



USAID
FROM THE AMERICAN PEOPLE

TITLE XII REPORT TO CONGRESS FY 2012

May 2014

This report is submitted to Congress pursuant to Section 300 of Title XII of the Foreign Assistance Act of 1961, as amended.



Board for International Food and Agricultural Development
U.S. Agency for International Development, Ronald Reagan Building Room 6.7-153, 1300 Pennsylvania Ave., Washington, D.C. 20523-2110

FOREWORD

I am pleased to present the U.S. Agency for International Development Title XII Report for Fiscal Year FY 2012. The report highlights significant progress made through work with Title XII universities, the Board for International Food and Agricultural Development (BIFAD), and other partners to strengthen food security and fight malnutrition in collaboration with President Obama's Feed the Future initiative. With a legacy of pioneering research and applied solutions, Title XII universities are essential partners in achieving our shared goal to end extreme poverty in the next two decades.

With this report, we advance a new model of development that takes a more collaborative and results-driven approach to agricultural research, extension, and education in developing countries. This approach forms the foundation of Feed the Future, which improved nutrition for over 12 million children and helped nearly seven million farmers apply new technologies and grow more food in 2013. The unique ability of the Title XII community to strengthen local capacity is critical to sustaining the important achievements of Feed the Future and all of our development programs.

In FY 2012, BIFAD commissioned top experts to review an important and longstanding Title XII program for agricultural research and capacity development, the Collaborative Research and Support Program (CRSP). BIFAD recommended key changes to help focus the CRSPs on delivering research results against our top priorities and better integrate them with other USAID research, policy and capacity development investments. In response to the recommendations, we created the Feed the Future Food Security Innovation Center to lead USAID's implementation of the Feed the Future research strategy and transformed the CRSPs into an expanding number of U.S. university-led Feed the Future Innovation Labs.

In March 2014, we launched the U.S. Global Development Lab, a historic investment in the power of science and technology to bend the curve of development. The Lab will generate, test, and scale breakthrough solutions to complex development challenges, while also attracting private sector investment to improve the sustainability of our efforts. A core part of the Lab is our Higher Education Solutions Network (HESN), a constellation of seven world-class universities that collaborates with a network of over 100 partner organizations across academia, civil society and government that span 38 countries. By focusing the efforts of innovators across the world in a data-driven, results-oriented manner, we can unlock answers to once intractable challenges.

BIFAD played an important role in shaping these major developments. I continue to look to BIFAD for advice on Title XII university issues and rely on BIFAD's guidance in shaping our strategies and programs to continue moving firmly towards our goal of ending global hunger and extreme poverty. We submit this report to you as affirmation of our commitment to these ambitious, but achievable goals.

Rajiv J. Shah
Administrator

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Introduction

In July 2009 at the G8 Summit in L'Aquila, the United States pledged \$3.5 billion over three years to create what became Feed the Future, the U.S. government's hunger and food security initiative. Global agricultural production will need to rise by 60 percent, on a shrinking natural resource base, to meet the needs of nine billion people by 2050. In the face of this great challenge, the importance of U.S. Title XII institutions and their work with developing country partners to increase agricultural productivity through collaborative research, training and extension, cannot be overestimated. The challenge facing developing countries is not just to increase food supplies in the short term, but to find long term solutions factoring in a growing population, climatic uncertainty and increased competition for land, energy, and water.

U.S. Title XII public and land-grant universities are important USAID implementing partners under Feed the Future. FY 2012 represented the third full year of solid collaborative successful programs with the Title XII community. Through the FY 2012 obligations cycle, total Title XII obligations exceeded \$230 million, or approximately 6.6 percent of the \$3.5 billion L'Aquila commitment. Reflecting USAID's commitment to working with Title XII universities, USAID is committed to seeking robust funding levels over the next several years.

In FY 2012, two major initiatives—the Feed the Future Food Security Innovation Center (FSIC) and the Higher Education Solutions Network (HESN)—advanced USAID partnerships with universities to reduce poverty and hunger in developing countries. New research and capacity building programs were launched, with a strong emphasis on better harnessing synergies among central, regional and Mission investments to advance and sustain key Feed the Future and Title XII objectives around research, education, extension and nutrition.

The major source of funding for Feed the Future and Title XII development assistance programming from FY 2010 – 2012 is the USAID Development Assistance account. Congressional appropriations for agricultural development in support of Feed the Future enabled the U.S. Government to meet the L'Aquila commitment and to continue its strong leadership of the global effort to eradicate hunger and extreme poverty.

In FY 2012, of the 56 active Title XII projects, there were a total of 34 Title XII incrementally funded prime award activities, of which six were new projects. FY 2012 saw a relative stabilization in Title XII programming after robust initial USAID investments during the first two years of Feed the Future. In FY 2010, Title XII program obligations under Feed the Future increased by over 50 percent from the FY 2009 baseline of \$47.3 million.

Title XII Report to Congress – FY 2012 summarizes USAID's partnerships and priorities with U.S. state and local universities and colleges under Title XII of the Foreign Assistance Act of 1961, as amended. The report focuses on the Agency's collaboration with its Title XII university partners to address the global food security challenge through investments in agricultural research, education, extension and through related programs in nutrition and sustainable management of natural resources.

Title XII of the Foreign Assistance Act of 1961, entitled *Famine Prevention and Freedom from Hunger*, was introduced in 1975¹ and was significantly amended in 2000.² The purpose of Title XII is to mobilize U.S. public universities, with their public and private partners, to support

programs that advance agricultural and related environmental sciences in food-insecure developing countries. From 1975 until the 2007 – 2008 food crisis, global food supplies were relatively abundant. At the same time, funding for agricultural development was greatly reduced, including the amounts allocated for Title XII projects.

This report is the annual account of USAID’s agricultural development assistance programming through U.S. Title XII universities in the agricultural³ sector, called for in Section 300⁴ of Title XII under the Foreign Assistance Act of 1961, as amended. Section 300 calls for the President to transmit a report to Congress, no later than September 1 of each year, that:

- (i) details the activities carried out pursuant to Title XII during the preceding fiscal year;
- (ii) contains a projection of programs and activities to be conducted during the subsequent five fiscal years;
- (iii) contains a summary of the activities of the Board for International Food and Agricultural Development (BIFAD) established pursuant to Section 298 of Title XII; and
- (iv) may include the separate views of BIFAD with respect to any aspect of the programs conducted or proposed to be conducted under Title XII.

The first section of this report provides an overview of USAID and U.S. Government priorities in FY 2012 as they relate to the U.S. government’s Feed the Future Initiative and engagement with Title XII universities. The second section details Title XII activities carried out in FY 2012 as called for in the legislation noted above. The third section suggests future directions for Title XII activities in the next five years, and is guided by Feed the Future and USAID Forward reforms. The fourth section provides a summary of BIFAD activities in FY 2012, and the fifth and final report section documents BIFAD’s separate views of the Title XII strategy, policy, and implementation efforts during FY 2012.

I. Key USAID University Engagement Initiatives with Title XII Institutions

In FY 2012, USAID invested \$74 million in partnerships with 22 U.S. Title XII institutions, with the greatest number of partnerships targeted for sub-Saharan Africa, the major focus region for Feed the Future. In addition to U.S. universities such as Michigan State University, University of California Davis, Texas A&M University, Ohio State University, University of Florida and others, these partnerships included research and capacity development collaborations with a number of African universities, such as Tegemeo University in Kenya, Makerere University in Uganda, and Sokoine University in Tanzania. These partnerships formed part of two larger USAID initiatives, described below.

USAID Administrator University Initiative In FY 2012 USAID Administrator Shah launched the Higher Education Solutions Network (HESN), to directly engage faculty and students of U.S. universities and partner researchers, innovators, and institutions in the redefinition of problems and identification of new solutions to persistent development problems. As part of the development of HESN, Administrator Shah met with a number of university presidents and discussed his vision at the annual meeting of the Association of Public and Land-Grant Universities (APLU) and other university forums. The new “whole-of-university” HESN

reflects an enhanced USAID focus on science, technology, innovation and partnerships. HESN features expanded partnerships through which the U.S. and global university community can apply innovative, multidisciplinary approaches to meet development challenges related to food security, resilience, health, education, and other areas—see www.usaid.gov/hesn. In FY 2012 USAID pledged an investment of \$20 million under HESN to support partnerships with Title XII and other universities such as Michigan State University, Texas A&M University, William and Mary University, and others for work around the initial challenge areas.

Feed the Future Food Security Innovation Center The FSIC, announced in FY 2012, is housed within USAID’s Bureau for Food Security, and incorporates all of Feed the Future’s centrally-funded investments with Title XII institutions. With a FY 2012 funding level of \$135.6 million, the FSIC leads USAID’s implementation of the Feed the Future Research Strategy. The Food Security Innovation Center programs are organized and managed around seven priority program themes outlined in Figure 1. Each program integrates diverse approaches and partners to deliver research, technology adoption and scaling results. FSIC is results-driven, encouraging an interdisciplinary approach and strong coordination among research programs and with mission partners. The seven program areas are listed below in Figure 1. The FSIC is led by the USAID Bureau for Food Security’s Chief Scientist and receives strategic guidance from the Board for International Food and Agricultural Development. All Title XII Feed the Future Innovation Labs are integrated into one of the seven FSIC program areas.

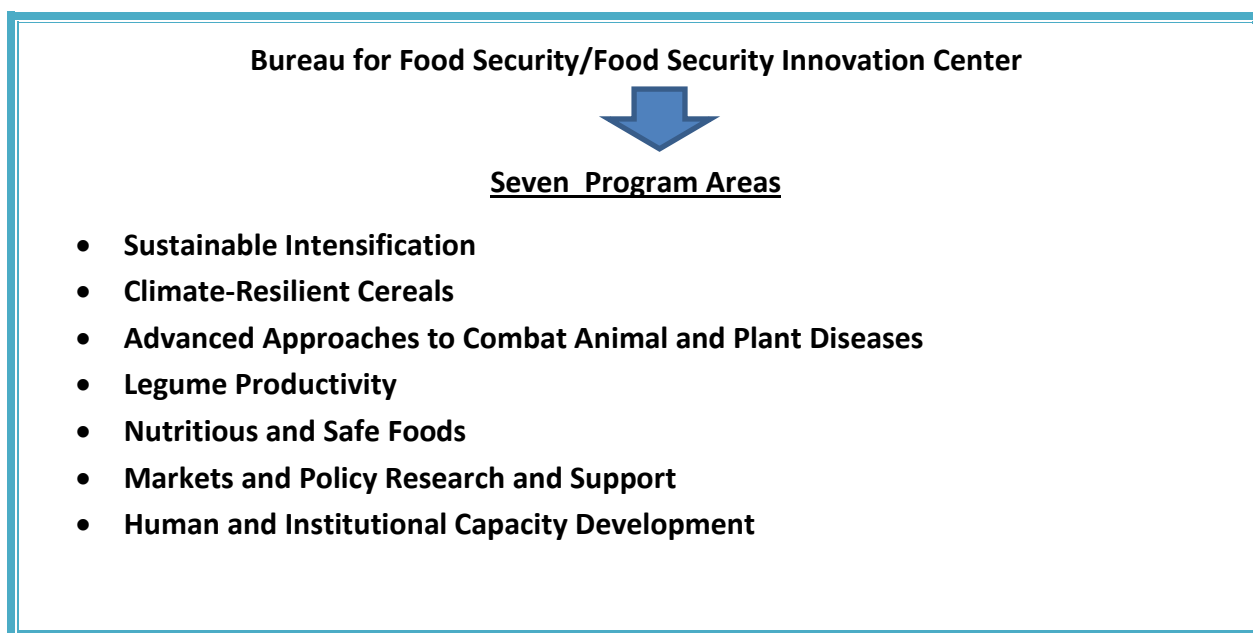


Figure 1. Food Security Innovation Center Program Areas

FSIC Research Partnerships: Highlights from FSIC research partnerships in FY 2012 include:

- The launch of a new public-private alliance between Pioneer Hi-Bred, Purdue University, the CGIAR, and private seed companies in South Asia to develop heat-tolerant maize. Research has shown that maize is more sensitive to high temperatures than previously

thought and the newly developed heat-tolerant variety will benefit farmers in both developing countries and the Midwest United States.

- In FY 2012, FSIC Programs contributed to efforts to develop a draft sequence of the wheat genome, one of the “big three” primary crops required to feed the world. Unlocking the genetic secrets of wheat enables researchers to develop new varieties that not only have higher yields but also address the worldwide threats of crop pests, plant diseases, and a changing climate.

The former Collaborative Research Support Programs (CRSPs) are now known as Feed the Future Innovation Labs, representing 10 major Title XII agricultural university collaborations (Figure 2). Additional Feed the Future Innovation Labs will be awarded in FY 2013.



Figure 2. Feed the Future Innovation Labs

Examples of FSIC Feed the Future Innovation Lab Impact:

- **The Feed the Future Innovation Lab for Collaborative Research on Horticulture at UC Davis** has also been instrumental in forming public-private partnerships. For example:
 - The Lab has partnered with the Tanzanian company A to Z Textiles to develop pest exclusion nets. Similar to mosquito bed nets, these nets limit pest infestations in vegetable fields. A to Z Textiles in turn is partnering with public research institutions in Kenya and Benin to help farmers reduce pest damage to their vegetables while supporting market opportunities for local textiles to make this public-private partnership thrive.
 - The Feed the Future Innovation Lab for Collaborative Research on Horticulture is partnering with Store It Cold, LLC, of New York and several public institutions including Rutgers University, Kenya Agricultural Research Institute and The World Vegetable Center, to improve storage of high value horticultural crops. Store It Cold produces the CoolBot, a device which creates a small-scale commercial cooler out of a standard room air conditioner and a well-insulated room. Cooling fruits, vegetables and flowers is a critical step in extending the quality and marketability during postharvest stages. The Innovation Lab has deployed CoolBots in Honduras, Zambia,

Uganda, Bangladesh and India. CoolBot was developed by an American farmer in New York.

- The **Feed the Future Innovation Lab for Collaborative Research on Peanut and Mycotoxin**. The Peanut and Mycotoxin Lab at the University of Georgia has developed a groundbreaking dry blanching technology that helps producers detect and sort aflatoxin-contaminated peanuts after dry roasting. This new dry blanching technology has enormous potential to reduce aflatoxin contamination in processed peanut products to levels consistent with international contaminant standards, representing great opportunities for the peanut value chain in Feed the Future countries as well as offering new solutions for contamination to U.S. producers. In 2012, the Lab transferred this technology to Ghana and Uganda. In Uganda, a new nutritious peanut cookie developed by Hometech Foods is selling about 1,000 packages of cookies and generating \$400 per week due to their new ability to screen for aflatoxin contamination. According to the Peanut and Mycotoxin Innovation Lab, the U.S. peanut industry benefits by at least ten dollars for every dollar invested in peanut research under Feed the Future.
- The efforts of the **Feed the Future Innovation Lab for Collaborative Research on Integrated Pest Management (IPM), led by Virginia Polytechnic Institute**, to control the papaya mealybug, a major economic pest, showed benefits of over \$104 million in India alone. The mealybug has devastated the papaya industry in India and Indonesia. Papaya is a nutritious and important commercial crop that is used to produce papain, a key ingredient in the production of chewing gum, shampoo, toothpaste, and meat tenderizer—it is also used in brewing and textile industries. To control this pest, scientists from the IPM Innovation Lab introduced a parasitic wasp into the mealybug’s habitat. The IPM Innovation Lab collaborated with USDA’s Animal and Plant Health Inspection Service, to help India and Indonesia acquire and release the wasps and save the papaya industry. This effort has been so successful that the rearing of these wasps has now been taken over by the private sector in South Asia. USAID’s investment in the IPM Innovation Lab has paid for itself through this single biological pest intervention, which is also reaping benefits that are saving the papaya industry and spurring private sector growth in South Asia, with potential benefits to US producers.
- The **Feed the Future Innovation Lab for Collaborative Research on Grain Legumes at Michigan State University** builds on results of three decades of legume research by its predecessor CRSPs. To illustrate benefits of this investment, These improved varieties have a dual purpose— both the dry grains and the fresh pods can be consumed. In addition, all mature two weeks before traditional varieties, providing needed food during the “hungry period” when households have typically already consumed their food stocks. Surveys of farmers found that 87 percent regard green pods as an important source of food before the cereal harvest with 80 percent viewing the consumption of green pods as an important source of diet diversity.

FSIC Capacity Building: In FY 2012 USAID launched two new central platforms to provide capacity-building support to Missions and their country partners. The new Innovation for Agriculture Training and Education Program (InnoVATE), led by Virginia Tech, aims to

strengthen the full range of institutions that train agricultural professionals, from primary and secondary institutions to vocational schools, technical colleges, and universities. InnoVATE emphasizes training, analysis, documentation of good practices, and provides help to design successful agricultural education systems.

In FY 2012, USAID also implemented the suite of activities known as the Borlaug 21st Century Leadership Program to build scientific and leadership capacity for food security in developing countries, especially for women, an important goal for Dr. Norman Borlaug and Title XII. Through the Borlaug 21st Century Leadership Program and additional capacity-building activities funded directly by USAID Missions, during FY 2012 Feed the Future provided full or partial funding that allowed nearly 1,000 students to participate in higher degree programs. Forty percent of these students were women.

The Borlaug Leadership Enhancement in Agricultural Productivity (LEAP) program, led by the University of California at Davis, Texas A&M University and the Consultative Group for International Agricultural Research (CGIAR), supports research projects of developing country graduates pursuing food security-related degrees at U.S. universities. The Borlaug Higher Education for Agricultural Research for Development (BHEARD) program, led by Michigan State University, matches Feed the Future-sponsored graduate students with M.S. and Ph.D. opportunities related to food security at a broad range of U.S. Title XII universities. These universities competitively bid for each student, and an evaluation board then selects the best university for each student. The Borlaug U.S. Fellows Program, managed by Purdue University, allows U.S. graduate students to conduct graduate research in agricultural development and participate in a summer institute on food security.

Much of Feed the Future's capacity development work focuses on training the next generation of technical leaders, particularly women, who will return home with new skills and expertise to improve agricultural growth and food security. For example, Tanzanian student Frida Nyamete, a Food Science and Human Nutrition student at Michigan State University, receives funding for her education and research through Feed the Future's Innovative Agricultural Research Initiative (iAGRI), a mission-funded program. She is completing her required in-country research at Tanzania's Sokoine University of Agriculture, focusing on innovative ways to improve food safety in her home country. The iAGRI project provides long-term educational funding and research opportunities to 59 Tanzanians, 20 at the Ph.D. level. Half of these students are enrolled at U.S. universities, and the other half in developing countries.

FSIC Title XII Research and Policy RFA: In FY 2012, under the FSIC, USAID designed a new \$70 million Feed the Future Research and Policy Request for Applications (RFA), with the objective of expanding new Title XII partnerships in priority areas, resulting in new Feed the Future Innovation Labs for soy value chains, small-scale irrigation, post-harvest loss reduction, policy analysis and capacity development, livestock disease and productivity, and climate-resilient cereals and legumes. The awards for new Innovation Labs in these program areas will be made to Title XII institutions in FY 2013.

FSIC Partners: The FSIC includes a range of partners who can build upon existing discovery, applications and practices to create a strong network. The key partners include:

Universities – *Feed the Future Innovation Labs* and other university-led programs underpin work in each of the seven FSIC challenge areas, delivering integrated research and capacity building linked to national research institutions and universities in target countries. U.S. universities bring critical scientific expertise, emerging technologies, unmatched training opportunities and a history of strong research collaborations to FSIC programs. *Feed the Future Innovation Labs* are composed of domestic and international partners, but are led by U.S. Title XII universities such as Oregon State University, Kansas State University, University of Nebraska, Colorado State University and others.

International Centers – The FSIC supports research for global public goods in partnership with the *Consultative Group on International Agricultural Research*, whose programs encompass global breeding platforms and systems research that target long-term challenges to food security. Through the CGIAR’s long-standing collaborations with national programs and U.S. universities, the FSIC supports researchers at the local level and ensures that major innovations are adapted for local conditions and widely disseminated.

Private Sector – Through carefully crafted public-private partnerships, the FSIC leverages resources, technologies, and advanced facilities for the development of innovative technologies, which are important for smallholder farmers. Through these collaborations with private companies, public sector and university researchers gain invaluable product development expertise, access to new commercialization pathways, as well as hands-on training and internship opportunities for students and entrepreneurs.

U.S. Government – The FSIC implements the *Feed the Future Research Strategy* through partnerships with other U.S. Government agencies, especially the U.S. Department of Agriculture, whose research programs are leveraged for developing country agricultural challenges with current or future implications for U.S. agriculture.

FSIC Cross-Cutting Issues: The FSIC integrates key cross-cutting issues into its research and capacity development efforts. These include:

Climate Change – The FSIC ensures that challenges associated with increased climate and weather variability are factored into research and development planning at all levels, from cutting-edge research on photosynthetic efficiency to land and water management on farms. Research has a key role in generating technologies, management practices and policies that help developing country stakeholders adapt to a changing climate.

Gender – To expand the participation of women as agricultural producers, the FSIC puts priority on improving their access to finances, inputs, education and technologies. In addition, FSIC seeks to increase the involvement of women in decision-making at every level, including in research, extension and policymaking institutions.

Environment – FSIC programs foster natural resource conservation and productive agriculture to enhance the health and well-being of local communities.

In sum, FY 2012 was a pivotal year for Title XII engagement in Feed the Future. Two new initiatives launched in FY 2012 increased university engagement in Feed the Future and USAID programs more broadly, the Higher Education Solutions Network and the Feed the Future Food Security Innovation Center. USAID’s leadership of Feed the Future builds on more than 35 years of university partnerships under Title XII. We envision continued engagement with Title XII institutions and partners over time, with Congressional and Executive level support, as we work together to alleviate global hunger and poverty.

II. Title XII Activities and Progress in FY 2012

Section 297 of Title XII authorizes activities in five different program components. Although these program types are not always mutually exclusive in their implementation, they typically achieve distinct outcomes, as described below.

Component 1: “... to build and strengthen the institutional capacity and human resource skills of agriculturally developing countries...”

Component 2: “... to provide long-term program support for United States university global agricultural and related environmental collaborative research and learning opportunities...”

Component 3: “... to involve United States universities more fully in the international network of agricultural science...”

Component 4: “... to provide program support for international agricultural research centers, to provide support for research projects identified for specific problem-solving needs, and to develop and strengthen national research systems in the developing countries.”

Component 5: “... special programs supported by non-agricultural funds...”

During FY 2012, fifty-six active Title XII projects were being implemented. The largest component, with twenty-two active projects, was Component 2, collaborative research and learning. A list of all active Title XII Prime Award Activities in FY 2012 by program component can be reviewed in Annex Table 1.

The following table (Table 1) provides a summary of the annual Title XII awards funded and the obligation levels by program component for each of the first three years of Feed the Future, FY 2010 – 2012.

Table 1: Number of Title XII Prime Awards Funded and Levels of Obligation in FY 2010, FY 2011 & FY 2012 by Program Component

	FY 2010 # of Awards	FY 2010 \$ Obligations	FY 2011 # of Awards	FY 2011 \$ Obligations	FY 2012 # of Awards	FY 2012 \$ Obligations
<i>Institutional capacity and human resource skills</i>	10	\$22,598,885	18	\$41,526,133	10	\$29,691,041
<i>Support for U.S. university collaborative research and learning</i>	21	\$39,199,740	14	\$24,264,784	11	\$28,594,588
<i>International networks of</i>	2	\$587,629	3	\$729,879	1	\$476,300

agriculture science

<i>Support for international agricultural research</i>	10	\$12,199,574	9	\$14,465,669	11	\$14,555,292
<i>Special programs</i>	0	\$0	1	\$1,500,000	1	\$500,000
	43	\$ 74,585,828	45	\$82,486,465	34	\$73,817,221

Note: The number of prime awards includes new activity funding and incremental funding of ongoing activities during the year, but excludes active but unfunded activities listed in Table 1. The levels of funding denote USG commitments to Title XII institutions by actual annual obligations and include all funding (agricultural and non-agricultural) attributed to Title XII awards as defined by Standardized Program Structure and Definitions (SPSD). Also, please note that this Table **does not** include funding allocated to Title XII sub-awards funded under non-Title XII prime Awards. *Source:* Based on FY 2010, FY 2011 and FY 2012 Obligations Data from USAID Phoenix Viewer Reports compiled by BFS/ARP/BIFAD.

In the first Title XII program component, *institutional capacity and human resource skills*, 10 Title XII activities were funded at a level of almost \$30 million. This represents a decrease in the number of activities and level of obligations from the previous year but reflects an important, positive transition from a disparate Title XII portfolio to fewer but larger activities focused on strengthening agricultural research, education and extension capacity in Feed the Future focus countries, including Ghana, Senegal, Liberia, Mozambique and Tanzania as well other important programs in India and South Sudan. Lead Title XII partners in the capacity development component are primarily large U.S. public research universities such as Colorado State University and Mi, with smaller universities and Minority Serving Institutions playing an important collaborative role with the lead universities.

In the second Title XII program component, *“support for U.S. university collaborative research and learning,”* 11 Title XII activities were funded at a level over \$28 million in FY 2012. This represents an increase in the level of obligation from the previous year, but a decrease in the number of activities funded. Research within these activities focused on agricultural policy research (1); agricultural commodity research (6); agricultural systems research (2); and agriculture and nutrition research linkages (2).

Under the third Title XII program component, *“international network for agriculture science,”* a single Title XII award identified with the Association of Public and Land-grant Universities (APLU) received funding in FY 2012. Since 2004, APLU has partnered with USAID to support BIFAD program operations and special studies.

The fourth Title XII program component, *“support for international agricultural research,”* included 15 active Title XII projects. In FY 2012 there was an increase in the number of projects funded and in the level of funding for this program component. Activities in this area focus on agricultural challenges that require resolution of a specific research problem. Funding for existing food security research projects expanded in Mali, Mozambique and Zambia, and a new project was funded for Cambodia. A global food security research project linked to climate change increased its funding, and a new project that examines abiotic stress tolerance in millet was created. Support for biotechnology and agricultural policy analysis continued to expand in Uganda and Kenya, respectively.

There was one activity under the fifth Title XII program component, “*special programs*.” This is an ongoing program that collects national attitude data on democracy, markets and civil society in Africa to support evidence-based programming by USAID.

III. Looking Forward: Title XII–The Next Five Years

Feed the Future anticipates a continued expansion of the role of U.S. universities in its programs over the next five years according to the following priorities:

Strategic approach to food security research, capacity development and policy aimed at achieving impact at scale: The Feed the Future Food Security Innovation Center’s seven research program themes will focus applied and development research funds on transferring technologies and innovations to farmers at scale. USAID anticipates achieving a significant expansion in numbers of farmers and hectares reached with new Feed the Future technologies during FY 2013 – 17, with Title XII universities as key partners. Increased scientific expertise from Title XII and other universities from talented AAAS and Jefferson Fellowship Programs will continue to strengthen USAID’s pool of scientific expertise. These programs are expected to expand through FY 2017.

Strategic funding: Over the next five years, there will be increased funding for research and capacity development food security priorities through the Feed the Future Food Security Innovation Center (FSIC).

New Title XII Feed the Future Innovation Labs: In FY 2012, USAID issued an important Request for Applications to Title XII universities to establish new areas or expand existing research programs to reflect priorities identified in the Feed the Future Research Strategy. These programs will be funded with FY 2013 funds for five years, and include: small-scale irrigation, legume and soy research, post-harvest loss, drought-tolerant cereals, policy capacity building, small-scale irrigation and animal and plant diseases. These direct awards will effectively tap and expand USAID investment in the Title XII university community and partner expertise to develop solutions to some of the major impediments affecting global food security.

Interdisciplinary focus: To achieve sustainable and transformative results to meet the challenges of agricultural development, an interdisciplinary approach is critical. As USAID continues to invest in research and capacity development programs with Title XII universities and other partners, integrative multi-disciplinary research will be a priority.

Importance of agricultural policy in building sustainable systems: Strengthening countries’ human and institutional capacity to analyze, evaluate alternative policy options, and implement policy reforms is critical to creating an enabling environment for private sector investment and developing the foundation for broad-based economic growth. During FY 2012, the USAID Feed the Future Program funded more than \$36 million in policy-related partnerships with Title XII universities and international agricultural research centers.

Focus on metrics, results and impact: Working with our Title XII partners and other stakeholders, USAID in the next five years will continue to strengthen its assessment and

reporting capability to determine appropriate measures of impact in agricultural science, capacity development and policy programs.

IV. Summary of BIFAD Activities in FY 2012

BIFAD is a presidentially-appointed, seven-member advisory committee comprised of at least four representatives from U.S. universities. BIFAD is authorized by Congress under Section 298 of Title XII, and its purpose is to assist USAID in the administration of the Title XII program that mobilizes the capacity of U.S. universities and their public and private partners in the fight against food insecurity. While authorized under Title XII, BIFAD activities are supported by USAID under guidelines established by the Federal Advisory Committee Act of 1972 (FACA).

BIFAD members in FY 2012 included:

Brady J. Deaton, Chancellor of the University of Missouri as the new BIFAD Chair, Gebisa Ejeta, Distinguished Professor of Agronomy at Purdue University,

Jo Luck, President of Heifer International,

Marty L. McVey, President of McVey & Co. Investments,

Catherine Bertini, Professor at the Maxwell School of Citizenship and Public Affairs at Syracuse,

William B. DeLauder, President Emeritus of Delaware State University, and

Elsa Murano, Professor and President Emerita of Texas A&M University.

During FY 2012, the Presidential appointees to the Board on International Food and Agricultural Development (BIFAD) worked with the Bureau for Food Security on a number of issues and spoke regularly with the Administrator to provide independent advice. The Administrator asked BIFAD to commission a pivotal review of the Title XII Collaborative Research Support Programs (CRSPs), a program that was created in 1978. The study was conducted by a team of experienced and well-respected professionals, including a former World Bank senior development economist, current and former senior U.S. university and U.S. government administrators and professors. The report, *BIFAD Review of the Collaborative Research Support Program (CRSP) Model*, was well-received by USAID, and the report's recommendations were implemented in FY 2012 by the Bureau for Food Security. Key recommendations focused on measures to ensure a strategic approach to research, improved coordination between the programs and their respective staff and students, the need for independent scientific advice on research priorities, improved metrics, and the importance of adequate Title XII funding for agricultural research. This report led to a USAID decision to change the name of the CRSPs to Feed the Future Innovation Labs in order to align collaborative research programs in a more strategic way. In FY 2012, the BIFAD also conducted a brief review of the Feed the Future Program in Haiti, with a report to be submitted to the Administrator in early 2013. Separately, the BIFAD continued its deliberations on human and institutional capacity development and prepared for a future study to be commissioned.

In FY 2012, in response to BIFAD’s request for easier access to the Administrator and to enhance overall communication, the BIFAD Secretariat began a new “dual report” system. Going forward, BIFAD will be linked to USAID in two ways—through the Administrator’s office and his Chief of Staff, and to the Bureau for Food Security which leads the coordination of Feed the Future and the Innovation Labs.

The Highlights of FY 2012 BIFAD activities are outlined in Table 2 below.

Table 2: Summary of BIFAD Public Meetings and Workshops

Date	Location	Highlights
October 11, 2011	Hotel Marriott, Des Moines, Iowa	<ul style="list-style-type: none"> Public Meeting – “The Next Generation: Global Food Security through Human and Institutional Capacity Building” Update on Feed the Future Research Programs “Perspectives on Human and Institutional Capacity Development from the Next Generation of Hunger Fighters” “HICD Experts and Perspectives”
January 26-28, 2012	Little Rock, Arkansas	<ul style="list-style-type: none"> BIFAD Executive Meeting and Public Outreach BIFAD Strategic Planning Session Outreach to Local University and NGO Community
April 13, 2012	National Press Club, Washington, D.C. BIFAD Public Meeting	<ul style="list-style-type: none"> Public Meeting – “BIFAD and New University Partnerships” Feed the Future Updates Reports from BIFAD Outreach Visits Update on Higher Educations Solutions Network and Grand Challenges
September 2012		<ul style="list-style-type: none"> BIFAD Team Visited Haiti
September 2012		<ul style="list-style-type: none"> BIFAD transmittal to the USAID Administrator of the report “Review of the USAID Collaborative Research Support Program”

V. BIFAD Response on the FY 2012 Title XII Report

The Board for International Food and Agricultural Development (BIFAD) is pleased to comment on this Title XII Report to Congress for FY 2012 (1 October 2011 to 30 September 2012). The United States Agency for International Development (USAID) has not only maintained its level of interaction with US universities through a number of important traditional approaches described in the Report, but it has established new avenues for working with universities to accomplish development goals. The Title XII Report to Congress continues to provide a level of detail on these interactions for consideration by Congress and BIFAD that was started in FY 2011, and these details allow for a much greater level of transparency than in past Title XII Reports.

BIFAD applauds USAID for taking the bold steps to establish the Higher Education Solutions Network (HESN). The breadth and depth of responses from the US higher education community, including the Title XII Community, highlights the interests and capabilities of higher education in contributing to USAID’s development goals. BIFAD looks forward to the possibility of

additional HESN Development Labs being established in the areas of food and agriculture in the future.

BIFAD was pleased to work with USAID to evaluate the Collaborative Research Support Program (CRSP). BIFAD commissioned a team of experts in FY '12 to study the Program and deliver a report. BIFAD then evaluated their report and communicated recommendations to the Administrator. BIFAD looks forward to USAID's response to these recommendations in the future.

USAID significantly increased funding to support research, education, and capacity building for agriculture, food and nutrition in the last few years, and many of these commitments are now coming to fruition. We concur with USAID and Administrator Shah's assessment that the Title XII university community provides unique capabilities to aid the Feed-the-Future Program in meeting its development goals. BIFAD anticipates monitoring progress towards those goals in future Title XII Reports to congress, especially related to the InnovATE and MEAS Programs. The establishment of the Feed-the-Future Food Security Innovation Center (FSIC) in the Bureau of Food Security in FY '12 is an accomplishment that offers great promise in facilitating synergy in research efforts among the Title XII university community, the international research centers and the private sector. BIFAD is supportive of this initiative and will be particularly interested in assessing this effort in the future.

USAID has also engaged US universities in helping build human capacity for science and leadership in selected developing countries through the Borlaug Leadership Enhancement in Agriculture Productivity (LEAP) Program, the Borlaug Higher Education for Agricultural Research for Development (BHEARD) and the U.S. Borlaug Fellows Program. These programs are excellent in intent and management and are consistent with the aims of the Title XII legislation. However, BIFAD is concerned that the current funding levels for these programs are likely insufficient to meet the needs for trained scientific leaders and researchers in developing countries in either the near-term or the long-term. This remains a serious concern of BIFAD because it represents a clear national need of the US. BIFAD will continue to work with USAID to address this issue in the future.

The FY '11 Title XII Report provided greater detail than the FY 12 Report on US university involvement in support for human and institutional capacity development, collaborative research on key problems (CRSP Programs), international agriculture science networks, research programs, and other special programs. For the first time, the FY 11 Report provided information on 'sub-awards' to US universities. BIFAD notes the absence of such information in the FY12 Report and encourages inclusion of this level of detail in future Reports. This information would enable Congress and BIFAD to be presented with information that allows for greater transparency when evaluating involvement of US universities in USAID programs related to food, nutrition and agricultural development.

In FY '11, BIFAD was challenged by Administrator Shah to play a more active role in engaging US universities and to be “ambassadors” for the FtF approach. BIFAD welcomes these changes and has accepted the Administrator’s challenge. The FY '12 Report contains additional evidence for these activities, and we look forward to continuing interaction with the Administrator on these topics.

BIFAD commends USAID for increasing funding for food and agricultural development and for augmenting involvement of US universities in these development activities. BIFAD notes, however, that the proportion of USAID funding going to US universities is not keeping pace with the overall level of funding for food and agricultural development. Given the extensive interest and commitment of US universities to play a meaningful role in food and agricultural development and the past record of high rates of return on such investments, BIFAD is convinced of the merits, and the societal value, of USAID funding of US university programs to strengthen human and institutional capacity development for agricultural institutions in developing countries. The extensive partnerships that US universities develop with private businesses, non-governmental organizations, and the international community continue to strengthen their ability to contribute to USAID goals. Accordingly, the Title XII community is eager to explore new and innovative approaches to achieve developmental progress, including the critical problems associated with climate change, through new forms of collaboration and employing new technologies that stimulate innovation, support entrepreneurial ventures, and utilize modern communication technologies to accomplish these objectives.

BIFAD thanks USAID for the excellent efforts and the opportunity to help strengthen US university participation in the noble goals of helping foster food security worldwide.

¹ *International Development and Food Assistance Act*, Public Law 94-161, signed December 20, 1975.

² *Famine Prevention and Freedom from Hunger Improvement Act*, Public Law 106-373, signed October 27, 2000.

³ Title XII defines agriculture as “including the science and practice of activity related to food, feed, and fiber production, processing, marketing, distribution, utilization, and trade, and also includes family and consumer sciences, nutrition, food science and engineering, agricultural economics and other social sciences, forestry, wildlife, fisheries, aquaculture, floriculture, veterinary medicine, and other environmental and natural resources sciences.”

⁴ Section 300 of Title XII of the Foreign Assistance Act of 1961, as amended, reads as follows: “*The President shall transmit to the Congress, not later than September 1 of each year, a report detailing the activities carried out pursuant to this title during the preceding fiscal year and containing a projection of programs and activities to be conducted during the subsequent five fiscal years. Each report shall contain a summary of the activities of the Board established pursuant to section 298 of this title and may include the separate views of the Board with respect to any aspect of the programs conducted or proposed to be conducted under this title.*”

ANNEX 1

Table 1: List of Active Title XII Prime Award Activities in FY 2012

Activity Title (Acronym)	Life of Award	Geographic Focus	Title XII Partner
<i>Human and Institutional Capacity Development</i>			
1. Pastoral Engagement, Adaptation, and Capacity Enhancement (PEACE)	7/1/2006-4/30/2012	Afghanistan	University of California-Davis
2. Value Chain Training for Agricultural Technical School (VCT/ATS)	4/1/2008-3/30/2013	Egypt	Midwest Universities Consortium for International Activities
3. Integrated Coastal and Fisheries Governance (ICFG) Associate CA	9/15/2009-9/14/2013	Ghana*	University of Rhode Island
4. Education and Research (ERA)	9/1/2010-9/30/2015	Senegal*	Virginia Polytechnic Institute
5. Modernizing Extension and Advisory Services (ME&AS)	9/15/2010-9/14/2015	Global	University of Illinois
6. Agriculture Education and Innovation Systems Project (AEISP)	12/9/2010-9/30/2014	India	Cornell University
7. Trilateral Cooperation U.S. – Brazil – Mozambique	1/1/2011-12/31/2014	Brazil & Mozambique*	University of Florida
8. Excellence in Higher Education for Liberia Development (EHELD)	2/10/2011-1/31/2016	Liberia*	RTI International Consortium
9. Collaborative Management for a Sustainable Fisheries Future in Senegal (COMFISH)	2/14/2011-9/30/2016	Senegal*	University of Rhode Island
10. Tanzania Agricultural Research and Capacity Building Project (OSO-Sokoine Cooperative Agreement)	3/1/2011-2/29/2016	Tanzania*	Ohio State University
11. Strengthening Afghanistan Agricultural Faculties (SAAF)	3/25/2011-2/31/2011	Afghanistan	Purdue University
12. Rwanda Integrated Water Security Program (RIWSP)	5/18/2011-5/17/2016	Rwanda*	Florida International University
13. DIV Fixed Obligation Award (DIVFOG# 12)	9/9/2011-12/7/2012	Afghanistan	Purdue
14. John Garang Memorial University of Science and Technology (JGMUS&T)	9/30/2011-3/31/2014	South Sudan	Texas Agricultural Experiment Station
15. Strengthening Environmental Management in Madre de Dios, Peru and Pando, Bolivia (ICAA Regional ENV Program)	9/30/2011-9/29/2016	LAC/RSD	University of Florida
16. Modernizing Agricultural Education and Training System (MEAS)	9/30/2012-9/29/2017	Global	Virginia Polytechnic Institute
<i>U.S. Collaborative Research (Feed the Future Innovation Labs)</i>			
1. BASIS/AMA-AA (MCC)	5/30/2007-2/11/2012	Nicaragua	University of Wisconsin
2. BASIS/AMA-AA (Food Security)	9/30/2008-9/29/2013	Africa	University of Wisconsin

Activity Title (Acronym)	Life of Award	Geographic Focus	Title XII Partner
3. Aquaculture & Fisheries (AquaFish)	9/30/2006-9/29/2011	Global	Oregon State University
4. AquaFish-AA	10/1/2010-9/30/2013	Africa	Oregon State University
5. Sorghum, Millet, and Other Small Grains (INTSORMIL)	9/30/2006-9/29/2011	Global	University of Nebraska
6. INTSORMIL-AA	4/8/2010-3/7/2012	Mali*	University of Nebraska
7. INTSORMIL-AA	10/1/2010-9/30/2013	Global	University of Nebraska
8. Peanut II	7/31/2007-7/30/2012	Global	University of Georgia
9. Dry Grain Pulse (Pulse)	9/19/2007-9/28/2012	Global	Michigan State University
10. Pulse-AA	10/1/2010-9/30/2013	Global	Michigan State University
11. Integrated Pest Management (IPM)	9/30/2004-9/30/2014	Global	Virginia Polytechnic Institute
12. IPM-AA	1/1/2010-12/31/2012	Mali*	Virginia Polytechnic Institute
13. IPM-AA	10/1/2010-9/30/2013	Indonesia	Virginia Polytechnic Institute
14. Sustainable Agriculture and Natural Resource Management (SANREM)	9/30/2004-9/30/2014	Global	Virginia Polytechnic Institute
15. SANREM-AA	3/4/2011-9/30/2012	Ethiopia*	Virginia Polytechnic Institute
16. Horticulture	10/1/2009-9/30/2014	Global	University of California-Davis
17. Horticulture-AA	9/30/2012-3/31/2013	Central America	University of California-Davis
18. Adapting Livestock Systems to Climate Change (ALSCC)	4/20/2010-4/19/2015	Global	Colorado State University
19. ALSCC-AA	8/1/2010-7/31/2013	Mali*	Colorado State University
20. Nutrition/Africa	10/4/2010-10/3/2015	Africa	Tufts University
21. Nutrition/Asia	10/4/2010-10/3/2015	Asia	Tufts University
22. Assets and Market Access	4/20/2012-4/19/2017	Global	University of California-Davis
<i>U.S. International Agriculture Science Networks</i>			
1. Sustainable Development Cooperation	4/8/2004-4/7/2014	Global	Association of Public & Land-grant Universities
2. Assessments and Opportunities for Higher Education in Africa	8/12/2011-8/11/2012	Africa	Association of Public & Land-grant Universities
<i>Support for Research Programs</i>			
1. Food Security III (FS III)	9/30/2002-9/29/2012	Global	Michigan State University
2. FS III-AA	12/1/2008-9/30/2013	Mali*	Michigan State University
3. FS III-AA	12/21/2009-11/30/2012	Mozambique*	Michigan State University
4. FS III-AA	10/21/2010-10/20/2015	Zambia*	Michigan State University
5. FS III-AA	9/30/2011-9/29/2014	Global	Michigan State University
6. FS III-AA	9/29/2012-9/28/2016	Cambodia*	Michigan State University
7. Agricultural Biotechnology Support Project II (ABSP II)	9/30/2002-9/29/2012	Global, India, Indonesia, Philippines & Bangladesh*	Cornell University

Activity Title (Acronym)	Life of Award	Geographic Focus	Title XII Partner
8. ABSP II-AA	8/18/2004-8/18/2012	Uganda*	Cornell University
9. ABSP II-AA	8/31/2011-8/30/2016	Uganda*	Cornell University
10. Ethiopia Sheep and Goat Productivity Program (ESGPIP)	9/22/2005-9/30/2012	Ethiopia*	Prairie View State
11. Agric. Research and Biotechnology Services	9/23/2005-9/30/2013	Africa	USDA/ARS
12. Pastoralist Livelihoods Initiative (PLI)	9/30/2005-3/31/2013	Ethiopia*	Tufts University
13. Tegemeo Agricultural Policy Research and Analysis (TAPRA)	10/1/2006-2/28/2012	Kenya*	Tegemeo Institute at Egerton University
14. Tegemeo Agricultural Policy Research and Analysis (TAPRA)	6/1/2012-5/31/2017	Kenya*	Tegemeo Institute at Egerton University
15. Abiotic Stress Tolerant Millet	9/21/2012-?	Africa & South Asia	University of California-Davis
<i>Special Programs</i>			
1. Afrobarometer Support	8/11/2004-2/31/2015	Africa	Michigan State University

* Denotes a Feed the Future focus country. *Note:* The number of active Title XII projects will be greater than the number of Title XII annual awards as some active projects are in the completion phase and no incremental funding was required in FY 2012. *Source:* Based on Life of Project Data from USAID Phoenix Viewer Reports compiled by BFS/BIFAD.