



FEED THE FUTURE

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



2016

PROGRESS REPORT

Growing Prosperity for
a Food-Secure Future

This progress report highlights FY2015 data, stories and results achieved through Feed the Future, the President's global hunger and food security initiative. It also includes data on reductions in poverty and stunting to which the initiative is contributing. In countries reached by Feed the Future, improvements in food security and nutrition continue to grow.

Additional information and previous progress reports are available at
www.feedthefuture.gov/progress.

For a digital version of this progress report, visit
www.feedthefuture.gov/progress2016.

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INTRODUCTION

For Honduran farmer Salomón Lorenzo Vázquez, Tuesday has become the most important day of the week.

As the veteran grower tends his farm of over 20 years, he eagerly anticipates the weekly visit from a Feed the Future-supported agronomist who is helping equip Vázquez with the tools to move from small-scale farmer to entrepreneur.

Vázquez is one of thousands of farmers across Honduras who has seen improvements in his income since a Feed

the Future project started in his town four years ago. For years, he struggled to provide for his family, but access to innovative production technology and crop protection products has been a game-changer for him and other nearby farmers who are now better equipped to care for their plants and prevent devastating harvest losses. Incomes have increased and market demand for the farmers' produce has created thousands of jobs across areas in Honduras where Feed the Future works. Vázquez himself has more than doubled his family's annual earnings.

With his increased income, Vázquez is planning to extend the reach of his business. "I'm investing in buying more fertilizer and more seeds so that I can grow more," he

explains. He also recently purchased a vehicle, making it much easier to transport his produce to the local market. Today, he is able to earn more income and take better care of his family, and he is making an impact in his community by sharing his knowledge. Vázquez's success is representative of Feed the Future's model and demonstrates that when given the right tools, technologies and knowledge, people can prosper and overcome the challenges of poverty, hunger and malnutrition.

Feed the Future was born out of the belief that helping smallholder farmers is the key to unlocking the transformative potential of agricultural production and expanding markets to build economic growth and pave a path out of poverty and hunger. By working with governments, private companies, universities, other donors and civil society, Feed the Future is helping millions of people improve their productivity and nutrition, connect to financial services and markets, reduce shocks and increase resilience and build better lives for their families and communities.

In many regions of the world, the promise of improved agricultural practices and outputs to reduce hunger has yet to be fully realized. Following the global food price crisis in 2008, President Obama called on world leaders at the 2009 G-8 Summit in Italy to strengthen global agriculture efforts as a proven way to reduce poverty, hunger and malnutrition. The United States pledged to invest \$3.5 billion in these food security efforts over a three-year period, which catalyzed an additional \$18.5 billion in support from G-8 members and other donors. The U.S. contribution to this global commitment came to be known as Feed the Future.

Through Feed the Future, the U.S. Government is partnering with countries around the world to build a more food-secure future. Our efforts are supporting the use of improved practices and technological innovations; increasing effective partnerships; empowering women to realize their potential as farmers and entrepreneurs; building communities that face lower risks from and are more resilient to natural and man-made stresses and shocks; financing key infrastructure such as roads and water projects for irrigation; and helping governments more effectively develop and implement policies to promote good nutrition and inclusive economic growth. The core of Feed the Future includes programs in 19

By working with governments, private companies, universities, other donors and civil society, Feed the Future is helping millions of people improve their productivity and nutrition, connect to financial services and markets, and build better lives for their families and communities.

focus countries in Africa, Asia and Latin America and the Caribbean. The countries were carefully selected based on level of need, country commitment to increasing food security and nutrition and the potential for agricultural growth.

In just a few short years, Feed the Future has helped rally the global community to dramatically transform the way we approach food security and, in doing so, has helped move the global development community toward what just a few years ago seemed unimaginable: the end of extreme poverty and global hunger in our lifetimes.

With strong bipartisan support and a whole-of-government approach that builds on the skills and resources of 11 U.S. federal departments and agencies, Feed the Future's development model—which is driven by partnership, country-led growth and a focus on results—has improved the way the U.S. Government does business, facilitating effective, transparent, evidence-based, multi-stakeholder efforts to achieve lasting success. Feed the Future's research partners have made discoveries that connect smallholder farmers and markets to the tools, technologies and information that increase their yields and incomes.

The initiative's efforts have fostered investments that have boosted income growth in developing countries



9 MILLION

Food producers applied new technologies and practices to overcome challenges and boost harvests in 2015.

and promoted global prosperity and stability. Increasing yields and incomes, in turn, have demonstrated to youth populations that agriculture can be a lucrative occupation. In addition, by facilitating access to enough nutritious food, Feed the Future's activities are contributing to reductions in stunting, lessening child hunger and improving the health of pregnant women. Helping individuals across the globe increase prospects for a better life is not only the right thing to do; it is the smart thing to do.

In 2015, Feed the Future helped **more than 9 million smallholder farmers and other producers** adopt innovations and practices to improve their incomes and nutrition. Feed the Future-supported producers, many of whom are women and youth, **boosted their incomes from agricultural sales by more than \$800 million**. Last year, the initiative also reached **18 million children** with vital nutrition interventions to help them lead their most productive lives. In addition, in 2015 alone Feed the Future leveraged **more than \$150 million in private sector resources** to maximize results and transform agricultural systems for farming families.

These results, combined with host-country and other global efforts, are contributing to impressive reductions¹ in poverty and childhood stunting rates, Feed the Future's top two goals. Since the start of the initiative:

- **Poverty has dropped between 7 and 36 percent within 11 Feed the Future focus countries.**
- **Child stunting—a measure of chronic undernutrition—has dropped between 6 and 40 percent within 8 Feed the Future focus countries.**

¹ Data represent populations in the geographic areas where Feed the Future concentrates all or most of its efforts. For individual country data, visit pages 8-9 in the report.



A WHOLE-OF-GOVERNMENT APPROACH

Feed the Future has marshaled resources from across the government to invest in agriculture as a driver of inclusive economic growth. Below are the 11 U.S. Government departments and agencies that work together to achieve Feed the Future's goals.

DEPARTMENT/AGENCY	ACTIVITIES
 USAID FROM THE AMERICAN PEOPLE	U.S. Agency for International Development Provides overall leadership of Feed the Future. Coordinates, implements and assesses Feed the Future programming at the country and regional levels while also directly programming agriculture, nutrition and development food assistance funding. Supports the U.S. Government contribution to the Global Agriculture and Food Security Program (GAFSP), an innovative multi-donor trust fund that works to improve food and nutrition in low-income countries by boosting agricultural productivity.
	U.S. Department of Agriculture Supports agricultural development and trade through research, data and economic analysis, market information systems and statistics, natural resources management, and overseas and U.S.-based trade and technical capacity building. USDA also leads the U.S. Government's Global Open Data for Agriculture and Nutrition initiative, which supports global efforts to make agricultural and nutrition data available, accessible and usable worldwide without restrictions. USDA further supports the U.S. Government's global food security efforts through the McGovern-Dole International Food for Education and Child Health and Nutrition program focused on improving literacy of school-aged children and children's health and nutrition through the Food for Progress program, focused on improving agricultural productivity and expanding trade and markets.
	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.
	U.S. Department of State Uses diplomacy 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 and strengthens national frameworks for adoption and regulation of agricultural biotechnology. Partners with relevant United Nations agencies and other international organizations on global food security, nutrition and the Feed the Future agenda.
	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, the African Development Bank, the Asian Development Bank and the World Bank.

DEPARTMENT/AGENCY	ACTIVITIES
 <p>MILLENNIUM CHALLENGE CORPORATION UNITED STATES OF AMERICA</p>	<p>Millennium Challenge Corporation</p> <p>Invests in country-led projects that lead to economic growth and sustainably reduce poverty, including investments in vital food security-related infrastructure, such as irrigation systems, roads, electrification, ports and post-harvest facilities. Helps advance institutional and policy reform to create a stronger environment for increased private-sector investment. Supports projects that strengthen land and property rights, improve land policy, reduce stunting and provide business training and agriculture finance.</p>
 <p>OPIC</p>	<p>Overseas Private Investment Corporation</p> <p>Mobilizes essential U.S. and local partner private investments in Feed the Future countries through political risk insurance, long-term debt financing and support to private equity funds.</p>
 <p>Peace Corps</p>	<p>Peace Corps</p> <p>Dedicates Peace Corps Volunteers to support community economic development, agriculture, the environment and nutrition.</p>
 <p>OFFICE OF THE PRESIDENT UNITED STATES OF AMERICA OFFICE OF THE U.S. TRADE REPRESENTATIVE</p>	<p>Office of the U.S. Trade Representative</p> <p>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 free trade agreements.</p>
 <p>UNITED STATES AFRICAN DEVELOPMENT FOUNDATION</p>	<p>U.S. African Development Foundation</p> <p>Builds the capacity of local farmer associations and food processors in selected Feed the Future countries in Africa. Expands economic activities in rural communities and involves smallholders in local, regional and international markets.</p>
 <p>USGS <i>science for a changing world</i></p>	<p>U.S. Geological Survey</p> <p>Offers scientific and technical expertise to enhance resilience to recurring droughts. In its role as a Famine Early Warning Systems Network implementing partner, provides remotely sensed and seasonal forecast-derived products on crop performance indices for more-informed recovery, response and preparedness. Provides expertise on integrated approaches for sustainable water resources and management.</p>

NEW IMPACT DATA

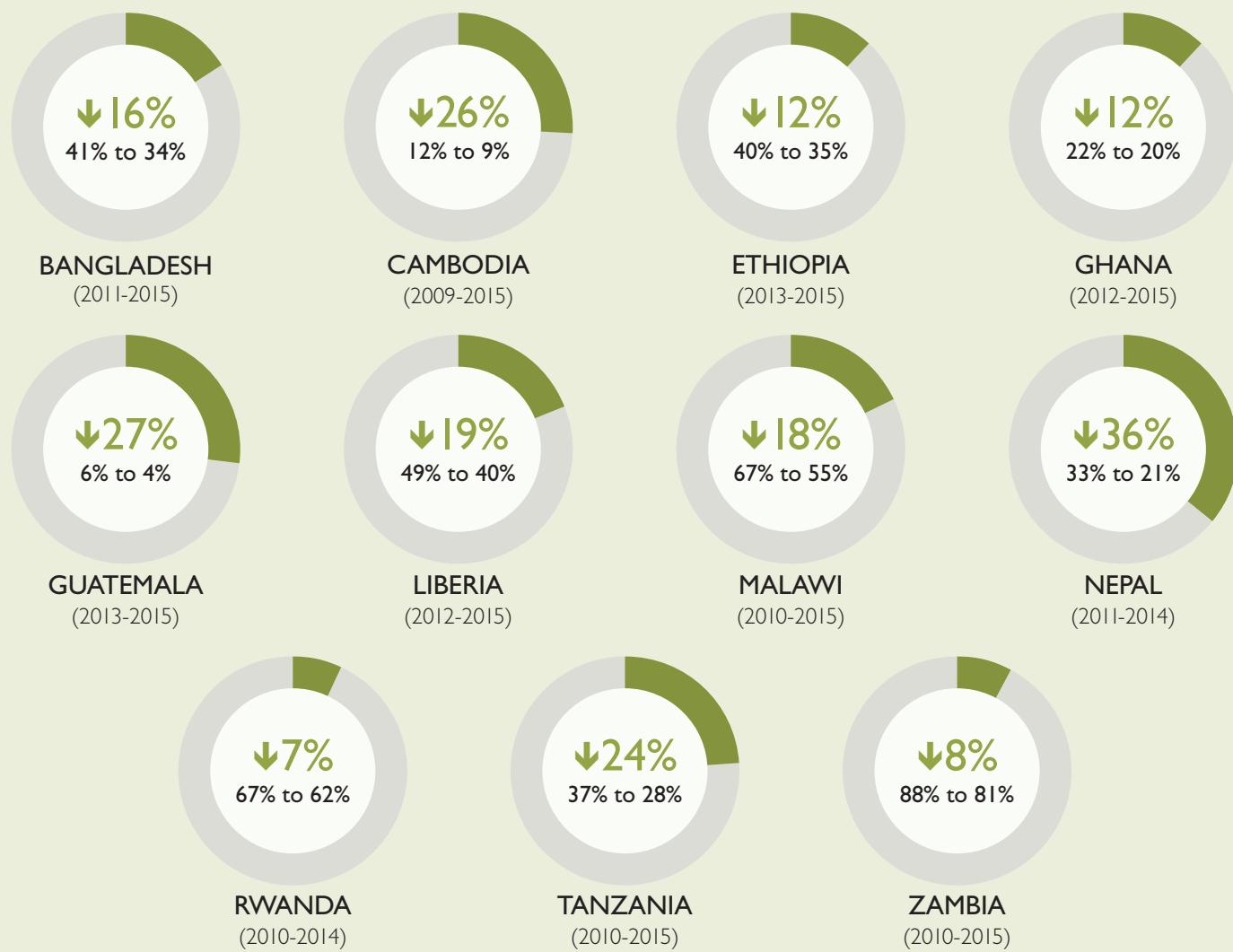
The Feed the Future annual results highlighted on pages 10-11 reflect the outputs and outcomes directly attributable^a to the initiative. These results, combined with host-country and other global efforts, are contributing to early impact on reducing poverty and childhood stunting rates.

Feed the Future collected new interim impact data^b from 2014 to 2016 for 17 of 19^c of the initiative's focus countries.

Those data show tremendous progress toward the Feed the Future goals of reducing poverty and stunting by an average of 20 percent in the areas where we work.

If this same momentum is maintained, Feed the Future is on track to exceed both stunting and poverty targets in some of those countries.

IN MANY AREAS WHERE FEED THE FUTURE WORKS, POVERTY IS ON THE DECLINE.



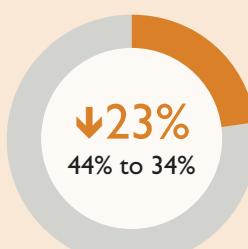
In 11 out of 17 focus countries with publicly available data, there were statistically significant reductions in poverty.^d

In 8 out of 17 focus countries with publicly available data, there were statistically significant reductions in stunting. Given the slow-changing nature of stunting rates, these initial results are very promising.

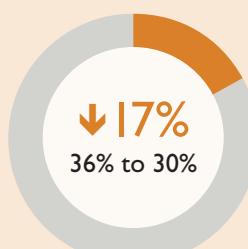
THE PREVALENCE OF CHILD STUNTING IS ALSO FALLING.



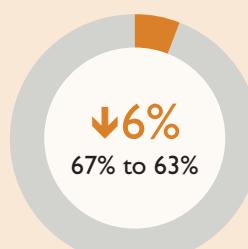
BANGLADESH
(2011-2014)



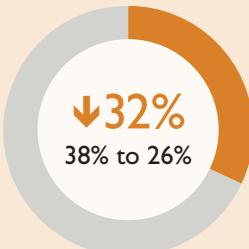
CAMBODIA
(2011-2014)



GHANA
(2012-2015)



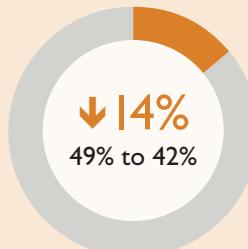
GUATEMALA
(2013-2015)



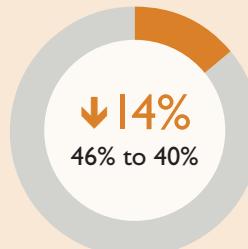
HONDURAS
(2012-2015)



KENYA^e
(2008-2015)



MALAWI
(2010-2015)



RWANDA
(2010-2015)

a USAID defines attribution as: Ascribing a causal link between observed changes (results) and a specific intervention. A result is attributable to USAID, or USAID can claim credit for a result, even when other partners are involved in achieving the result, if USAID can claim that without USAID intervention the outcome would not have taken place.

b 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. Data represent populations in the geographic areas where Feed the Future concentrates all or most of its efforts. Data compiled from primary and secondary sources. Numbers have been rounded.

c Poverty and stunting data for Mali and Haiti are not publicly available at this time.

d In the other countries with available data, the change in the prevalence of poverty or stunting was not statistically significant, meaning the margin of error of the survey sample was too great to conclusively demonstrate change.

e In Kenya, the Feed the Future Zone of Influence is composed of two strata: the northern resilience stratum comprising five counties; and a second stratum comprising 16 counties in the high rainfall area (HRI) and six counties in the eastern semi-arid area (SA2). This 40 percent reduction in the prevalence of stunting represents results for the second stratum, composed of HRI and SA2.



RESULTS THROUGH THE YEARS

Select Feed the Future Annual Global Results^{a,b,c}

The data for output and outcome indicators below are directly attributable^d to U.S. Government funding.

INDICATOR	FY2011 ^e	FY2012	FY2013	FY2014	FY2015 ^f
Improved Agricultural Productivity					
Farmers and others who have applied improved technologies or management practices as a result of U.S. Government assistance ^g	1,226,119	5,248,659	6,525,677	6,799,319	9,038,700
	% Male	55%	73%	71%	64%
	% Female	45%	27%	29%	36%
Hectares tended with 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	5,329,462
	% Male	n/a	68%	80%	64%
	% Female	n/a	25%	15%	27%
Individuals who have received U.S. Government-supported long-term agriculture sector productivity or food security training	905	932	928	1,300	1,299
	% Male	58%	25%	56%	55%
	% Female	42%	42%	44%	45%
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	18,006,457
	% Male	n/a	50%	50%	56%
	% Female	n/a	50%	50%	44%
Health facilities with established capacity to manage acute undernutrition	85	1,141	848	2,029	2,959
People trained in child health and nutrition through U.S. Government-supported programs	9,865	221,962	566,242	1,441,042	2,681,398
	% Male	41%	42%	22%	19%
	% Female	59%	58%	78%	81%



INDICATOR	FY2011 ^e	FY2012	FY2013	FY2014	FY2015 ^f
Expanded Markets and Trade					
Value of incremental sales (collected at farm level) attributed to Feed the Future ⁱ (USD)	\$38,080,821	\$100,366,589	\$174,302,362	\$532,082,927	\$829,439,579
Public-private partnerships formed as a result of Feed the Future assistance	442	544	1,149	1,294 ^j	1,563
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	124,293
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	1,227,391
	% Male	n/a	52%	64%	51%
	% Female	n/a	48%	35%	49%
Value of agricultural and rural loans (USD)	\$208,750,220	\$121,925,081	\$184,813,765	\$671,831,928	\$ 877,871,314
	% Male Recipients	70%	88%	55%	71%
	% Female Recipients	30%	12%	32%	28%
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	\$154,007,901

- a Indicators are reported annually 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. For a list of Feed the Future focus countries, visit www.feedthefuture.gov. Participating agencies do not necessarily report on all countries where they have programs and may only report on certain common indicators. The U.S. Agency for International Development (USAID) Office of Food for Peace additionally reports on Feed the Future indicators in non-aligned as well as non-focus countries where it has development programs, as does the Peace Corps.
- b U.S. Government agencies reporting into the Feed the Future Monitoring System (FTFMS) include the USAID, U.S. Departments of Agriculture and the Treasury, Millennium Challenge Corporation, Peace Corps and the U.S. African Development Foundation. 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 revised based on additional information provided after publication for previous years. For more detailed information, visit the Feed the Future Indicator Handbook.
- c Disaggregates - including by sex - are not reported for all activities and therefore often represent only a subset of activities.
- d USAID defines attribution as: Ascribing a causal link between observed changes (results) and a specific intervention. A result is attributable to USAID, or USAID can claim credit for a result, even when other partners are involved in achieving the result, if USAID can claim that without USAID intervention the outcome would not have taken place.
- e 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.
- f FY2015 aggregate results have increased slightly from our Snapshot of Progress publication because we were able to verify additional results.
- g Some activities may not report some disaggregates, and the percentages here may only represent a portion of the total results.
- h This number represents the aggregate of country-wide results from nutrition interventions that 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. Individual USAID projects are instructed to count children only once even if they are reached several times, although in some cases partner information systems are only able to track contacts, not individual children.
- i 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 \$2.28 billion in FY2015.
- j The value for this indicator has been updated to correct an error in the 2015 Feed the Future Progress Report.



IMPROVING NUTRITION FOR HEALTHIER, MORE PRODUCTIVE LIVES

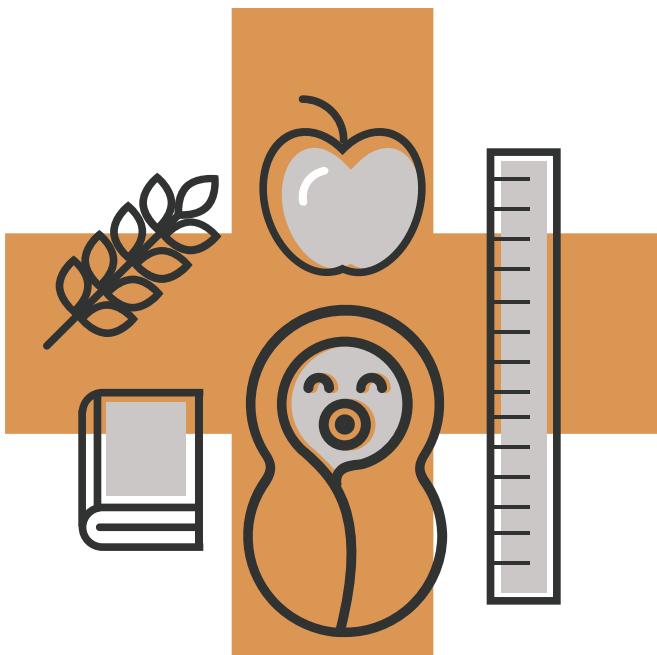
Since 1990, global nutritional status has improved, and worldwide stunting rates of children under 5 have fallen from 39.6 percent to 23.2 percent in 2015.² While this progress is encouraging, nearly 800 million people around the world, including approximately 159 million children under the age of 5, still suffer from chronic undernutrition.³ Malnourished children who survive past their fifth birthday are often permanently scarred with poor physical, mental and social development, further perpetuating a cycle of poverty and hunger that leads to poor health, lower levels of attained education and reduced productivity and wages

in adulthood. That is why improving children's nutrition is one of the most cost-effective investments to advance global progress and prosperity and reduce extreme poverty; the 2012 Copenhagen Consensus, a panel of global economists and development experts, concluded that every \$1 spent in nutrition yields \$16 in productivity returns.⁴

2 UNICEF Joint Child Malnutrition Estimates, 2016 Edition: <http://public.tableau.com/profile/unicefdata#/vizhome/JointMalnutritionEstimates2016Edition/UNICEF>

3 UNICEF Levels and Trends in Child Malnutrition Report: http://www.unicef.org/media/media_85603.html

4 IFPRI Global Nutrition Report 2014: <https://www.ifpri.org/publication/global-nutrition-report-2014-actions-and-accountability-accelerate-worlds-progress>



18 MILLION

Young children in developing countries reached with help to improve their nutrition in 2015.

Improving nutrition is one of the two overarching goals of Feed the Future. Through an approach that integrates activities from a range of sectors—agriculture, nutrition, resilience, health and more—the initiative builds the capacity of governments, local communities and health workers to help families grow, purchase and prepare more nutritious foods.

Nearly half of the Feed the Future focus countries with publicly available data already show statistically significant reductions in stunting. Of those, Cambodia, Honduras, and Kenya⁵ will exceed Feed the Future stunting reduction targets if they maintain their current rate of progress. In 2015 alone, Feed the Future, in collaboration with other U.S. Government efforts, reached almost 18 million children under 5 with interventions designed to improve their nutrition.

In Bangladesh, Feed the Future projects have successfully reduced household food insecurity and improved health

and nutrition in some of the country's most vulnerable households, many of whom can only meet their basic food needs during 6 to 9 months of the year.

Over the course of 5 years of Feed the Future programming, stunting dropped by more than 20 percent for the 604,000 participating households, three to four times the national average reduction in stunting.⁶ By the end of the program, rice yields had increased by between 49 and 139 percent,⁷ depending on the variety of rice.

⁵ In Kenya, the Feed the Future Zone of Influence is composed of two strata: the northern resilience stratum comprising five counties; and a second stratum comprising 16 counties in the high rainfall area (HRI) and six counties in the eastern semi-arid area (SA2). This 40 percent reduction in the prevalence of stunting represents results for the second stratum, composed of HRI and SA2.

⁶ Qualitative Evaluation of Food for Peace Development Food Assistance Projects in Bangladesh, May 2016. <http://www.fantaproject.org/sites/default/files/resources/FANTA-Qualitative-Eval-FFP-Bangladesh-May2016.pdf>

⁷ PROSHAR Quantitative Final Program Performance Evaluation 2015, Bangladesh, June 2015. http://pdf.usaid.gov/pdf_docs/PA00M1HD.pdf

COMMITTING TO IMPROVED NUTRITION IN NEPAL

In 2012, the Government of Nepal committed \$193.4 million to nutrition efforts over 5 years, making it clear that improving the health of its people was a national priority and that improving the nutritional status of children and women in particular was necessary for the country's future economic growth and development. Feed the Future was there to support and build on those efforts. The initiative's five-year \$57 million nutrition project—a unique collaboration between the U.S. Government's Global Health Initiative and Feed the Future—complemented the country's efforts by providing key health and nutrition information to "1,000-day households," referring to the critical 1,000 days between pregnancy and a child's second birthday.

Under the country's Multisectoral Nutrition Plan, the Government of Nepal mobilized more than 48,000 health workers; social mobilizers; water, sanitation and hygiene facilitators; female community health volunteers and agricultural extension workers serving 41 districts. The U.S. Government supported the training of these workers in nutrition, water, sanitation and hygiene, child health, and homestead food gardens through its integrated nutrition approach. Because of the Government of Nepal's strong commitment to implementing its Nutrition Plan, the impact of these trained extension workers will continue beyond the Feed the Future nutrition project.

Additionally, by linking farmers and small business owners with business advisers, participants made connections with private sector dealers, traders and government services so they could sell their produce, animals and handicrafts collectively at reasonable prices. Under one project, average household income increased from \$18 per month to \$28 per month.⁸ This increased income, combined with improved agricultural yield, meant that families could provide themselves with adequate food for one to two more months, getting them safely through the year.

In June 2016, the U.S. Government put into effect the Global Nutrition Coordination Plan, a roadmap that will strengthen the impact of the many diverse nutrition investments across the U.S. Government through better communication, collaboration and coordination mechanisms. With input from Millennium Challenge Corporation, Peace Corps, U.S. Agency for International Development, U.S. Department of Agriculture, the U.S. Department of Health and Human Services, the U.S. Department of State, the U.S. Department of the Treasury and the White House Office of Science and Technology, this plan will leverage the resources and skills of these interagency partners to tackle malnutrition, one of the most pervasive and enduring causes of extreme poverty.

⁸ PROSHAR Quantitative Final Program Performance Evaluation 2015, Bangladesh. June 2015. http://pdf.usaid.gov/pdf_docs/PA00M1HD.pdf



SUPPORTING GOVERNANCE FOR AGRICULTURAL TRANSFORMATION

Lasting food security depends on the decisions and behaviors of both governments and individuals.

Governments need to have the political will to plan strategically and make public investments that will build capacity in their respective agriculture sectors. They need the ability to set a policy agenda, the institutions to deliver on policies and programs, and a way of working that is accountable to citizens. Feed the Future works in countries

committed to investing in agriculture, supporting their efforts to be more evidence-driven, inclusive and accountable for development success.

Recognizing the importance of targeted public investments in transforming agriculture, the U.S. Government and its partners designed Feed the Future to respond to country priorities in promoting agriculture and food security. In addition to aligning support with country-led plans and priorities, the initiative also helps governments strengthen their institutions, focus their policies and improve their accountability.

As a result of Feed the Future's investment, the availability of certified seeds in Senegal increased threefold—from 3,000 metric tons in 2014 to 10,000 tons today.

Feed the Future is, for example, helping countries and regional economic communities across Africa to translate the 2014 Malabo Declaration into specific goals and commitments at the country and regional levels. This help includes supporting 79 policy changes that improved agricultural trade, strengthened markets for agricultural trade and facilitated land tenure registration, especially for women.

One example is Senegal, where Feed the Future has partnered with the government to create an environment that allows investments to take root and thrive, making it possible for both civil society and the private sector to flourish. In 2013, the Government of Senegal passed a law creating new standards for seed certification in line with regional standards. This change opened the regional market of the Economic Community of West African States to breeders in Senegal and lowered development and transaction costs.

To support this transition to broader market opportunities, Feed the Future funded local seed labs, entered into agreements to establish private seed processing centers, and trained community farmers as certified seed producers for improved varieties.

Last year, this private sector-driven system disseminated 10,000 tons of certified rice, maize and millet seed, meeting the needs of 180,000 small-scale cereal farmers in Senegal who are vulnerable to climate variability. As a result of Feed the Future's investment, the availability of certified seeds in Senegal increased threefold—from 3,000 metric tons in

2014 to 10,000 tons today. This growth has transformed the Senegal River Valley economy from one based on subsistence rice production to a commercial agricultural economy that helped raise incomes among the poorest 20 percent of households by almost \$70 annually, more than three times the growth rate in other areas.

As a result, rural villages and small towns have started to create nonfarm employment opportunities often linked to the food sector, further increasing incomes in the area. Investors, who previously lacked incentive to invest in Senegal's market, are now looking to capitalize on the opportunities created by the reforms. In 2015, 100 private sector partnerships were formed in Senegal through Feed the Future, and the initiative leveraged more than \$4 million in private sector investment.

This policy reform created an opportunity for Feed the Future to make strategic investments that catalyzed private sector investment and expanded the market for seeds grown by Feed the Future-supported farmers. In 2015, Feed the Future's efforts in Senegal contributed 30 percent of national irrigated rice production compared to 23 percent in 2014 and increased irrigated rice yields from five to seven tons per hectare, leading to more than \$10 million in incremental sales between 2013 and 2015.

In Uganda, Feed the Future partnered with the Ministry of Agriculture, Animal Industries and Fisheries and the Ugandan National Bureau for Standards to implement an ambitious new e-verification system that uses scratch tags to authenticate agricultural inputs on the market. This system gives farmers the confidence to buy improved inputs, knowing that their purchases are guaranteed by the government. Private input firms now willingly purchase the tags for placement on their products.

The partnership is a crucial first step in recovering the estimated \$1.5 billion in losses from counterfeit inputs that Uganda suffers each year. In response to the absence of effective government certification bodies, Feed the Future also has leveraged private seed companies to develop a private seed certification scheme, which will improve the quality of seed produced and sold in Uganda and provide additional consumer protection for farmers, complementing the government's new authenticity e-verification system.

Feed the Future also supports enactment of regional policies and standards to promote food security and enable food and agriculture inputs to move efficiently across borders. In West Africa, Feed the Future supported the first-ever regional Joint Sector Review of agriculture, paving the way for further coordination and increased agricultural trade between member states. Feed the Future also supported the Common Market for Eastern

and Southern Africa (COMESA) in adopting the COMESA seed variety catalogue, which enables seed varieties that have been registered in two countries to be sold among the 19 COMESA member countries. Most importantly, Feed the Future's foundational work on improving policy systems has built the capacity and confidence of governments and non-state actors to support policy change.

SUPPORTING POLICY REFORM: MAKING THE MOST OF AGRICULTURAL INVESTMENTS

Feed the Future supports country-owned policy reform by strengthening the capacities of networks of stakeholders working toward common development agendas. These networks include governments, other donors, the private sector and civil society. In 2015 alone, Feed the Future supported the implementation of 79 policy changes in 19 countries, resulting in stronger country-led policy institutions and accountability systems.

- In 2008, only one African country had a National Agricultural Investment Plan. That number is now 42. These plans play a pivotal role in helping countries strategically invest scarce resources to achieve the greatest impact.
- Of 12 Feed the Future focus countries in Africa, 11 have increased budgetary obligations in their National Agricultural Investment Plans, demonstrating a serious commitment to agricultural investment.
- In 2008, no Feed the Future countries had mutual accountability systems in place. Today, 18 of 19 focus countries are implementing agriculture Joint

Sector Reviews, ensuring transparency within and between government institutions.

- Since 2009, Feed the Future-supported countries in Sub-Saharan Africa have, on average, outpaced other countries' domestic investment in agriculture, and growth rates in public agricultural expenditures in Feed the Future countries have exceeded those of non-Feed the Future countries.
- Feed the Future has supported the Comprehensive Africa Agriculture Development Program Non-State Actors Coalition to ensure civil society engagement in the policy process.
- In 2009, no Feed the Future countries had established civil society and private sector platforms to contribute to their national plans and policies; in 2015, there were eight.
- Since 2009, Feed the Future has helped improve the availability of reliable data to guide evidence-based policy reforms, including for land tenure and natural resource management, in Ethiopia, Malawi, Rwanda, and Tajikistan.



LEVERAGING THE POWER OF THE PRIVATE SECTOR

For Mozambican cashew farmer Daniel Machono, agriculture offers a lifeline out of poverty.

Prior to Mozambique's decades-long civil war, the country was the world's largest cashew-producing country and processed approximately half of the world's output, some 100,000 tons per year. By the early 1990s, after the end of the civil war, production had declined to 22,000 tons and factories lay dormant. Despite this downturn, more than 40 percent of Mozambican farmers still grew cashews, one of the few reliable cash crops in the country.

Given the global demand for cashews, Feed the Future, through the U.S. Department of Agriculture's Food for Progress program, invested \$18 million in modernizing the Mozambican cashew sector in an effort to reconnect farmers to the global market. Since cashews account for two-thirds of U.S. shelled tree nut imports, the project linked major U.S. retailers and trading companies like Red River Foods, Inc., Costco and Whole Foods to Mozambican cashew farmers and processors. Feed the Future worked with all seven major cashew processors in northern Mozambique to meet industry standards for food safety and traceability and to obtain certifications in organic and fair trade.

The Feed the Future project is revitalizing the value of Mozambican cashews on the global market, and farmers can feel the impact. Participating processors have sold more than \$98 million of cashews—an increase of \$12.7 million from the prior year—and have created 700 new jobs for Mozambicans living in cashew-producing areas. Retailers can now purchase high-quality, traceable products, while farmers like Machono have risen to the challenge to meet these higher standards. The increased income and assets generated from the project, coupled with the newfound reliability in sales, has increased food security for the more than 22,000 farmers participating in the program.

While the international donor community plays a critical role, private sector investment in agriculture is essential to creating the conditions where development assistance is no longer needed. Today, 91 percent of financial flows from the United States to the developing world are from private sources, not public development assistance.⁹

Feed the Future's partnerships with the private sector are central to how it does business. Massive investments in agriculture are needed to keep up with global food demand, but donor funding for agricultural development is relatively small. To spur the economic growth that will help feed the nearly 800 million people suffering from chronic hunger today, the development community needs private sector partnerships that promote growth in new markets and foster thriving small- and medium-sized enterprises, increased investment in agriculture, and cutting-edge research and technologies.

Feed the Future is one of the U.S. Government's most effective development vehicles for private sector engagement. **Since its start, Feed the Future has leveraged more than \$600 million in private sector capital investment and has created almost 5,000 public-private partnerships.** These strategic alliances leverage more than just funds: they spur growth in emerging markets by empowering agricultural entrepreneurs with tools, connections and skills; commercializing new technologies; helping to create policy environments where business can grow; increasing opportunities for investment, finance and risk mitigation; and connecting stakeholders across value chains to accelerate growth. Partnerships with the private sector also bring market access, cutting-edge business practices

THE 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 way to drive transformative growth in agriculture.

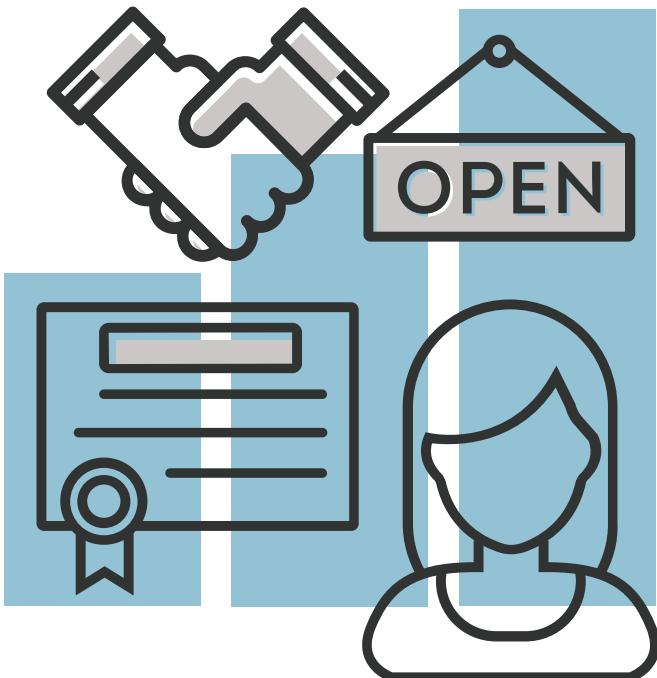
The New Alliance for Food Security and Nutrition helps African countries undertake key policy reforms to strengthen the policy environment and accountability around a shared set of goals to reduce hunger, poverty and malnutrition and drive inclusive private sector investment in agricultural development.

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.

Feed the Future serves as the primary vehicle through which the United States contributes to the New Alliance.

and innovative insights to the table to help rural farmers increase their yields, their incomes and the health of their households.

⁹ Brookings Development Assistance in the 21st Century Report: https://www.brookings.edu/wp-content/uploads/2016/06/11_development_aid_kharas-1.pdf



1.2 MILLION

Micro- to medium-sized enterprises secured loans in 2015 to grow their businesses and economies.

Feed the Future efforts also concentrate on facilitating the access that rural small- and medium-sized enterprises and smallholder farmers have to credit and other financing. The initiative has invested in scaling up mobile technologies and easy access to real-time market information and in developing new tools that demonstrate the creditworthiness of rural agribusinesses. Low-tech solutions, such as developing farm profiles using data to predict future yields, have given banks confidence in farmers' ability to repay their loans, which lowers the level of risk associated with granting loans to agribusinesses and farmers.

Chamwino Super Sembe Supply is a medium-sized agribusiness outside Dodoma in Tanzania. The company had ambitious goals: It wanted to expand operations, make its mill more profitable and provide fortified flour to more customers. But translating that vision into reality was a challenge. Among other things, Chamwino lacked a business plan, making it difficult to chart the way forward or access the loans needed to expand and improve operations.

To address this problem, Feed the Future and Partners in Food Solutions—a nonprofit organization that links the technical and business expertise of global businesses to small-scale food processors and millers in the developing world—joined forces to build the capacity of Chamwino.

Through this Feed the Future partnership, experts from leading global food companies provide African food processors with tailored advice and guidance to make their operations more efficient, reduce spoilage, improve marketing, roll out new product lines, and more. The goal of the partnership is to strengthen high-potential food processors at the center of the food supply chain.

A volunteer from Cargill, a business analyst from TechnoServe, and an accountant from Chamwino collaborated to develop a business plan and a maize market analysis. Armed with this business plan and new financial and operational knowledge provided by the partners, Chamwino was able to secure \$250,000 in

loans. Access to financing is critical to ensure companies like Chamwino can thrive, and the loans were used to invest in improved storage and milling infrastructure. Now, Chamwino is selling fortified maize flour in districts it had never reached before.

Underpinning Feed the Future's efforts to responsibly engage the private sector is the institutional and policy capacity to create environments where private businesses can grow and thrive. For example, the Millennium Challenge Corporation (MCC) supported irrigated agriculture and

roads in Senegal while it ran a land tenure security activity. The project strengthened the land rights of project beneficiaries and improved the capacity of land management institutions to mitigate potential land conflict and improve the environment for increased investment by agricultural producers, including small-scale farmers. In order to capitalize on these investments, USAID, under Feed the Future, integrated a segment of MCC-supported farmers into market development activities in its rice value chain program in Senegal. These farmers are now engaged in quality control, financing and contracting schemes.

RESPONSE TO COFFEE LEAF RUST CRISIS

Recently, a convergence of higher rainfall and hotter temperatures linked to climate change in Central America prompted a devastating outbreak of coffee leaf rust, a wind-borne fungus that threatens the livelihoods of coffee growers and laborers. At the peak of the outbreak, in 2012-2013, half of Central America's growing area was affected, causing extensive job losses and an estimated \$1 billion in economic damage.

Such shocks can have a dramatic impact on food security for poor farmers. In response, Feed the Future and its partners are supporting the Coffee Farmer Resilience Fund to leverage \$23 million in financial and technical assistance for more than 40,000 coffee farmers combating coffee leaf rust across Central America. The fund directs private sector dollars, matched with funding from the public sector and philanthropic sources, to value chain investments with farmer organizations. To date, the fund has approved more than \$8.2 million in long-term loans to help farmers rehabilitate or replace rust-affected coffee trees.

Through a USAID Development Credit Authority guarantee that assumes 50 percent of the risk for long-term loans made to farmers, these investments are helping to ensure that farmer cooperatives can continue earning income. In addition to the loans, technical assistance offered through the partnership ensures that farmers get the support needed to use the loan money effectively and increases the likelihood that the loans will be repaid, which improves the ability to establish sustainable relationships between lenders and borrowers in the coffee sector.

Nahualá, a cooperative in the Western Highlands of Guatemala that was founded to combat pervasive poverty in the region, sources organic coffee from more than 200 smallholder farmers. But in recent years, over half of the coffee-growing land has been affected by coffee leaf rust. In response, Nahualá turned to the Coffee Farmer Resilience Fund for funding to establish bio-fertilizer production centers to boost soil fertility and to help its members diversify beyond coffee.



EMPOWERING WOMEN TO IMPROVE HOUSEHOLD INCOMES AND NUTRITION

On the shores of Rwanda's Lake Kivu, members of a Feed the Future-supported cooperative are doing their part to break down the economic barriers that Rwandan women face every day.

The cooperative—which began as a women's-only group but has since expanded to include men—runs a small operation to catch and sell isambaza, a nutritious local fish.

With a starting grant of \$85,000 from the U.S. African Development Foundation (USADF), a Feed the Future partner agency, the cooperative members leveraged financial and technical support to build their business operations and increase production and sales. In 2013, the women received a second USADF grant of \$143,000 for 4 years, which they used to expand operations from

selling fresh isambaza to drying and processing it into fishmeal. The production of fresh fish increased from 5.1 tons in 2010 to 213.9 tons in 2015, while total fish sales increased from \$1,215 to \$317,168 over the same period. The cooperative is the only local producer of this highly nutritious product, which has already become a staple for many people in surrounding communities, especially women and children.

As a result of their efforts, all 48 cooperative members now have paid medical insurance and 43 can afford electricity and piped water in their homes. For young women in the community, the cooperative serves as an example of how women can break gender stereotypes and manage a thriving, nontraditional business.

Empowering women through agriculture and access to other business opportunities is a driving force behind Feed the Future. When women's social and economic status improves, productivity increases and poverty is reduced. If hunger is to be eliminated in our lifetimes, women must be empowered to fully participate in all aspects of society particularly in agriculture.

When Feed the Future began collecting data in 2011, it became clear that the initiative was not reaching as many women as intended and that few women living in Feed the Future targeted areas were in leadership positions. Today, Feed the Future emphasizes gender equality and women's empowerment across all investments. It also promotes women's leadership in agriculture and strengthening women's access to financial services.

In Feed the Future's first year, more than 500,000 women were applying improved technologies or practices in their agricultural work; in 2015, that number rose to more than 2.5 million.¹⁰ To provide women with access to the capital that they need to become leaders in the agriculture sector, Feed the Future programs extended more than \$877 million in loans to smallholders in 2015—48 percent of whom were women.

To measure and understand progress in women's empowerment, Feed the Future, in partnership with the International Food Policy and Research Institute and the Oxford Poverty and Human Development Initiative,

In Feed the Future's first year, more than 500,000 women applied improved technologies or practices in their agricultural work; in 2015, that number rose to more than 2.5 million.

developed the Women's Empowerment in Agriculture Index (WEAI), a first-of-its-kind tool that directly measures women's empowerment and inclusion levels in the agriculture sector. Unlike other tools that track women's empowerment outcomes, the WEAI also measures women's empowerment relative to men within their households, providing a more robust understanding of gender dynamics and allowing for targeted activities that engage men as proponents of and participants in gender equality.

Since its creation, WEAI results and analysis have been used to prioritize and target activities to foster the greatest possible improvement in women's empowerment. In Bangladesh, the government responded to a 2011 WEAI baseline survey showing that 75 percent of rural women were disempowered and that this status was significantly associated with poorer child, maternal and household dietary diversity. Based on these data, Bangladesh's policy makers took action, working with Feed the Future to refocus efforts to include more opportunities so that women could exercise control over productive assets and take leadership positions within their communities.

Results from the 2015 interim WEAI survey in Feed the Future's zone of influence in Bangladesh demonstrate solid improvement in women's empowerment compared to the 2011/2012 baseline. The headcount of empowered

¹⁰ Disaggregates, including by sex, are not reported for all activities and therefore often represent only a subset of activities.



2.5 MILLION

People trained in child health
and nutrition through U.S.
Government programs in 2015.

women increased by 13.9 percentage points, from 27.4 percent to 41.2 percent. The percentage of women who hold gender parity with the primary male in their household also increased—from 40.2 percent to 50.7 percent. And the empowerment gap between women and the primary male in their household dropped 10.6 percentage points, from 31.6 percent to 21.0 percent.

The biggest drivers for these improvements were reductions in the lack of input in decisions about production (a drop of 24 percentage points), discomfort in public speaking (a drop of 21 percentage points), and the lack of control over use of income (a drop of 20 percentage points).

Strengthening women's land and property rights can also empower women to participate more effectively in community-level organizations and allow them to exercise greater influence over household income, something that often reduces household poverty and benefits children.

Through MCC projects in Senegal and Mali, women—both individually and in groups—have been provided greater access to newly irrigated agricultural land. In Mali, women now own 37 percent of the land allocated in the irrigation project, while in Senegal, some communities reserved as much as 20 percent of the land exclusively for women and an additional 10 percent for women's producer groups. These community-based decisions give women control over their household's most valuable asset—land.

Feed the Future is committed to working with host countries to prioritize women's empowerment and enable women farmers and entrepreneurs to more fully realize their potential. Through the initiative, women have opportunities to increase productivity and access to resources and business opportunities, thereby improving their families' nutritional status and incomes and changing their communities for the better.



SUPPORTING RESILIENT COMMUNITIES

Clement Mshana knows all too well how drought can affect livelihoods.

He began farming in Tanzania more than a decade ago, and in recent years, increasingly unreliable rainfall has taken a toll on his yields. Mshana did not realize that his traditional farming methods were depleting his soil and exacerbating the effects of erratic rainfall. His crops were suffering, as was his income and his ability to care for his family.

That all changed when a Feed the Future-supported project brought climate-smart farming practices to more than 11,000 Tanzanian farmers whose food security was threatened by insufficient rains and low yields. The program introduced Mshana and other farmers to agricultural techniques specifically designed to mitigate environmental degradation and increase farmers' resilience. Resilience is the ability of people, households, communities, countries, and systems to reduce, mitigate, adapt to, and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth. After training farmers to understand the benefits of these techniques,

“Many farmers like me in dry areas of Kongwa will harvest something as a result, despite poor rains.”

– Clement Mshana, Smallholder Tanzanian Farmer

Feed the Future connected them to service providers who could help farmers sustain this climate-smart practice over the long term.

Farmers are seeing a difference in their yields. Last year, Mshana produced 18 bags of maize on an acre of land that had yielded an average of five bags in previous years. “Many farmers like me in dry areas of Kongwa will harvest something as a result, despite poor rains,” he says.

Recurrent environmental and man-made shocks and stresses—droughts, cyclones, political upheavals, urbanization and climate change, among others—have driven many regions around the world into crisis year after year, resulting in staggering human suffering and economic loss. These shocks are threatening agriculture and food systems, changing production yields and patterns, and challenging farmers to adapt to unpredictable conditions that are already affecting food availability, local incomes and economies, and regional and global political stability.

The international development community has historically responded to these crises with emergency assistance that saved lives and alleviated suffering, but that left in place the underlying causes, increasing the likelihood of a similar disaster in the future. Resilience is vital to ensuring that vulnerable communities are able to escape the cycle of poverty and reduced opportunity. Increased resilience ultimately diminishes the repeated need for humanitarian relief and requires an integrated approach and a long-term commitment to some of the world’s most vulnerable places.

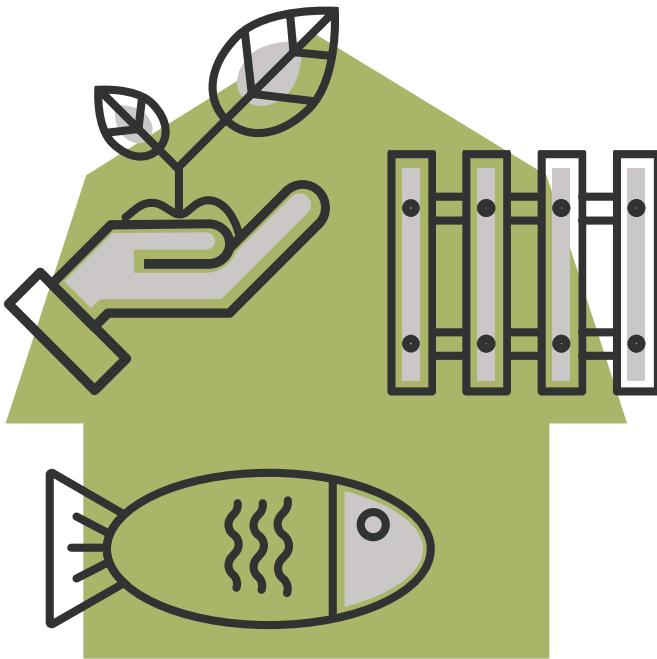
Feed the Future works in partnership with governments, local institutions and other humanitarian and development organizations to make investments that build resilience in communities and households that are subject to recurring shocks and stresses. The approach focuses on people and places subject to recurrent crises as a development priority, rather than a perpetual humanitarian risk.

In the Horn of Africa, Feed the Future is working to ensure hard-won agricultural gains are not lost as the area experiences one of its worst droughts in decades. In Ethiopia, where people are extremely vulnerable to recurrent climate stressors such as El Niño, the drought has exceeded the country’s capacity to cope on its own, leaving 10.2 million people in need of emergency food assistance and many farmers without seed or animals to produce more. This is not the first time Ethiopia has faced a severe drought, but the country is now better prepared to face this crisis due in large part to the leadership of the Government of Ethiopia and its commitment to building resilience and improving food security and nutrition. Feed the Future’s efforts are helping families adapt so they can prevent income loss and meet their needs while maintaining assets like livestock, instead of offloading the animals at rock-bottom prices for quick cash.

Thus far, the drought has had less of a negative impact in the areas in Ethiopia where Feed the Future works than in other drought-stricken regions. This is due, in part, to the fact that farmers, organizations and systems in these areas have benefited from Feed the Future activities to strengthen resilience, which include seed delivery systems, new income-generating activities and greater access to storage and markets. Farmer groups supported by the initiative are supplying maize to the Ethiopian and regional governments for distribution to families in need in drought-affected areas.

In addition, building on support to the Ethiopian government’s Productive Safety Net Program through USAID’s Office of Food for Peace, Feed the Future has helped 200,000 people increase their annual income by an average of \$330 from 2011 to 2016, putting them on a path to self-sufficiency.

Applying the promising model of Ethiopia’s Productive Safety Net Program, Feed the Future is working through



5 MILLION

Hectares of farms, fisheries and pastures tended with better tools and practices in 2015.

Food for Peace to support the development of a national food-based safety net program in Haiti. This effort is strengthening the capacity of Haiti's government at both the national and local levels to implement a voucher-based safety net linked to locally produced foods.

In Kenya, through support from USAID, the U.S. Department of State and USDA, Feed the Future has prioritized resilience-building efforts in the face of erratic rainfall and frequent drought. Because food security and climate conditions are intertwined, Feed the Future is targeting areas of recurrent crisis with traditionally high humanitarian needs.

The project, which aims to strengthen both technical and policy capabilities, is providing Kenyan farmers, extension agents and local officials with the hands-on information needed to help build resilience in the country's rural communities. It is creatively linking ongoing relief and development activities and partnering in new ways with other development and humanitarian stakeholders to

mitigate the need for relief assistance. For example, the project featured the development of a climate-smart agriculture manual for Kenya's agricultural extension professionals and fostered collaboration between Kenya's Ministry of Agriculture, Livestock and Fisheries and the World Agroforestry Center to quantify the benefits of climate-smart agricultural practices in the field. Feed the Future also supported Kenya's creation of an effective National Drought Management Authority, which has empowered local communities and governments with the information and tools they need to anticipate and mitigate droughts.

Reducing risk and promoting stability and resilience in vulnerable communities is key to safeguarding progress and ensuring that households are able to manage adversity without the constant risk of sliding back into poverty. A food-secure future will require the development of new ways to help families, farmers and food producers grow, innovate and thrive, even in the face of a changing climate and recurrent crises.



BUILDING CONNECTIONS WITH CIVIL SOCIETY PARTNERS

It was not long ago that governments and the donor community tried to address the challenges of global poverty and hunger using a top-down approach, relying on only limited input from civil society and other local stakeholders. Regional and national agendas, lacking the perspective that only civil society organizations could provide, often resulted in policies and programs that did not reflect community needs.

Feed the Future is committed to an approach that prioritizes what local actors and organizations can bring to

the table to make development assistance more inclusive and sustainable. President Obama's Stand with Civil Society call to action made supporting and partnering with civil society a U.S. Government priority, ensuring that we continue to sustain our work with these partners.

In 2014, in recognition of the critical role civil society plays in our efforts to end hunger, poverty and malnutrition, the U.S. Government and civil society partners came together to develop the Feed the Future Civil Society Action Plan, a blueprint for working more effectively with our civil society partners to fight against hunger and poverty.

With more inclusive participation of civil society organizations—faith-based organizations, farmer cooperatives and associations, local entrepreneurs and nonprofits, women’s groups, youth-led organizations and community-based organizations—both the design and the implementation of Feed the Future activities are informed and led by groups with strong links to their communities, so that interventions are locally owned and driven, and results are more durable. Feed the Future also supports civil society organizations to build their internal capacity and gain access to the evidence they need to better advocate for smallholders and marginalized communities. This improved social infrastructure helps ensure civil society can elevate the voices and interests of smallholder farmers, producers and other stakeholders in their communities, in the marketplace, and in national and international decision-making forums.

In Tajikistan, Feed the Future-supported community water user associations bring farmers together to improve access to and the management of irrigation water for more than 26,000 hectares of land, affecting approximately 200,000 people. Recognized and respected by their communities, water user associations serve a fundamental need to efficiently and equitably distribute water. Their proven success means that they have the support of the Tajik government and offer people an opportunity to participate in their communities, constructively engage government authorities and jointly manage a precious resource for the benefit of everyone. Members acquire skills in water management to respond to local needs, dispute resolution to hold people accountable for appropriate water usage, and organizational and financial management to sustain the associations in the long term. In turn, the water management improvements spearheaded by the associations increase agricultural productivity for smallholders, sometimes enabling farmers to produce more than one crop per year. The associations put local actors in the lead and provide a sustainable mechanism for them to participate in their communities.

In Haiti, Feed the Future is helping smallholder cacao farmers form seller groups to negotiate better prices for their products. To date, 280 seller groups have been formed, and 118 of these groups have already signed direct trading agreements with Novella, Haiti’s largest cacao exporter. The company pays a portion of the costs for

By partnering with and strengthening civil society, Feed the Future puts local actors in the lead.

transporting the sellers’ cacao to its headquarters, where the seller groups are paid according to the quality of the cacao they bring in. For the 2016 season, the price ranged from \$0.73 to \$0.90 per pound. Before, when they were primarily selling to middlemen, the farmers were paid about half of that. “Now that I am a member of a group, I know nobody can do this to me anymore,” Anne-Marie Severe, a cacao farmer and grandmother, says emphatically. For these farmers, going directly to an exporter had been inconceivable; the system of intermediaries had been in place for such a long time. Now, farmers are working to raise their voices, increase their incomes and take charge of their own livelihoods.

Elsewhere, others are also raising their voices, including Muketoi Wamunyima, a Zambian agricultural development professional who understands the importance of a strong agriculture sector in a country struggling to bring down the high rate of malnutrition.

In 2013, Wamunyima partnered with a local nongovernmental organization to form the Zambia Alliance Against Hunger and Malnutrition (ZAAHM), a coalition of civil society organizations that works to promote, advocate and strengthen good agricultural practices and policies. In its first 2 years, ZAAHM brought together 18 member organizations, but it had limited resources and capacity to advance its objectives. Through Feed the Future support, ZAAHM connected with the Alliance to End Hunger.

Since partnering with Feed the Future and the Alliance to End Hunger, ZAAHM has increased its membership from 18 to 50 organizations. The coalition also has extended outreach to potential members in an increasing number of districts, helping the organization become more demographically and geographically diverse.

ZAAHM currently represents civil society in national policy processes, actively participates in reviews of the National Agriculture Policy and the Zambia Land Policy, and proposes ways to enhance smallholder participation in development of the agriculture sector. It has increased its advocacy to help the coalition make unified proposals—urging investment in agricultural diversification, varied diets and nutrition-sensitive development programs. Though still a budding coalition, ZAAHM has already made significant strides in becoming a persuasive advocate for Zambia's rural families.

By partnering with and strengthening civil society, Feed the Future puts local actors in the lead. It helps farmers, producers and other stakeholders come together to better represent their interests and actively participate in their countries' development. Not only does such an approach yield better, more sustainable results, it also helps weave together the fabric of mutual accountability between government, the private sector and civil society.

SUPPORTING LOCAL LEADERS TO ADVOCATE FOR MORE INCLUSIVE AGRICULTURE POLICIES

As part of its effort to prioritize local leaders and strengthen inclusive strategy and processes for policymaking, Feed the Future supports the Comprehensive Africa Agriculture Development Programme (CADDP) Non-State Actors Coalition to elevate the voice of civil society actors at many regional and continental-level policy dialogues across Africa.

The coalition provides a platform for civil society stakeholders to use common language to express their concerns as a stronger, united voice for reform in agriculture. For instance, a 2016 coalition meeting in Ghana presented an important opportunity for civil society groups to reflect on progress and challenges and to plan for expanded civil society engagement and influence at national, regional and continental levels. Among the 62 participants, 53 were women representing policy and research centers, national-level advocacy groups, and rural women farmers associations where they serve in leadership roles and as activists.

For most of these women, the meeting provided a chance to travel outside their country for the first time. The women actively participated in the policy discussions and used the international meeting as an opportunity to share their vision and priorities for helping women farmers across Africa.

According to Mary Ishaya Afan, vice president of the Rural Women's Farmers Federation in Nigeria, "Women formerly were not given space to speak about their own problems. This is changing. Now they should be looking for ways on how women can access land. When talking about farming, a lot of traditional rulers stop women from inheriting land and stop us from having access to finance. To put a stop to this, the banks should either stop asking women for collateral or make it possible for women to have access to land. This will enable us to increase the standard of life through good production. Farming is a lucrative business for women, too."



ACCELERATING RESEARCH TO ADVANCE FOOD SECURITY

The world's population is estimated to increase to more than 9 billion by 2050, and feeding this growing population will require at least a 60 percent increase in agricultural production.¹¹ With the challenges presented by the impacts of climate change, land degradation, less arable land and scarce water supplies, the urgency is clear: Investing in research is critical to ensuring the development of innovations that will increase and sustain agricultural productivity and improve the nutritional status of women and children.

Through a consultative process with U.S. universities, the Consultative Group on International Agricultural Research (CGIAR), the private sector and leading experts, USAID and USDA developed the Feed the Future Research Strategy in 2011. The strategy lays out a vision for how scientific and technological innovations can increase agricultural productivity with more efficient use of inputs, make agricultural systems more sustainable and improve nutrition.

¹¹ FAO How to Feed the World in 2050 Report: http://www.fao.org/fileadmin/templates/wsfs/docs/expert_paper/How_to_Feed_the_World_in_2050.pdf



\$800 MILLION

New agricultural sales achieved by Feed the Future-supported producers in 2015, boosting their incomes.

A key component of the research strategy is the collaboration between U.S. and developing country scientists, which leverages the scientific expertise of U.S. university researchers to advance developing country agriculture. Feed the Future now supports 24 U.S. university-led Feed the Future Innovation Labs that bring together more than 60 U.S. colleges and universities, the CGIAR, national agricultural research institutions and universities, private sector partners and others.

Over the past 7 years, Feed the Future agricultural research investments have delivered more than 900 innovations that can hold the key to helping farmers increase yields, fight pests and adapt to changing climatic conditions. These innovations—such as new crop varieties that tolerate heat, drought, flooding and salinity; crops and livestock that are resistant to pests and diseases; technologies for value-added food processing and post-harvest handling; and management practices to improve food safety and nutrition—have the potential to solve food security challenges and help families thrive. Through a range of development partners, Feed the Future is scaling many of these innovations and tracking adoption rates in order to better respond to farmers' needs.

To ensure that new technologies can be made readily available, Feed the Future has also encouraged reforms of policies and procedures that have improved markets for fertilizers and other inputs in more than 10 Feed the Future countries. These policies and procedures include facilitating faster release and wider distribution of improved seed varieties in Mozambique, Nepal and Tanzania, making it easier for farmers to adopt more resilient and productive crops.

Across much of Africa and South Asia, the accelerated development of climate-resilient maize has the potential to change lives for millions of farmers who grow this staple crop. Maize is particularly vulnerable to increasing temperatures, so in conjunction with the International Maize & Wheat Improvement Center (CIMMYT), Purdue University, national agriculture research systems in Bangladesh, India, Nepal and Pakistan, and 11 seed companies, Feed the Future is driving efforts to get higher-yielding maize hybrids into the hands of farmers. Within 3 years of the project's launch, Feed the Future researchers released 17 new heat-tolerant maize hybrids that out-yield the best commercial varieties in the region, an accomplishment that normally takes 5 to 10 years. These drought-tolerant hybrids and varieties are now grown by

4.8 million farming families on 2.4 million hectares across 13 African countries, and new and improved lines continue to expand via public-private partnerships. Yields are 30 percent higher during common mid-season droughts than those achieved by the older varieties. Efforts do not stop at maize; in total, Feed the Future research investments have generated 198 varieties of climate-resilient crops.

In addition to contending with changing weather conditions, many farming families are also fighting against pests and diseases that can destroy harvests and leave smallholders struggling. Wheat stem rust is one of the biggest threats to wheat production around the world, causing 70 to 100 percent losses in yield and rapidly spreading over long distances. Feed the Future has responded to this threat by identifying and deploying resistance through breeding and seed multiplication programs, concentrating in vulnerable countries from Ethiopia to Bangladesh. By 2015, Feed the Future rust-resistant wheat varieties were grown on more than 25 million hectares, and most wheat-growing partner countries had achieved coverage rates of one-third to one-half, greatly reducing the threat of an epidemic.

In Bangladesh, eggplant farmers face threats from the stem borer, a pest that can cause extensive damage and make harvests unfit for the market. In response, Feed the Future has partnered with Cornell University and public and private institutions in South Asia to develop and release pest-resistant Bt eggplant. Officially released by the Government of Bangladesh on a limited basis in 2013, Bt eggplant is being scaled up by smallholder farmers and is leading to large reductions in pesticide use. Traditional eggplant varieties are typically sprayed up to 80 times to control insects, whereas Bt eggplant crops are sprayed two to three times during the growing season.

Approximately 5,000 farmers will grow Bt eggplant in 2017 and millions of consumers stand to benefit as this technology is scaled across eggplant production areas in Bangladesh. In total, Feed the Future has generated 144 disease- and pest-resistant crop varieties.

Feed the Future's research efforts also focus on improving nutrition, especially for women and children, through tools like biofortified crops. Feed the Future has steadily invested in the development and dissemination of the orange-fleshed sweet potato, a rich source of the vitamin A that is

commonly lacking in the diets of the poor. Deficiencies in this vitamin are linked to higher rates of infant mortality, a limited immune system and blindness. Eight Feed the Future focus countries in Africa have embraced these sweet potatoes as an effective strategy to combat vitamin A deficiency. In Uganda alone, more than 100,000 farming households across 22 districts are growing and feeding them to their families. In Ghana, this brightly colored vegetable may be on its way to becoming the country's most popular crop since being introduced to communities in its Northern Region, where vitamin A deficiency is prevalent.

To intensify and diversify major production systems where the poor and undernourished are concentrated, Feed the Future has invested in research to identify and adapt management practices and technologies for local farming systems. Through the integration of legumes into production systems, particularly those based on cereals, Feed the Future is helping farmers adopt "doubled up" legume systems that are providing increased yields and incomes. These systems alternate between planting one nutritious and soil-enriching legume with another or with maize.

In Malawi, farmers using this system have achieved high maize yields while reducing the need for purchased fertilizer. The extra income from these bountiful harvests has allowed women to start raising goats, pigs and chickens, provide their children with nutritious food, and earn critical income for school fees, health care and household staples. The results have been so impressive that the Government of Malawi is now promoting the adoption of doubled-up systems at scale across the country's major maize-growing zones. This is just one of 195 improved management practices that Feed the Future has developed.

Other sustainable approaches to food security, such as using a harmless wasp to limit the crop losses caused by the papaya mealybug, have generated \$1 billion in added crop value and money saved from the cost of pesticides for farmers. In Ethiopia, fertilizer blends developed by Feed the Future have boosted yields for staple crops, even in previously unresponsive soils, for more than 3 million producers.



SUSTAINING PROGRESS THROUGH SMART FINANCING

While international donor investments are as important as ever to global development efforts, they alone are not enough to end global hunger, poverty and undernutrition.

The post-2015 global goals and commitments can be reached only with a new framework for financing

agriculture, food security and nutrition. Yet keeping food security commitments at the forefront of the global agenda presents new hurdles and necessitates new approaches to increase funding, maximize the effective use of existing resources and build on past successes.

Significant progress has been made in improving global food security over the last decade, but more is needed to overcome the problems associated with a growing population, climate change, youth unemployment and urbanization—now and into the future. The 2030 Agenda on Sustainable Development and the Addis Ababa Agenda

forAction provide a road map to capitalize on food security's critical role in achieving the global development agenda.

That is why, in addition to establishing more partnerships with a wide range of stakeholders from across the development community—country governments, bilateral and multilateral donors, foundations, financial institutions, agribusinesses and others—Feed the Future is leading efforts to rethink how to finance food security. The initiative is committed to strategic investments that can induce growth in often hard-to-reach but critical segments of the global food system.

Feed the Future supports multi-stakeholder platforms like Grow Africa that bring together the private sector, governments, civil society and development partners to foster new streams of inclusive private investment in agriculture. Such platforms bring key players to the table and catalyze long-term investment that leads to inclusive economic growth.

Feed the Future also supports the Global Agriculture and Food Security Program (GAFSP), a multi-donor trust fund housed at the World Bank that provides grant financing for low-income countries to fund food security projects. Through its Private Sector Window financing program, GAFSP also provides comprehensive advisory services and complementary financing in agribusinesses and financial institutions. In 2015, the GAFSP Private Sector Window approved \$107.6 million in investments and helped leverage an additional \$248.6 million from other sources. This funding, which supports projects across 11 countries in Africa and Asia, is expected to benefit millions of smallholders and their families.

Feed the Future has worked to find innovative ways to incentivize and de-risk lending to smallholder farmers, including using index-based insurance to act as collateral. In Senegal, as a result of Feed the Future support, the number of agricultural insurance policies increased from 24 in 2012 to 3,087 in 2015, currently covering 3,945 hectares and representing \$500,000 in insured capital. Agricultural insurance drastically reduces the risk of farmers not being able to pay back their loans because of income loss due to lack of rainfall, which is the primary reason many smallholders hold back from investing in improved technologies.

Significant progress has been made in improving global food security over the last decade, but more is needed to overcome the problems associated with a growing population, climate change, youth unemployment and urbanization—now and into the future.

The initiative has also provided credit guarantees to companies that lease labor-saving equipment to facilitate their lending to farmers. And Feed the Future has worked with banks to use warehouse stocks as collateral for loans to processors, which enables them to immediately repay farmers for their harvests, allowing farmers to invest for a second season of production.

The global food security community is well on its way to a coordinated, long-term vision for food security, and Feed the Future has a critical role to play in that process. With strong buy-in, support and close coordination from global stakeholders, we can reach the ambitious targets set in the Sustainable Development Goals and ensure that growth is sustainable, efficient and inclusive.



COUNTRY SPOTLIGHT

Ghana



Although Ghana has made significant progress in overcoming poverty in recent years, the country's achievements have been uneven: Poverty and stunting are more deeply entrenched in the north

because of its remote location, limited resources, sparse population and inhospitable climate. Feed the Future, working closely with the Ghanaian government, is targeting these northern regions, putting in place interventions that can tackle the entrenched poverty and stunting found in many communities.

The agriculture sector is the largest source of employment for Ghanaians, dominated by smallholder farmers producing food and cash crops. In 2015, Feed the Future leveraged \$42.7 million in private capital to assist smallholder farmers and agribusinesses in Ghana in acquiring production infrastructure, inputs and capital to run their businesses.

With Feed the Future support, more than 65,200 maize farmers applied improved technologies in 2015 on roughly 13 percent of the estimated total hectares cultivated in the areas where Feed the Future works.

From production to marketing, Feed the Future has helped increase the competitiveness of the rice, maize and soybean value chains in the Northern Region by increasing farmers' access to seeds and fertilizers, building and rehabilitating irrigation systems, improving crop research and farming practices, and modernizing storage and distribution methods. In 2015, Ghanaian farmers generated a total of \$11.4 million in incremental sales in maize, soybeans and rice, and smallholders are being introduced to improved seeds, including hybrids and drought-tolerant varieties, to keep up with changing weather conditions.

Bontanga Reservoir caretaker Azara Alhassan has seen firsthand how the introduction of new technology can help empower food producers in Northern Ghana. She has

been farming for 30 years but only recently became a landowner of her own one-acre plot, gifted to her by her husband. Despite access to irrigation and land, traditional farming methods produced low yields that stifled her earning potential.

Feed the Future has introduced new fertilizer technology—Urea Deep Placement—and the fortunes of Alhassan and other farmers in her community have started to improve. Alhassan and her husband were two of the earliest adopters, offering their fields as demonstration plots. Since Feed the Future introduced the technology two years ago, more than half of the community's farmers, including 144 women, have started using it. With the new fertilizer, rice harvests are 300 percent higher for some farmers in the region, and, as the new fertilizer is more affordable and efficient, many farmers are able to plant a second crop of rice during the rainy season, a time when fields used to lie fallow. Alhassan says that the new practice has increased her seasonal output from 9 bags to 21 bags. "The presence of Feed the Future is helpful to the women in the rice transplanting group," she says. "They are able to pay their children's school fees now and assist their husbands in providing food for the family."

In addition to ensuring access to appropriate technologies, Feed the Future supports training for volunteer facilitators to develop a cadre of Ghanaian leaders—especially youth and women—from across the spectrum of agriculture, food security and agribusiness, who will champion the cause of increased innovation in agriculture and support greater agricultural productivity that can lead to increased food security. These volunteer facilitators are helping create a critical mass of individuals and organizations who can transform key policies and practices that will result in increased community efforts to break the cycle of weak investments, inadequate inputs, low agricultural production and poor food security.

By working through communities and strengthening local support networks, Feed the Future has helped address the ongoing livelihood and nutrition needs of vulnerable households and has helped families, particularly food-insecure households in the Northern Region with women of reproductive age and children under 2, improve their access to diverse and quality food. In 2015, Feed the Future reached almost 66,700 rural households through U.S.

Government agriculture or nutrition interventions. The initiative's activities also focus on improving child feeding behaviors, expanding community-based treatment, and increasing accessibility of safe, quality foods for child weaning.

In collaboration with UNICEF, Feed the Future supported the Government of Ghana's social cash transfer initiative. The program targets food-insecure households with pregnant women and children less than 1 year of age with cash transfers. The aim is to improve the nutritional outcomes of infants during the crucial first 1,000 days between a woman's pregnancy and her child's second birthday, when the consequences of undernutrition are often irreversible.

These targeted investments are starting to pay off. Results from comparable surveys conducted in 2012 and 2015 show that the rate of poverty in Feed the Future's targeted areas dropped 12 percent, and the prevalence of stunting among children under 5 decreased 17 percent.¹² In addition, Feed the Future has contributed to increased economic growth and improved nutrition, including ensuring that smallholder farmers are engaged and have access to essential services and appropriate technologies, encouraging growth and investment in agribusiness, promoting policies to improve the enabling environment in the agriculture sector, and facilitating private sector expansion.

To ensure that these hard-won gains are sustainable and can be built on, Feed the Future has supported the Government of Ghana in seeking to fulfill its policy commitments to several objectives: improved policies on inputs through Ghana's seed law, which guarantees the distribution of quality seed to farmers; a secure environment for private sector investment; and a transparent, evidence-based and inclusive policy process. Feed the Future has provided technical support to the Ghanaian government to complete regulations to implement a new seed and fertilizer law and is now working with the government to develop and implement a more robust annual agricultural survey. The initiative has also supported the development of a land bank and model lease agreement to improve land tenure security for responsible private sector investment.

¹² Population Based Surveys, Baseline 2012 and Interim 2015.



COUNTRY SPOTLIGHT

Honduras



Throughout the 1990s and 2000s, Honduras faced enormous obstacles to improving and expanding agricultural productivity. As a result, poverty and stunting rates were high, and many people, especially rural smallholder

farmers, were living on little food and poor-quality diets. Because agriculture is the country's economic engine, it represented a major opportunity to enhance productivity, increase incomes and improve health and nutrition among Honduran farmers and their families. Working with the Government of Honduras, Feed the Future has made key investments to increase agricultural production, improve the nutritional status of women and children, and strengthen the resilience of vulnerable populations.

Across six targeted areas in Honduras, Feed the Future's investments in agriculture and nutrition have contributed to a positive impact. Since 2012, stunting in Honduras has decreased by 32 percent in the areas where Feed the Future works. Between 2014 and 2015, vegetable yields more than doubled among Feed the Future farmers, and nutrition interventions reached more than 200 communities with messages promoting improved child feeding practices and hygiene and increased food diversity and availability. Feed the Future also has increased the effectiveness and outcomes of nutrition interventions in these 200 communities by improving household conditions and increasing access to clean drinking water and fuel-efficient cook stoves. These measures have helped families reduce the incidence of diarrheal and respiratory diseases.

The challenges of developing income-generating production systems for farmers in rural areas of Honduras are compounded by unpredictable and extreme climatic conditions.

Smallholders are especially susceptible to crop losses that result from climate variability. Feed the Future has introduced growers to contoured beds, drainage systems, application of organic material, mulching, erosion barriers, drip irrigation, diluted fertilizer applications, pruning practices and post-harvest handling methods, all of which can reduce the risks of climate change-related impacts while benefiting the environment.

In 2015, Honduras struggled to adjust to the strongest El Niño drought in 30 years. Maize and bean harvests dropped sharply, and smallholder farmers, many of whom depend on crop production and agricultural labor for their livelihoods, were hit particularly hard. At the end of 2015, an estimated 600,000 Hondurans faced food insecurity.

El Niño has challenged Feed the Future to find both short- and medium-term solutions and make program adjustments that build resilience, including better management and conservation of water resources.

To increase incomes, Feed the Future encouraged Honduran farmers to diversify from growing only rain-fed staple crops to begin producing higher-value vegetables that could be easily irrigated. Feed the Future-supported irrigation systems are now being scaled up, always paired with interventions to strengthen community management of the natural upstream environments that supply water for crops. As a result, farmers are faring better, in large part due to technical assistance that has led to better crop selection, increased incomes and an improved ability to cope with shocks. Feed the Future projects also targeted maize farmers who were not using irrigation, teaching them how to adapt cultivation practices to drought conditions.

Feed the Future has also promoted the use of renewable energy with the installation of solar dryers, bio-digesters and fuel-efficient cook stoves among beneficiary households. These activities have contributed to reduced deforestation, increased productivity and savings, and healthier households

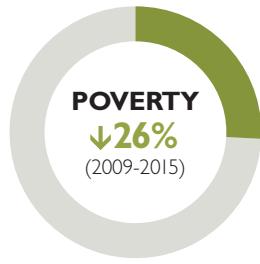
Working with the Government of Honduras, Feed the Future has made key investments to increase agricultural production, improve the nutritional status of women and children, and strengthen the resilience of vulnerable populations.

by reducing respiratory diseases caused by indoor smoke. The number of renewable energy projects installed—the majority of which are fuel-efficient wood-burning stoves—increased from 6,000 in 2014 to 7,506 in 2015. Because these stoves use 60 percent less fuel than traditional stoves, 345,000 trees have been preserved and beneficiary families have saved almost \$2.5 million in fuel costs. The adoption of the stoves also has reduced the amount of time and physical labor—especially for children and pregnant or time-poor women—that is required for collecting and carrying the wood.



COUNTRY SPOTLIGHT

Cambodia



As much as 80 percent of Cambodia's population relies on aquaculture and fisheries for their livelihoods. But rural communities' dependence on Cambodia's rich biodiversity is increasingly under threat from illegal logging,

overfishing, a changing climate, poor financial services and inadequate production and storage infrastructure for crops. To help Cambodian farmers and fishers overcome these challenges, Feed the Future works in four provinces surrounding Tonle Sap Lake by integrating its investments with the U.S. Government's Global Climate Change Initiative activities.

The goals of this work are to support sound agriculture and aquaculture production systems, help Cambodian farmers better adapt to the effects of climate change, improve farmers' food security by promoting adoption of improved and diverse varieties and cultivation techniques,

strengthen the agriculture and aquaculture policy environments, and increase farmer income—all while sustainably managing their natural resources. While working toward these goals, Feed the Future efforts maximize women's economic power and their access to resources and opportunities to increase household income.

Through a range of technical assistance activities, Feed the Future is helping Cambodian rice and aquaculture farmers increase their productivity. In 2015, Feed the Future-supported rice farmers, about 40 percent of whom are women, increase their incomes by 55 percent. Since 2014, rice production has increased from 158,000 to 255,076 metric tons. The initiative provided assistance to more than 3,000 aquaculture farmers, who have increased their yields by 130 percent over baseline and their incomes by 140 percent. In a country where 70 percent of the protein comes from fish, these efforts are contributing to increased food security and nutrition. In recent years, Feed the Future efforts in Cambodia have contributed to a 25.8

percent reduction in poverty and a 23.3 percent reduction in stunting, as well as a 22.6 percent decrease in the prevalence of underweight women.

To ensure growth along the rice and aquaculture value chains in Cambodia, Feed the Future works not only with smallholder farmers and fishers but also with small- and medium-sized enterprises such as food processors, millers and distributors, ensuring growth at every step of the value chain. For example, Feed the Future trained input suppliers in business skills; organized farmer field days to connect input suppliers and farmers on demonstration farms; co-invested in a fish hatchery to expand and improve its fingerling (juvenile fish) production to meet the rapidly increasing demand for fingerlings, which were previously of poor quality; and supported seven rice millers to increase their capacity to process rice paddy that lowered transaction costs for both millers and farmers.

By making targeted investments along various points in the value chain, Feed the Future has helped create more dynamic enterprises that are now able to provide a broader range of products and services. This investment also generates jobs, benefiting everyone. In particular, it creates new opportunities for some members of the large and impoverished youth population to be absorbed into the growing number of small- and medium-sized enterprises.

Rin Sokun owns the Chhang Lay rice mill in Battambang Province. He processes harvested paddies into consumable rice, providing a vital service to hundreds of local farmers. Yet securing funding to upgrade and grow his business has been difficult.

To help small business owners thrive, Feed the Future works through public-private partnerships to support and scale agribusinesses such as Rin's rice mill. Working hand in hand with these enterprises, Feed the Future jointly designs, funds and implements activities to improve competitiveness and expand the market for more smallholder farmers and fishers in Cambodia. The investment has spurred private sector partners to install equipment and deliver training to increase productivity, improve overall product quality, lower operating and farming costs, and strengthen technical knowledge. These improvements are benefiting thousands of farmers and small businesses throughout the rice, aquaculture and horticulture value chains.

For Rin, a \$35,000 co-investment from the project meant that he could purchase a second mechanical rice dryer and build a warehouse for better storage of rice. "With the dryer, the quality of my rice is also higher, and there's less breakage—20 percent versus 40 percent, using traditional methods—so my cash flow is higher," he says. "This allows me to buy more rice from farmers." By using the new dryer, Rin has doubled his supplier base to nearly 1,000 farmers and traders and purchased 4,660 metric tons of rice in 2015, an increase of 79 percent over 2014.

Although rice mills account for seven of the 11 enterprises supported by the partnership, the program has also co-invested with three input distributors and one fish hatchery to improve irrigation practices, increase access to improved seed and fertilizer, and increase fingerling production capacity. After testing improved rice seeds on a limited basis in Battambang Province, client rice farmers' yields increased by 27 percent, from 3.3 metric tons per hectare to 4.2 metric tons per hectare, and margins grew by 45 percent, from \$520 to \$755 per hectare.

To ensure that families flourish, Peace Corps Volunteers in Cambodia work to help communities make sustainable changes in how they cultivate their food, address water shortages and feed their families. By working closely with other Feed the Future partners and helping disseminate knowledge and technologies from Feed the Future projects, Peace Corps Volunteers are helping ensure that nutrition efforts reach as many households as possible. In 2015, 32 Volunteers supported Feed the Future's work in Cambodia, while nearly 2,800 Volunteers supported the Feed the Future initiative globally. Since 2011, more than 5,000 total Volunteers have contributed to food security efforts.

In Kampong Thom, Peace Corps Volunteers initiated nutrition education and garden training programs at a secondary school, teaching students how to build, maintain and replicate a garden. Students were able to bring vegetables home to share with their families to improve nutritional intake, and many students have worked with their families to start small gardens at home. The school is currently growing and harvesting from the second generation of the garden.



MOVING TOWARD A FOOD-SECURE 2030

Despite significant progress in overcoming the scourges of hunger and poverty, there is still much to be done.

Not only is the world's population projected to increase to more than 9 billion by 2050, but that population will be increasingly urban. Africa is estimated to see a 14 percent increase in its urban population over the next 14 years, while Asia will experience a 16 percent increase. To meet changing food demands, especially those of people living in urban areas, agricultural production must increase by at least 60 percent.¹³ The infrastructure—roads, refrigerated

transportation and energy—that brings food from where it is grown and raised to where it is consumed must be significantly improved. Regulatory structures that provide credible assurances of food safety and quality must be established. And farmers, especially smallholders, must dramatically increase their technical knowledge related to high-value production.

In addition to urbanization, demographic trends in developing countries, particularly in Africa, point to a major “youth bulge”: Youth will constitute an increasing

¹³ FAO How to Feed the World in 2050 Report: http://www.fao.org/fileadmin/templates/wsfs/docs/expert_paper/How_to_Feed_the_World_in_2050.pdf

proportion of the population over the next 15 years. Given high youth unemployment rates—more than 40 percent of the total unemployed in Africa are youth—this bulge holds great opportunity for bringing a new, energetic and innovative group of stakeholders into the agriculture sector, which has the potential to increase its share of jobs for everyone—both adults and the young, women and men—as the overall economy expands.

A more food-secure world is essential to the long-term prosperity of individuals, communities and nations, and international investments in the agriculture and nutrition priorities of partner countries promote global stability and are critical to the prosperity and security of the United States. Transforming the world's agriculture and food system holds the key to conquering poverty and hunger.

While there has been significant progress in increasing the government, private sector and donor financial resources to achieve global food security over the past decade, keeping food security commitments on the forefront of the global agenda presents new challenges and necessitates new approaches. With development assistance now accounting for only 10 percent of financial flows into poor and middle-income countries, financing must focus on effectiveness and on further mobilizing countries' own domestic resources and private, non-donor finance, which now contribute 80 percent of financial flows into these countries.

Feed the Future is at a pivotal moment in this process and must press forward to accomplish the ambitious goal of ending global hunger and poverty by 2030. Several recent declarations and accords on global food security and climate change—including the Paris Declaration on Aid Effectiveness, the Accra Agenda for Action, and the Addis Ababa Action Agenda—have rallied commitments around these issues.

Nevertheless, we need to build on this momentum to keep food security and nutrition at the top of the world's development agenda. Countries must continue to prioritize agriculture to ensure sufficient and effective funding and enabling policy environments to deliver jobs and food security to meet the needs of their citizens. Donors must continue to prioritize food security to maximize the opportunity to meet the nutritional needs of the world's

vulnerable populations. The private sector must be engaged to invest in research and innovation so that more food can be grown on ever-scarcer land without depleting the soil of its nutrients. And civil society and community-based organizations must work side by side with both the private sector and the public sector to ensure that societal benefits are reaching the most vulnerable people, especially women and children.

Hunger and poverty do not have to plague us forever. Supporting the food security priorities of Feed the Future partner countries; empowering women, who are vital to driving agricultural growth; embracing collaborative, country-led problem solving; facilitating private investment; understanding the effects of global climate change on agriculture; integrating agriculture and nutrition, with a particular focus on mothers and children—these are the means to drive progress. The international donor community, governments, the private sector and civil society must redouble their efforts to solve today's agriculture and food security problems so that all people can experience a life free of hunger and poverty.

What Feed the Future and related U.S. Government efforts accomplish in the next few years will be critical. Food security is key to achieving the Sustainable Development Goals. In order for them to be reached, the international development community must explore new ways to partner and bring all sectors and funding streams to the table to support and improve food security efforts in the face of increasingly complex challenges.

More than ever, the development model that Feed the Future embodies is critical for scaling positive changes and ensuring a more food-secure future.

Feed the Future is showing that, with the right approach, the U.S. Government can move the dial on ending poverty, hunger and malnutrition. With continued partnerships, political will and country ownership, we can end extreme poverty and global hunger in our lifetimes.



SELECT FEED THE FUTURE AND RELATED FOOD SECURITY FUNDING

Feed the Future Implementing Agencies and Programs^{a,b} (\$ in thousands)

Select Food Security and Agriculture Programs	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015
USAID^c						
USAID Feed the Future	813,100	968,362	972,688	957,057	977,960	980,318
Nutrition (Global Health Programs)	75,000	89,820	95,000	95,127	115,000	115,000
Food for Peace Title II Development Food Aid	385,515	422,643	426,831	299,830	256,583	350,738
Treasury^d						
Global Agriculture and Food Security Program (GAFSP)	66,600	99,800	160,000	142,765	133,000	—
International Fund for Agricultural Development (IFAD)	30,000	29,440	30,000	28,481	30,000	30,000
Millennium Challenge Corporation^e						
Food Security Related Investments	100,866	247,162	324,089	746,349	564,999	357,216
USDA^f						
Food for Progress	88,423	127,500	239,900	149,600	127,480	197,089
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	2,956
Norman E. Borlaug International Agricultural Science and Technology Fellowship Program	206	307	1,677	1,021	1,157	1,226
Peace Corps^g						
Peace Corps	—	—	23,000	23,850	26,510	28,280
U.S. Africa Development Foundation (USADF)						
USADF ^h	7,911	10,745	6,883	7,152	7,148	5,758

a Note: This table does not reflect the financial reporting requirements in the U.S. Government Global Food Security Act (Public Law No: 114-195) for activities supporting the global food security strategy.

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

c 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. Figures for Food for Peace Title II Development Food Aid have been updated to reflect final obligated amounts. Previously reported figures included estimated commodity and freight values.

d GAFSP and IFAD figures reflect appropriated amounts. GAFSP figures have been updated to include transfer funds from USAID. The U.S. 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.

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

f Funding represents obligations for these programs. FY2015 for the McGovern-Dole Food for Education Program is an obligation anomaly due to the timing of reporting. McGovern-Dole agreements signed and obligated in November/December 2015 will appear in FY2016.

g Represents estimated amounts of the Peace Corps appropriation used in support of food security programming, which includes post staff salaries, volunteer support costs, and trainings.

h 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. Previously reported figures have been updated to reflect enhanced system reporting capability acquired in FY2015.

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