers to the point of sale.



As part of Feed the Future, USDA, in collaboration with the Market Information Organization of the Americas, provides technical assistance to Hondurans on a variety of issues including food security, market information systems, and food safety. This partnership helped to enhance the Honduran Agricultural Market and Product Information System. Ultimately, the program has strengthened a professional staff of market reporters to collect, process and disseminate agricultural prices and commodity descriptions across wholesale markets in Honduras via radio, newspaper, and soon, a mobile-based application.

In addition to indirectly supporting good nutrition made possible through increased incomes, Feed the Future is looking to immediate interventions to combat childhood stunting, which is highly prevalent in targeted zones of Honduras and Guatemala. In western Honduras, more than 40 percent of children are stunted. And in Guatemala, 67 percent of children in the zone of influence, located in the Western Highlands, are stunted.

The Feed the Future Legume Innovation Lab, led by Michigan State University, is working to develop climate-resilient and disease-tolerant beans, lentils and peas—all staples in the diets in these two countries. Furthermore, the Lab helps farmers to grow a variety of beans that boost nutrition among the families who most need to diversify their diets and consume more vitamin-rich foods. In Guatemala, for example, the Máfrijol Project is distributing high-yielding, disease-resistant bean varieties adapted for high elevations. Carlos Dominguez, a smallholder coffee farmer in the Western Highlands, recently harvested 200 pounds of black beans as a result of the seed allocation and training he received on improved soil fertility and pest management practices. This means he will be able to provide 100 pounds of food for his family, retain enough seed for the next planting season, and sell the rest of the beans. The profits will help Dominguez's family stay food-secure in a region where climate variability and plant diseases have made it increasingly difficult to grow crops, including grain legumes.

Sometimes the only adaptation needed for better nutrition is behavior change. A Food for Peace project is helping improve health and nutrition across the Western Highlands of Guatemala by working with mothers to plant home gardens with chard, spinach, carrots and other crops, and to help their families adopt healthier nutritional habits. Catalina, a project beneficiary who went on to volunteer to teach other women in her community the importance of dietary diversity, as well as techniques to ensure productive home gardens, did not know much about growing vegetables and maintaining soil prior to participating in this project.

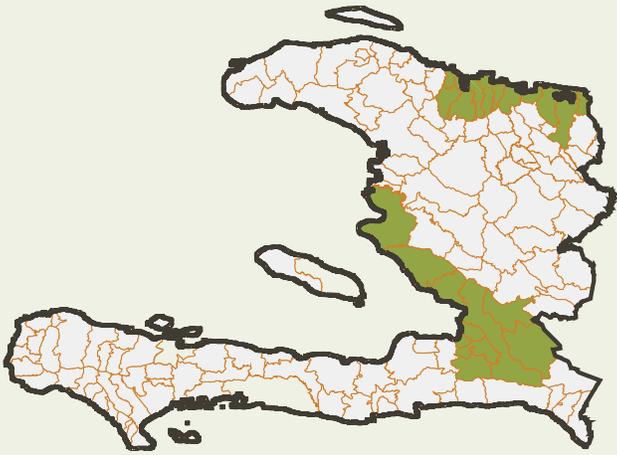
“Now we have home gardens and grow spinach, beets, carrots and other vegetables. Our children eat better now,” she says. Adds another mother with four children who lives nearby, “Before we only ate vegetables if we had the money to buy them. But now we can get them from our home gardens. Our land has changed a lot with this program.”

By contributing significantly to household earnings, women have more authority in deciding how their family's money is spent. Many have chosen to invest in their children's education and to purchase small plots of land.

In Honduras, Feed the Future helps communities understand that caregiving activities are not exclusive to women and works to remove traditional barriers to male participation in family health. Feed the Future activities integrate education on basic nutrition and hygiene into agriculture extension to improve men's awareness of their roles in ensuring the well-being of families. Feed the Future also works with partners to promote improved hygiene practices, which are critical to reducing infections among young children. Simple solutions such as eating meals on a mat rather than a dirt floor, or frequently washing hands, are showing success in improving the health of young children in these communities.

SPOTLIGHT:
HAITI





COUNTRY CONTEXT

Haiti has endured great hardship in its recent post-earthquake history, but there has also been significant progress under Feed the Future and other U.S. Government programs. The **number of underweight children nationally has plummeted to 11.4 percent in 2012**, down from 22.2 percent in 2007. In FY2014, through Feed the Future and global health efforts, **a quarter of a million children under age 5 received vitamin A supplements**. An even larger number were reached through nutrition programs such as Mother Leaders, where women take nutrition counseling to communities in need. In FY2014, **USAID, through Feed the Future, reached more than 70,000 rural households** with agriculture programs.

Value chain focus: Port-au-Prince/Cul-de-Sac: mango, maize, rice, beans; St. Marc: mango, plantains, maize, beans; Northern Corridor: cacao, rice, plantains

Zone of influence: Three priority development corridors: Port-au-Prince/Cul-de-Sac, St. Marc/Cabaret, and the Northern (Cap Haitien) Corridor; the Food for Peace Kore Lavi safety net program offers food vouchers and health and nutrition services to the poorest families outside the zone of influence

Key objectives:

- Increase agricultural productivity
- Stabilize watersheds above selected plains
- Strengthen agricultural markets
- Deliver nutrition messages and services

High-quality chocolate is an unlikely but significant contributor to improved nutrition—not for its calories, but through the profits generated from export markets for cacao produced in Haiti. These profits improve the livelihoods of farmers and their families and increase their ability to purchase more and healthier food.

Cacao production is not new in Haiti. However, in the past, aging tree plantations resulted in declining production for Haitian cacao, which has rarely met international standards and failed to attract the high-end export market. Feed the Future is supporting a project where farmers across three value chains—rice, plantains and cacao—receive training in agriculture, acquire high-quality seeds and seedlings, and receive assistance in trading and marketing their product. The project aims to double agricultural incomes for at least 20,000 rural households in northern Haiti, where most of the country’s cocoa is produced. For cacao farmers participating in the training, increased access to agricultural and market information will improve the quality of cacao produced and increase the prices paid to Haitian farmers. AVANSE, a flagship Feed the Future project in the region, is partnering with local Haitian cacao export firms to increase local cacao production and exports of Haitian cacao.

“This program is teaching us important techniques, such as how to prepare the land and take care of the trees, and how to treat the beans to get the best flavor,” explains one of the women farmers participating in the project. “Now we can get higher yield and produce better quality.”

“I would have never imagined that it was possible for me to harvest 5 or 6 tons of rice on one single hectare of land. It’s such an extraordinary feat for me.”

— LEO ANDRES PABLO JULSON, HAITI

In a country with a complex agriculture sector, Feed the Future is seizing opportunities to implement a package of proven agricultural practices depending on the local context. One example is Haiti’s version of a “greenhouse revolution,” which trains farmers and provides in-kind grants to farmer associations for the installation of small greenhouses with drip irrigation and vertical growing systems. Feed the Future also helped more than 15,000 members

of farmer organizations build more than 250 greenhouses to grow high-value crops like vegetables and flowers. These greenhouses enabled farmers to grow three harvests a year, rather than just one, and generate more money per year on a 70-square meter piece of land than what farmers usually make on one hectare with traditional crops and agriculture practices. This innovation enables hillside farmers to devote more of their steeply sloped land to soil conservation and agro-forestry activities, protecting downstream investments in Haiti’s productive plains.

Rice is also making a comeback in Haiti with assistance from Feed the Future. One thousand farmers in the western part of the country, including Leo Andres Pablo Julson, are doubling their rice yields using a technique called System of Rice Intensification (SRI). SRI allows farmers to use fewer seeds, water and fertilizer. Good soil preparation, specific planting techniques, intermittent irrigation, more efficient and appropriate application of fertilizer, and weeding between rows results in hardier and more productive plants.

Julson, who barely harvested 2 tons of rice per hectare before trying SRI, is pleased with the results. “I would have never imagined that it was possible for me to harvest 5 or 6 tons of rice on one single hectare of land, it’s such an extraordinary feat for me,” he says. “My family’s living conditions have greatly improved, and now I can hope for a better future for my son, including allowing him to have a good quality education. This experience has proven to me that we farmers can once again believe in agriculture and that we are also capable of helping improve the environment in the country.”

Through USAID’s partnership with USDA, Feed the Future is providing technical assistance to Haiti to enhance the capacity of the Haitian Ministry of Agriculture, Natural Resources, and Rural Development to offer services in vocational agriculture education, soils, plant health, food safety, and market information systems. The program works with the Ministry to strengthen institutional capacity and capability at the local



level. In April 2014, USDA's National Agricultural Statistics Service, in conjunction with the Ministry, officially released the results of a FY2013 spring crop production survey conducted throughout Haiti. Through training workshops in agricultural survey methods, this joint effort provided the Ministry with the first reliable crop production data in decades.

Feed the Future also aims to improve the livelihoods of Haiti's smallholder farmers through support of a new water management system that has the potential to stabilize fragile watershed ecosystems. After its completion in early 2015, President of Haiti Michel Martelly inaugurated a new water diversion system along the flood-prone Rivière Grise in Haiti's Cul-de-Sac corridor. Under Feed the Future, USAID works in partnership with the Government of Haiti to sustainably improve irrigation access in this region while reducing the risk of floods and increasing agricultural productivity. The system replaces a prior dam

rendered inoperative by a 1978 hurricane, leaving farming communities vulnerable to floods and devastating local irrigation systems that they relied on for growing crops during the dry season. The long-awaited network of rehabilitated irrigation canals that branch off from the new water diversion structure will allow year-round high-value agricultural production for 10,000 farmers working on 8,500 hectares of land. These new structures—the first of their kind in a country with limited engineering capacity—are designed to withstand a stronger hurricane than Haiti has seen in the last 50 years.

In a country with a complex agriculture sector, Feed the Future is seizing opportunities to implement a package of proven agricultural practices depending on the local context.

CONCLUSION



At the heart of Feed the Future is the understanding that development efforts are most successful when coordinated with countries as they contribute to and determine their own unique food security and nutrition needs. That is why Feed the Future embraces a model of development rooted in partnership with governments, donor organizations, the private sector, and civil society to enable long-term success.

2014 was a momentous year for Feed the Future. In addition to helping millions of smallholder farmers improve their yields and incomes and helping families—particularly mothers and young children—improve nutrition, new data show that our efforts are contributing to downward trends in poverty and malnutrition, Feed the Future’s two top goals. These results suggest that Feed the Future can meet its ambitious goal of reducing poverty and stunting by an average of 20 percent across the areas where the initiative works. While additional impact data are still being collected to measure changes in incomes and poverty, preliminary data indicate that Feed the Future programs, along with complementary U.S. Government and

other donor activities, are building a strong foundation for continued economic growth and resilient communities. Throughout the next year, Feed the Future will conduct additional studies and analyses, including impact evaluations, to examine how programs are affecting poverty and malnutrition. To date, more than 300 evaluations of Feed the Future activities have been conducted or are in process, and 20 multi-year impact evaluations are in process.

One of Feed the Future’s core tenets is working with smallholder farmers, particularly women, to unlock the transformative potential of agriculture to connect more people to local markets and the global economy, and thus pave a pathway out of poverty. Feed the Future investments promote women’s leadership in agriculture, support policy changes that increase women’s land ownership, and strengthen their access to financial services. Using the WEAI, Feed the Future will continue to measure how its programs are affecting changes in women’s empowerment in agriculture. Data from the WEAI baseline reports have already played a role in helping reassess strategies and programs to target opportunities with women and men where it matters most.

Feed the Future is also working to ensure that food security efforts reflect a strategic understanding of beneficiary communities and the challenges that climate variations pose to them. Today's climate prediction models indicate the need to prepare for the impacts of climate change on agriculture. Climate variability and increasingly frequent extremes in precipitation, temperature, seasonality, pests, and diseases will put additional pressure on farmers to adapt their farming operations and embrace innovative technological solutions. Feed the Future and related U.S. Government food security efforts continue to emphasize climate-smart agriculture, and they will continue to support agricultural development approaches that use resources efficiently, protect and conserve the environment, utilize the best practices and technologies available, and reduce the risk for smallholder farmers. Ultimately, climate-smart agriculture will ensure that our efforts to sustainably reduce poverty, hunger and malnutrition are even more powerful and effective.

Feed the Future Innovation Labs, which tap into the scientific excellence of over 65 U.S. colleges and universities, are helping to develop climate-resilient crops and livestock that tolerate warmer climates, can better withstand drought, and resist pests and diseases. In mid-2015, Feed the Future announced an investment of \$140 million in a series of public-private partnerships over the next three years. These partnerships are expected to deliver climate-resilient seeds and associated technologies to 11 million farming families across Africa who can benefit most from them.

In addition, Feed the Future is working to address the root causes of food insecurity and to increase economic resilience in many countries to help avoid recurrent food crises.

Through Feed the Future and other efforts, the U.S. Government has partnered with other donors, countries, and across sectors to continue to elevate food security and nutrition to the top of the global development agenda. With U.S. leadership and a sustained emphasis on inclusive partnerships, Feed the Future can continue to improve the lives and livelihoods of millions of people around the



world. Feed the Future's efforts are not only intended to achieve results, but also to build a strong foundation for positive impact for generations to come, and to deliver on President Obama's promise to "work alongside the people of poor nations to make farms flourish and let clean waters flow, and to nourish starved bodies and hungry minds."

One of Feed the Future's core tenets is working with smallholder farmers, particularly women, to unlock the transformative potential of agriculture to connect more people to local markets and the global economy, and thus pave a pathway out of poverty.

ANNEX

FEED THE FUTURE IN AFRICA					
COUNTRY	THE NEED			FEED THE FUTURE PROGRESS	
	POVERTY	STUNTING	ZOI POPULATION	FEED THE FUTURE VALUE CHAINS	FY14 HIGHLIGHT
ETHIOPIA^a 	36.8%	40.1%	16.8 million	Maize, wheat, sesame, coffee, honey, chickpea, live animals, meat, dairy, Irish/orange-fleshed sweet potatoes	US\$45 million in new agricultural and rural loans
GHANA^b 	22.2%	36.1%	5.2 million	Rice, maize, soya, marine fisheries	US\$4.1 million in new private sector investment in the agriculture sector leveraged by Feed the Future
KENYA^c 	37%	26%	21.7 million	Horticulture, dairy, maize, drought-tolerant crops, livestock.	934,822 farmers applying new technologies or management practices
LIBERIA^d 	50%	42%	2.6 million	Rice, cassava, vegetables, goats	45,902 farmers applying new technologies or management practices
MALAWI^e 	66.7%	49.2%	4.9 million	Legumes, orange-fleshed sweet potato, groundnuts	US\$6.3 million in new agricultural and rural loans
MALI^f 	50.6%	39%	2.4 million	Millet, rice, sorghum, and livestock (cattle, sheep, and goats)	60,565 farmers applying new technologies or management practices
MOZAMBIQUE^g 	62%	51.5%	6.5 million	Groundnut, sesame, soybean, cow pea, pigeon pea, common bean, fruit, cashew	US\$2.5 million in new private sector investment in the agriculture sector leveraged by Feed the Future

FEED THE FUTURE IN AFRICA (continued)

COUNTRY	THE NEED			FEED THE FUTURE PROGRESS	
	POVERTY	STUNTING	ZOI POPULATION	FEED THE FUTURE VALUE CHAINS	FY14 HIGHLIGHT
RWANDA^h 	66.96%	46.32%	9.3 million	Beans, maize, dairy, pyrethrum	US\$23.8 million in new agricultural sales
SENEGALⁱ 	46.7%	19%	4.2 million	Rice, millet, maize, marine fisheries	41,717 hectares under improved technologies or management practices
TANZANIA^j 	37.2%	48.3%	10.6 million	Rice, maize, horticulture	103,893 hectares under improved technologies or management practices
UGANDA^k 	32.86%	32.99%	13.7 million	Coffee, maize, beans	213,279 farmers applying new technologies or management practices
ZAMBIA^l 	79.8%	45.5%	1.5 million	Legumes, maize, horticulture, and oilseeds	US\$31 million in new agricultural sales

a Ethiopia poverty: World Bank. Ethiopia stunting: 2014 Demographic and Health Survey. Ethiopia FY2014 highlight: Feed the Future Monitoring System.

b Ghana zone of influence poverty: 2012 population-based survey. Ghana zone of influence stunting: 2012 population-based survey. Ghana FY2014 highlight: Feed the Future Monitoring System.

c Kenya poverty: World Bank. Kenya stunting: 2014 Demographic and Health Survey. Kenya FY2014 highlight: Feed the Future Monitoring System.

d Liberia poverty: 2012 population-based survey. Liberia stunting: 2013 Liberia Comprehensive Food Security and Nutrition Survey. Liberia FY2014 highlight: Feed the Future Monitoring System.

e Malawi zone of influence poverty: 2010/2011 Third Integrated Household Survey (IHS3). Malawi zone of influence stunting: 2010 Demographic and Health Survey. Malawi FY2014 highlight: Feed the Future Monitoring System.

f Mali poverty: World Bank. Mali stunting: 2013 Demographic and Health Survey. Mali FY2014 highlight: Feed the Future Monitoring System.

g Mozambique zone of influence poverty: 2013 population-based survey. Mozambique zone of influence stunting: 2011 Demographic and Health Survey. Mozambique FY2014 highlight: Feed the Future Monitoring System.

h Rwanda poverty: 2010/11 Integrated Household Living Conditions Survey (EICV 3). Rwanda stunting: 2010/11 Demographic and Health Survey. Rwanda FY2014 highlight: Feed the Future Monitoring System.

i Senegal poverty: 2011 National Agency of Statistics and Demography. Senegal stunting: 2013 Demographic and Health Survey. Senegal FY2014 highlight: Feed the Future Monitoring System.

j Tanzania poverty: 2010-2011 National Panel Survey. Tanzania stunting: 2010 Demographic and Health Survey. Tanzania FY2014 highlight: Feed the Future Monitoring System.

k Uganda poverty: 2009/10 Uganda National Household Survey (UNHS). Uganda zone of influence stunting: 2012 population-based survey. Uganda FY2014 highlight: Feed the Future Monitoring System.

l Zambia zone of influence poverty: 2012 Rural Agricultural Livelihoods Survey (RALS12). Zambia zone of influence stunting: 2012 population-based survey. Zambia FY2014 highlight: Feed the Future Monitoring System.

FEED THE FUTURE IN ASIA

COUNTRY	THE NEED			FEED THE FUTURE PROGRESS	
	POVERTY	STUNTING	ZOI POPULATION	FEED THE FUTURE VALUE CHAINS	FY14 HIGHLIGHT
BANGLADESH 	40.5%	37.1%	27.4 million	Rice, horticulture, fisheries/aquaculture	1.97 million farmers and other producers applying new technologies and management practices
CAMBODIA 	11.7%	43.95%	3.2 million	Rice, horticulture, fisheries/aquaculture	US\$2.27 million in new private sector investment in the agriculture sector leveraged by Feed the Future
NEPAL 	32.5%	45.2%	6.8 million	Vegetables, cereals (maize and rice), pulses (lentils), and livestock	US\$3.89 million in new agricultural sales
TAJIKISTAN 	8.8%	30.7%	1.5 million	Fruits, vegetables, dairy	US\$1.4 million in new private sector investment in the agriculture sector leveraged by Feed the Future

FEED THE FUTURE IN LATIN AMERICA AND THE CARIBBEAN

COUNTRY	THE NEED			FEED THE FUTURE PROGRESS	
	POVERTY	STUNTING	ZOI POPULATION	FEED THE FUTURE VALUE CHAINS	FY14 HIGHLIGHT
HONDURAS 	41.2%	40.2%	1.5 million	Coffee, horticulture, corn, beans	US\$24 million in new agricultural sales
GUATEMALA 	5.9%	67.4%	1.5 million	Coffee, horticulture	US\$2.5 million in new private sector investment in the agriculture sector leveraged by Feed the Future
HAITI 	25% (of rural population)	20.8%	812,294 (who live in rural areas)	Mango, rice, beans, maize, plantain, cacao	US\$1.4 million in new private sector investment in the agriculture sector leveraged by Feed the Future

SELECT FEED THE FUTURE AND RELATED FOOD SECURITY FUNDING

FEED THE FUTURE IMPLEMENTING AGENCIES AND PROGRAMS, FY2010–2014^a

(\$ IN THOUSANDS)	FY2010	FY2011	FY2012	FY2013	FY2014
USAID^b					
USAID Feed the Future	\$813,100	\$968,362	\$972,688	\$957,057	\$977,960
Nutrition (Global Health Programs)	\$75,000	\$89,820	\$95,000	\$95,127	\$115,000
Food for Peace Title II Development Food Aid	\$385,515	\$422,643	\$426,831	\$299,871	\$254,584
Treasury^c					
Global Agriculture & Food Security Program (GAFSP)	\$66,600	\$99,800	\$135,000	\$128,165	\$133,000
International Fund for Agriculture Development (IFAD)	\$30,000	\$29,440	\$30,000	\$28,480	\$30,000
MCC^d					
	\$100,866	\$247,162	\$324,089	\$746,349	\$564,999
USDA^e					
Food for Progress	\$88,243	\$127,500	\$239,900	\$149,600	\$127,480
McGovern-Dole Food for Education	\$126,304	\$143,500	\$173,400	\$183,513	\$164,775
Cochran Fellowship Program	\$283	\$200	\$825	\$3,004	\$2,587
Norman E. Borlaug International Agricultural Science and Technology Fellowship Program	\$206	\$307	\$1,677	\$1,021	\$1,157
Peace Corps^f					
	—	—	\$23,000	\$23,850	\$26,510
USADF^g					
	\$7,861	\$10,745	\$6,883	\$5,140	\$6,599

a Representative Feed the Future funding from implementing agencies. Certain agencies, which provide policy and diplomatic support for Feed the Future, are not represented.

b U.S. Department of State/USAID funding is the enacted amount, excluding agriculture, food security, and nutrition funding for Afghanistan, Pakistan and Iraq. FY2010 USAID Feed the Future figures are base funding only and do not include a \$62.071 million Haiti supplemental.

c GAFSP and IFAD figures represent enacted amounts. The United States has fulfilled its 2010 \$475 million pledge to GAFSP to provide long-term financing for country investment plans that address food insecurity in the poorest countries.

d These figures represent disbursements of food security-related investments from Millennium Challenge Corporation Compacts.

e Funding represents obligations for these programs.

f Represents funding for Peace Corps Volunteers working in agriculture, environment and health (nutrition and water/sanitation) programs. This is an estimate.

g Represents funding obligated for new grants in the fiscal year that builds the capacity of local farmer associations and food processors in nine African Feed the Future countries. Also expands economic activities in rural communities and involves smallholders in local, regional and international markets.

FEED THE FUTURE FUNDING BY REGION

FEED THE FUTURE INVESTMENTS IN AFRICA, FY2010–FY2015

(\$ IN THOUSANDS)	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015 ESTIMATE
Total Africa Feed the Future Programs ^a	\$422,378	\$479,567	\$467,708	\$460,793	\$467,000	\$488,500
Africa Feed the Future Focus Countries	\$281,078	\$366,000	\$369,500	\$356,449	\$360,000	\$371,500
Ethiopia	\$29,000	\$35,000	\$50,000	\$47,771	\$50,000	\$50,000
Ghana	\$33,000	\$45,000	\$45,000	\$42,994	\$45,000	\$45,000
Kenya	\$29,000	\$33,000	\$50,000	\$47,771	\$44,500	\$41,500
Liberia ^b	\$22,066	\$25,000	\$8,000	\$7,716	—	\$7,000
Malawi	\$12,000	\$15,000	\$13,000	\$17,198	\$17,000	\$16,000
Mali	\$27,000	\$37,000	\$27,000	\$11,466	\$18,000	\$24,500
Mozambique	\$13,000	\$18,000	\$18,000	\$27,708	\$22,500	\$22,500
Rwanda	\$25,000	\$47,000	\$31,000	\$32,485	\$33,000	\$28,000
Senegal	\$28,262	\$20,000	\$17,000	\$16,242	\$22,000	\$27,000
Tanzania	\$15,000	\$35,000	\$70,000	\$66,880	\$70,000	\$70,000
Uganda	\$29,750	\$41,000	\$32,500	\$32,485	\$30,000	\$30,000
Zambia	\$18,000	\$15,000	\$8,000	\$5,733	\$8,000	\$10,000
Other Feed the Future Programs ^c	\$141,300	\$113,567	\$98,208	\$104,344	\$107,000	\$117,000

a Represents USAID allocations for Feed the Future programming that directly contributes to poverty reduction and nutrition goals in the Feed the Future geographical zones of influence.

b In FY2014, Liberia continued implementation of Feed the Future programs with available prior year resources.

c Includes strategic partner, regional and aligned agricultural programs.

FEED THE FUTURE INVESTMENTS IN ASIA, FY2010–FY2015^a

(\$ IN THOUSANDS)	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015 ESTIMATE
Total Asia Feed the Future Programs	\$82,831	\$112,724	\$98,200	\$96,968	\$110,200	\$87,600
Asia Feed the Future Focus Countries ^b	\$42,560	\$73,361	\$78,000	\$74,703	\$76,000	\$67,000
Bangladesh	\$15,000	\$40,000	\$50,000	\$47,772	\$50,000	\$46,000
Cambodia	\$7,000	\$10,000	\$8,000	\$7,643	\$8,000	\$8,000
Nepal	\$9,000	\$10,000	\$10,000	\$9,644	\$10,000	\$8,000
Tajikistan	\$11,560	\$13,361	\$10,000	\$9,644	\$8,000	\$5,000
Other Feed the Future Programs ^c	\$40,271	\$39,363	\$20,200	\$22,265	\$34,200	\$20,600

a A full funding table, including resources from U.S. Government partner agencies, can be found on page 75.

b Represents USAID allocations for Feed the Future programming that directly contributes to poverty reduction and nutrition goals in the Feed the Future geographical zones of influence.

c Includes USAID allocations for Feed the Future for strategic partner, regional and aligned agricultural programs. This table includes Feed the Future aligned agricultural programs in Burma, Indonesia, Kazakhstan, Kyrgyz Republic, Philippines, Sri Lanka, Timor-Leste, Turkmenistan and Uzbekistan.

FEED THE FUTURE INVESTMENTS IN LATIN AMERICA AND THE CARIBBEAN, FY2010–FY2015^a

(\$ IN THOUSANDS)	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015 ESTIMATE
Total Latin America and Caribbean Feed the Future Programs	\$65,734	\$77,260	\$72,200	\$63,806	\$61,400	\$46,500
Latin America & Caribbean Feed the Future Focus Countries ^b	\$48,934	\$63,700	\$65,700	\$58,074	\$57,000	\$44,000
Guatemala	\$13,000	\$13,000	\$13,000	\$14,141	\$14,000	\$17,000
Haiti	\$25,934	\$35,700	\$35,700	\$28,933	\$28,000	\$10,000
Honduras	\$10,000	\$15,000	\$17,000	\$15,000	\$15,000	\$17,000
Other Feed the Future Programs ^c	\$16,800	\$13,560	\$6,500	\$5,732	\$4,400	\$2,500

a A full funding table, including resources from U.S. Government partner agencies, can be found on page 75.

b Represents USAID allocations for Feed the Future programming that directly contributes to poverty reduction and nutrition goals in the Feed the Future geographical zones of influence. Figures do not include \$62.071 million in FY2010 supplemental funding for Haiti.

c Includes USAID allocations for Feed the Future for strategic partner, regional and aligned agricultural programs.

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