



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



Feed the Future Innovation Lab for Food Security Policy
December 2016

Annual Report:

October 1, 2015 – September 30, 2016

(Award AID-OAA-L-13-00001)

Lead University: Michigan State University

Consortium Members:

International Food Policy Research Institute, University of Pretoria

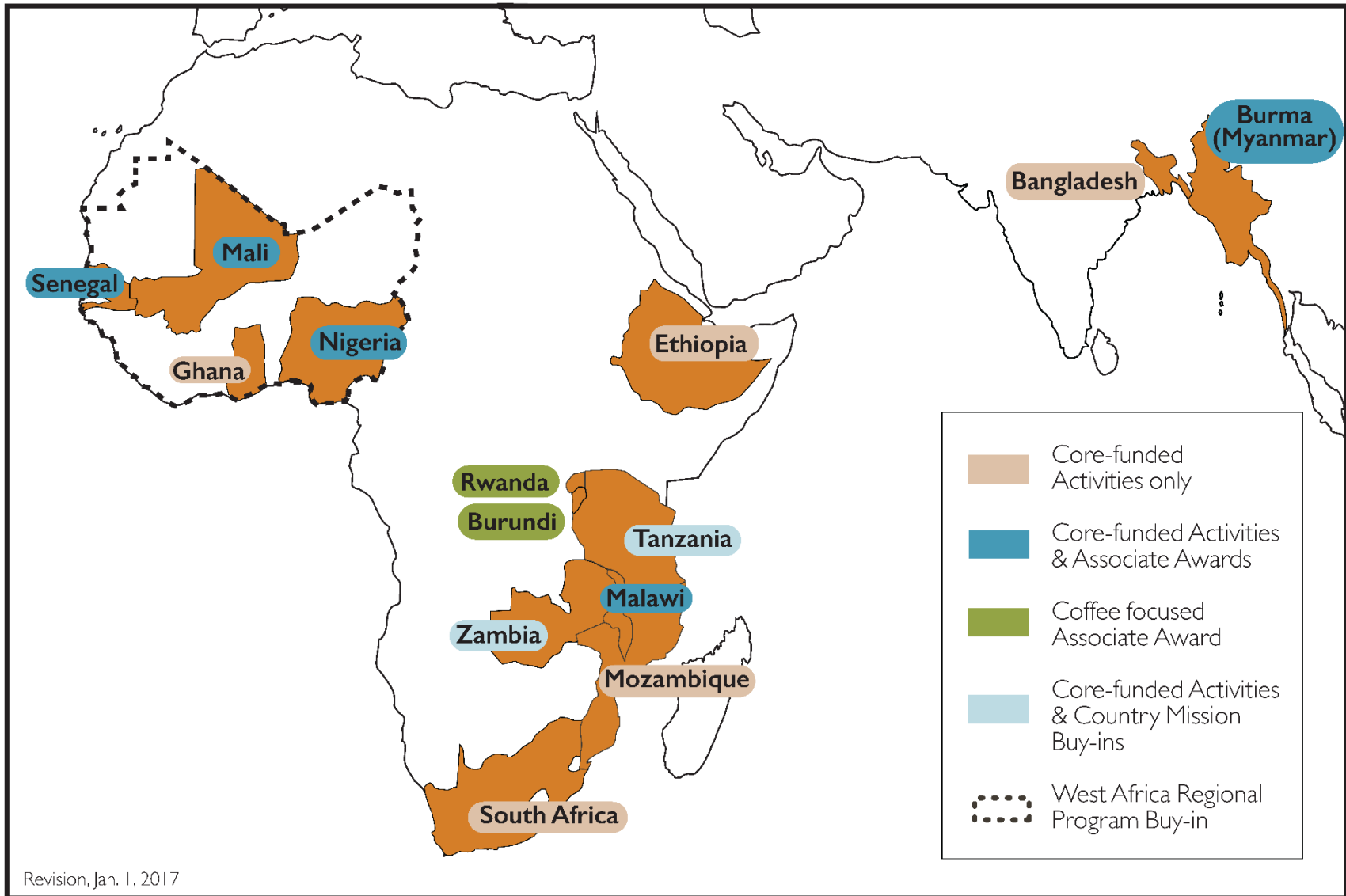
Revised version February 15, 2017



MICHIGAN STATE
UNIVERSITY



WHERE THE PROJECT WORKS



PROGRAM PARTNERS

Consortium Members

- Michigan State University
- International Food Policy Research Institute
- University of Pretoria

In-Country/Regional Collaborators:

- Ethiopia
 - Ethiopian Development Research Institute (EDRI)
 - Kenya
 - Kenya Land Alliance
 - Malawi
 - Civil Society Agriculture Network (CISANET) – Malawi
 - Malawi’s Ministry of Agriculture, Irrigation and Water Development (MoAIWD)
 - MoAIWD Department of Agricultural Planning Services (DAPS)
 - Mali
 - Institut Polytechnique Rural (Mali)
 - Myanmar
 - Food Security Working Group
 - Myanmar Development Resource Institute-Centre for Economic and Social Development (MDRI-CESD)
 - Nigeria
 - University of Ibadan
 - Senegal
 - Senegal’s Ministry of Agriculture, Directorate for Analysis, Forecasting and Statistics (DAPS)
 - Senegalese Institute for Agricultural Research (ISRA)
 - University Cheikh Anta Diop of Dakar.
 - Senegal’s Ministry of Agriculture, Directorate for Analysis, Forecasting and Statistics (DAPS)
- Tanzania
 - Directorate of Policy & Planning – MAFC
 - Department of Agricultural Economics and Agribusiness (DAEA), Sokoine University
 - Policy Analysis Group
 - Zambia
 - Zambia Land Alliance
 - IAPRI
 - International
 - AFAP
 - Africa Rising
 - Bill and Melinda Gates Foundation
 - CGIAR PIM (CRP2)
 - CIMMYT
 - ECOWAS
 - Global Center for Food Systems Innovation (GCFSI)
 - IFDC
 - ICRISAT KSU Sustainable Intensification Innovation Lab
 - ReNAPRI
 - ReSAKSS-Asia

ACRONYMS

AA	Associate Award
ADD	Agricultural Development Division
AFAP	African Fertilizer and Agribusiness Partnership
AGP	Agricultural Growth Program
AMIS	Ag Market Information System
ASWAp-SP	Agriculture Sector Wide Approach Support Project
ATOR	Annual Trends and Outlook Report
AU	Africa Union
BEE	Business Enabling Environment
BFAP	Bureau for Food and Agricultural Policy
BFS	Bureau for Food Security (USAID)
BMGF	Bill and Melinda Gates Foundation
BRN	Big Results Now
C1, C2, C3, C4, C5	Components of the FSP workplan
CAADP	Comprehensive Africa Agriculture Development Programme
CARD	Centre for Agricultural Research and Development (CARD), Bunda College, Malawi
CEPPAG	University Eduardo Mondlane Applied Policy Network
CESD	Centre for Economic and Social Development, Burma
CGE	Computable General Equilibrium
CIMMYT	International Maize and Wheat Improvement Center
CISANET	Civil Society Agriculture Network
CLD	Community Land Delimitation
DADO	District Agriculture. Development Offices
DAEA	Department of Agricultural & Agribusiness Economics
DAES	Department of Agricultural Extension Services
DAPS	Department of Agricultural Planning Services (Malawi)
DARS	Department of Agricultural Research Services
DNHA	Department of Nutrition, HIV and AIDS
DPP	Directorate of Policy & Planning
ECOSIM	Economic Community of West African States Simulation Model
ECOWAP	ECOWAS Investment Plan
ECOWAS	Economic Community of West African States
EDRI	Ethiopian Development Research Institute
FBOs	Farmer Based Organizations
FISP	Farm Input Subsidy Programme

FSP	Food Security Policy (Feed the Future Innovation Lab)
FSWG	Food Security Working Group
FTF	Feed the Future
FY	Fiscal Year
GCFSI	Global Center for Food Systems Innovation
GSSP	Ghana Strategy Support Program
GISAIA	Guiding Investments in Sustainable Agricultural Intensification in Africa
GoG	Government of Ghana
GoM	Government of Malawi
GOT	Government of Tanzania
GTAP	Global Trade Analysis Project
GTP	Growth and Transformation Plan
HESN	Higher Education Solutions Network
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
ICT	Information and Communications Technology
IFDC	International Fertilizer Development Center
IFPRI	International Food Policy Research Institute
IPR	Institut Polytechnique Rural
IRs	Intermediate Results
JSR	Joint Sector Review
KALRO	Kenya Agricultural and Livestock Research Organization
KLA	Kenya Land Alliance
LG(A)	Local Government (Authority)
LGAF	Land Governance and Assessment Framework
LIFT	Livelihoods and Food Security Trust
LPI	Land Policy Initiative
LSMS	Living Standards Measurement Study
LUANAR	Lilongwe University of Agriculture and Natural Resources
MAFC	Ministry of Agriculture, Food Security and Cooperatives
MAFS	Modernizing African Food Systems
MDRI	Myanmar Development Research Institute
MIT	Ministry of Industry and Trade
MoAIWD	Ministry of Agriculture, Irrigation and Water Development
Mozefo	Mozefo - Fórum Económico e Social de Moçambique
MSU	Michigan State University
M&E	Monitoring and Evaluation

NACCF	New Alliance Country Cooperation Framework
NAP	National Agricultural Policy
NAPAS	New Alliance Policy Acceleration Support
NGO	Non-Governmental Organization
PE	Partial Equilibrium
PMO-RALG	Prime Minister's Office Regional Administration and Local Government
PS	Permanent Secretary
ReNAPRI	Regional Network of Agricultural Policy Research Institutes
ReSAKSS	Regional Strategic Analysis and Knowledge Support System
RTS	Results Tracking System
SAGCOT	Southern Agricultural Growth Corridor of Tanzania
SAM	Social Accounting Matrix
SEBAP	Supporting Evidence-based Agriculture Policy
SUA	Sokoine University of Agriculture
TIA	Trabalho de Inquérito Agrícola (National Agricultural Survey)
TOR	Terms of Reference
UP	University of Pretoria
USAID	United States Agency for International Development
WA	West Africa

Table of Contents

WHERE THE PROJECT WORKS.....	ii
PROGRAM PARTNERS.....	iii
ACRONYMS.....	iv
EXECUTIVE SUMMARY: KEY ACCOMPLISHMENTS AND CHALLENGES	1
INTRODUCTION.....	5
DETAILED ACTIVITIES AND ACHIEVEMENTS.....	6
COMPONENT C1/C2 WEST AFRICA.....	6
COMPONENT C1/C2 ASIA.....	10
COMPONENT C1/C2 EASTERN AND SOUTHERN AFRICA – MALAWI.....	12
COMPONENT C1/C2 EASTERN AND SOUTHERN AFRICA – TANZANIA	15
COMPONENT C1/C2 EASTERN AND SOUTHERN AFRICA – ZAMBIA.....	21
COMPONENT 3: GLOBAL COLLABORATIVE RESEARCH ON POLICY PROCESS AND CAPACITY	23
COMPONENT 4a: ENGAGEMENT ON GLOBAL POLICY DEBATES ON FOOD SECURITY AND UPSTREAM AGRIFOOD SYSTEM TRANSFORMATION:.....	28
COMPONENT 4b: ENGAGEMENT ON GLOBAL POLICY DEBATES ON FOOD SECURITY: AGRIFOOD SYSTEM TRANSFORMATION IN THE DOWNSTREAM	39
COMPONENT 5: STRATEGIC ANALYTICAL AGENDA AND SUPPORT TO DONOR POLICY AND STRATEGY...	44
MANAGEMENT SUPPORT FOR COORDINATION, COMMUNICATION, COMPLIANCE AND IMPACT.....	45
APPENDIX A: LIST OF ONGOING AND PROSPECTIVE BUY INS AND ASSOCIATE AWARDS	47
APPENDIX B: MEETINGS.....	48
APPENDIX C. FY 2016 OUTPUTS POSTED ON FSP WEB SITE.....	50
FSP Research Papers	50
FSP Policy Briefs	52
Peer Reviewed Publications.....	53
Presentations	54
ANNEX D: MATRIX OF COUNTRY LEVEL ACTIVITIES FUNDED UNDER THE FTF INNOVATION LAB FOR FOOD SECURITY POLICY RESEARCH AS OF SEPTEMBER 2016	60

EXECUTIVE SUMMARY: KEY ACCOMPLISHMENTS AND CHALLENGES

The overall goal of the FSP program is to promote inclusive agricultural productivity growth, improved nutritional outcomes, and enhanced livelihood resilience for men and women through improved policy environments. The goal will be achieved by fostering credible, inclusive, transparent and sustainable policy processes at country and regional levels and filling critical policy evidence gaps. Entering its third full year of implementation, the FSP workplan is motivated by the Malabo Declaration goals of doubling smallholder productivity and tripling intra-African trade by 2025 as a means to accelerate poverty reduction. During the reporting period, the Leader Award supported the design and implementation of a new associate award in Mali and a new mission buy-in for Tanzania, building on lessons learned from associate awards launched in Burma, Malawi, Nigeria, Africa Great Lakes Region Coffee Support Program and Senegal during the first two years of FSP.

Activities in **West Africa** have focused on supporting ECOWAS to strengthen its monitoring and evaluation (M&E) unit and to establish a regular and comprehensive regional agriculture joint sector review (JSR). The JSR is an essential element for successfully monitoring and evaluating the ECOWAS Common Agricultural Policy (ECOWAP), the regional agriculture investment plan (RAIP), and national agriculture investment plans (NAIPs). It therefore represents a key instrument for supporting mutual accountability and implementing the CAADP Result Framework, providing a platform for state and non-state stakeholders to hold each other accountable on their commitments and to review agriculture sector performance.

Working with ECOWAS, the team held discussions on how best to strengthen an M&E unit proposed in the operational plan of ECOWAS's Agricultural Policy (ECOWAP). The team also reviewed ECOWAS's M&E framework and updated it to align it with emerging issues and the Malabo Declaration themes. The M&E framework will be used to update the ECOWAP Results Framework for 2015-2025 at a regional workshop. The team worked with various partners to develop technical guides for assessing the first and second-generation national agriculture investment plans and the regional agriculture investment plan. The regional JSR assessment report was finalized and submitted to ECOWAS and will be reviewed at an ECOWAS meeting planned for May 2016. The team has also initiated studies of the reasons for uneven implementation of regional policies at country level. Having discovered that the World Bank recently completed a thorough study of seed and fertilizer the team has opted to focus on pesticides.

In **Mali**, FSP completed preliminary reviews of the seed and fertilizer system and piloted a multiple-visit household survey to generate evidence on input access, utilization and productivity impacts in relation to subsidy costs. A new Associate Award for Mali, initiated in February 2016, will focus policy research, outreach and capacity building on a series of priority policy issues identified by USAID and the government. During 2016, priority topics include empirical assessment of agricultural input policies (fertilizer, seeds and herbicides), private sector agribusiness investments in food processing, and soil fertility differences by location and gender. Entitled the *Projet de Recherche sur la Politique de Sécurité Agricole (PRePoSAM)*, the new project involves collaborative policy research linking FSP researchers with colleagues in two key Malian institutions, the Institut de d'Économie Rural (IER) and Institut Polytechnique Rural de Formation et de Recherche Appliquée (IPR/IFRA). Initially, key policy themes include agricultural input policies, land policy and agribusiness investment.

In **East and Southern Africa**, the FSP project has actively supported the implementation of the New Alliance policy commitments in **Malawi** and **Tanzania**. In Malawi, core support has focused on conducting a training program for journalists in effective communication of agriculture, food security and nutrition information. Other FSP support focused on: 1) drafting the first Malawi National Agriculture Policy (adopted by Cabinet in September 2016); 2) drafting the Contract Farming Strategy (adopted by the Minister of Agriculture, Irrigation and Water Development in August 2016); 3) producing crop suitability maps as part of the Agricultural Zonation Scheme for Malawi; 4) review of sub-sectoral policies such as the National - Fertilizer Policy and the National Extension Policy. The FSP support in Malawi also focused on the development of a Memorandum of Understanding between the Ministry of Agriculture, Irrigation and Water Development, the Ministry Partners (including the NAPAS: Malawi project, the Farmers Union of Malawi (FUM), and the Alliance for a Green Revolution in Africa (AGRA), among others).

In **Tanzania**, country coordinator Dr. David Nyange (MSU) has engaged new GoT leadership (since the October 2015 Presidential/Parliamentary elections) and the Tanzania Private Sector Foundation (TPSF) to facilitate the development of legislation needed to implement the Local Government Authority (LGA) crop tax reforms to which all key stakeholders had publically agreed in October 2015. A draft of that legislation has been completed and the reform process appears to be moving forward. Piloting of a new electronic payment system for LGA crop and other taxes has continued in Kilombero LGA. Additionally, retail and miller surveys investigating agri-food systems transformation were designed and are being implemented in Dar es Salaam (the first of two cities to be covered). At the request of the GoT, FSP is also leading a multi-disciplinary study of options for crop board reform and associated policy and regulatory frameworks.

In **Zambia**, the team implemented two technical trainings for the researchers at IAPRI on modeling agricultural household behavior and technology adoption, and on experimental economics for policy analysis. Data collection on large-scale traders was completed in October 2016. Several papers examining the rise of multinational investment in smallholder grain markets, the effectiveness of fertilizer on maize productivity, and the customary land rights in Zambia were published as working papers or submitted to peer reviewed journals.

In **Burma**, FSP collaborated with the National Economic and Social Advisory Council (NESAC) and Nathan Associates to develop an agricultural strategy white paper for the new union (national level) government that took office April 1. The white paper was well received and FSP followed up with a concept note to establish an agricultural policy unit in the Department of Planning of the Ministry of Agriculture, Livestock and Irrigation, delivered to the Minister by the USAID Burma Mission Director. The Minister accepted the proposal and a policy unit will be established with capacity building support from FSP core and the USAID Burma associate award. To build the evidence base for policy at regional level in Burma, FSP and the Centre for Economic and Social Development (CESD) undertook a household level rural livelihoods survey in Mon State as a basis for a rural development strategy to support the government's decentralization efforts. FSP's core supported activities have focused on working with CESD staff to build statistical and analytical capacity to work with survey data, perform analysis, and communicate results effectively. Results will feed directly into the new regional government's 100-day plan.

FSP conducts global collaborative research and outreach to inform best practices in **policy process and capacity building**. Understanding the political economy context and institutional architecture

constraints for policy reform are critical to the design of successful policies and reform processes. The innovative conceptual framework known as the “kaleidoscope” model was applied to case studies of policy change – three each on fertilizer (Ghana, Tanzania, Zambia) and micronutrient policy (Malawi, South Africa, Zambia). The lessons learned during these case studies will be used to develop a series of tools for analysis of policy systems. During the past year, the C3 team has tested these policy system analytical tools in Malawi and Tanzania in coordination with USAID country missions and FSP country teams. An inventory of innovations in policy institutional architecture was assessed and an initial policy change case study is planned Tanzania in 2017. In the coming year, the FSP team will engage in a variety of ongoing policy processes with partners at MSU, IFPRI, UP, Africa Lead and possibly others. These efforts will include development and application of tools for guiding policy engagement, substantive engagement in various ongoing global and national policy debates and contributions to policy processes in selected CAADP-Malabo Declaration countries. Under the West Africa Buy-In to FSP, members of the C3 team will participate in a series of case studies of national implementation of regional input policies in West Africa.

Food systems, especially in Africa, are changing rapidly. FSP analyzes **upstream and downstream food system transformation** in a range of countries using a structural transformation lens. Employment outcomes in agriculture and the food economy as a result of food system transformation is an increasingly important dimension of food security.

Research on **upstream transformation of agri-food systems** has made major contributions to understanding the role of agriculture in Africa’s evolving economic transformation process, the factors influencing shifts in the sectoral composition of employment, the region’s sustainable intensification challenges (including fertilizer and seed policy), and causes and consequences of changing farm size distributions and their effects on mechanization, employment, and non-farm labor productivity. During the reporting period the upstream transformation team organized and/or participated in numerous outreach and policy engagement activities with African governments and development organizations, including the AGRA 2017 Alliance for a Green Revolution Forum, a special issue of Foreign Affairs devoted to the future of the African Farmer, and an exposé in *the Economist* on the rise of medium-scale farms. The team collaborated closely with Africa Rising and the Sustainable Intensification Innovation Lab to identify approaches to improving fertilizer response, as well as initiating a study on how fertilizer subsidies could be more effectively linked to Climate Smart Agriculture (CSA) initiatives. On land dynamics, the team initiated the design of new studies to understand implications of the emergence of medium-scale farmers in Tanzania and Senegal while deepening analysis of the relationship between farm size and productivity (referred to as the inverse productivity relationship). The team also studied mechanization and land registration issues in several Asian and African countries with a view to identifying their impacts on agricultural transformation and policies to facilitate mechanisms. The team’s work on land dynamics and labor market implications of upstream transformation were featured in a special edition of Foreign Affairs.

Research on **downstream transformation** has made major contributions to understanding the pace and nature of change in African diets, and how this is creating opportunities and challenges in African agrifood systems. Six findings stand out. First, a diet transformation is occurring on the demand side; second, a quiet revolution is occurring on the supply side; third, domestic and (secondarily) regional food value chains are dominant, imports from the global market are only about 10% of consumption; fourth, urban demand is primary, especially in secondary and tertiary cities; fifth, there exists also a reverse flow of processed foods from urban- to rural areas; and sixth, these findings have major

implications for employment. One key focus of research from this point forward will be on deepening our understanding in five countries of the local response to these changes – the formerly “missing middle” - and promoting policy- and programmatic initiatives that will assist them in becoming and remaining competitive in local and regional markets.

In addition to global research and engagement, FSP provides **demand-driven strategic analytic support** to USAID, national governments and other key stakeholders. This support has focused on the development of guidance documents that support the appraisal and design on the next round of CAADP National Agricultural Investment Plans (NAIPs); providing liaison, broad technical support, and data analytics to the BFS Policy Unit team in their efforts to articulate and report on their overall progress, and logistical support for Policy Unit events. FSP team members (namely, Tschirley, Reardon and Kennedy) also responded to requests from USAID/Washington in organizing (with USAID personnel) the Cities and Food Security Roundtable to help USAID’s thinking about the changing landscape for development assistance. FSP team members from across the components (i.e., Jayne, Haggblade, Resnick, and Liverpool-Tasie) participated in this Roundtable. A summary document of the outcomes of this discussion was released by the Food Security Journal.

A number of key personnel and **management** team changes took place during the reporting period. Effective January 1, 2016, Mywish Maredia took over from Duncan Boughton as FSP Program Director. Boughton moved to Burma on January 6 as COP for the USAID Burma Associate Award. Nick Sitko, formerly COP for the USAID funded Zambia Food Security Research Project, joined the FSP management team in April 2016 with a focus on supporting country teams in implementing improved policy implementation strategies based on the kaleidoscope model and toolkit. A one-day FSP retreat was held on the MSU campus in March to review USAID priorities and plan for the forthcoming mid-term evaluation of FSP. Two internal reviews (funded by MSU) were initiated to examine the internal project communications and coordination issues, and how the project is addressing (or not) cross-cutting themes on gender, nutrition and climate change.

INTRODUCTION

The Feed the Future Innovation Lab for Food Security Policy (FSP) was awarded to a consortium comprised of Michigan State University (MSU), the International Food Policy Research Institute (IFPRI) and the University of Pretoria on July 15, 2013.

FSP Goal and Objectives

The overall goal of the FSP program is to promote inclusive agricultural productivity growth, improved nutritional outcomes, and enhanced livelihood resilience for men and women through improved policy environments. FSP focuses on two integrated objectives:

- *Objective 1:* Address critical evidence gaps for informed policy debate and formulation at country, regional and global levels. FSP will generate, synthesize and disseminate new knowledge on targeted policy issues for which the current evidence base is insufficient or inadequately understood to permit confident formulation and implementation of effective policies at country, regional and global levels.
- *Objective 2:* Foster credible, inclusive, transparent and sustainable policy processes at country level. The FSP will strengthen the building blocks for national policy systems in their regional contexts, promote inclusion of and dialogue among all stakeholders around critical policy issues, and disseminate globally sourced examples of successful innovation and best practice in policy system capacity building.

As FSP accomplishes these two complementary objectives, improved policies will accelerate and deepen the FTF-wide intermediate results (IRs) of increased agriculture productivity, improved market access, increased public and private investment, new rural farm and non-farm employment, and improved resilience.

FSP Organization, Target Geographies and Approach

The FSP workplan is organized into five components developed by blended teams from all three consortium members:

- C1: Country-Level Collaborative Research (on Farms, Firms, and Markets) and Formulation/Analysis of Policy Options
- C2: Country-Level Capacity-Building for Policy (Data, Analysis, Advocacy, Formulation, Consultation, Coordination, and Implementation)
- C3: Global Collaborative Research on Support to the Policy Process and Policy Capacity
- C4: Engagement in Global Policy Debates on Food and Nutrition Security
- C5: Strategic Analytical Agenda and Support to Donor Policy and Strategy

Components C1 and C2 are designed jointly and grouped by region (West Africa, Eastern and Southern Africa, Asia) to capture potential geographical spillovers. They are implemented in close collaboration with global components, whose agendas directly support several strategic areas identified in the AUC draft implementation strategy to implement the Malabo Declaration¹.

¹ "Strategy and Roadmap to Achieve the 2025 Vision on CAADP: a Strategy to Achieve the 2014 Malabo Declaration on Accelerated Africa Agriculture Growth and Transformation for Shared Prosperity and Improved Livelihoods". Draft November 3, 2014. Africa Union Commission.

DETAILED ACTIVITIES AND ACHIEVEMENTS

COMPONENT C1/C2 WEST AFRICA

FSP's work in West Africa focuses on seizing opportunities to inform policy dialogue and provide empirical inputs to decision makers in situations where stakeholders appear interested in advancing policy debates. At a regional level, the group has worked closely with the Economic Community of West African States (ECOWAS), the most dynamic of Africa's Regional Economic Communities (RECs) and the one most advanced in developing and implementing harmonized regional agricultural policies. Over the past year, most of FSP's work has supported the ECOWAS Joint Sector Review (JSR) and supported progress in implementing various regional input and trade policies. The ECOWAS JSR is the first regional JSR ever and is to serve as template for the other RECs. At the country level, stakeholders in Ghana, Nigeria, Mali and Senegal have proven most receptive to an acceleration of empirically driven policy analysis and debate. For that reason, FSP has developed Associate Awards that support these efforts, supplementing these as necessary with FSP core resources (as in Mali).

Resources for regional activities under this component come from FSP Core funds and a USAID/WA buy-in. Through these two funding sources, MSU and IFPRI have continued to support following activities during 2015/16:

- MSU Joint Sector Review (JSR) Support on Regional Input Policies. (Principal Investigator: Boubacar Diallo, MSU)
- Case Studies of Uneven Implementation of Regional Input Policies. (Principal Investigator: Steven Haggblade, MSU)
- Support to ECOWAS' Regional Joint Sector Review (JSR) and Regional Monitoring and Evaluation (M&E) System
- Support to national programs

Activity 1: MSU Joint Sector Review (JSR) Support on Regional Input Policies:

Description: MSU provided technical support on regional input policies to the ECOWAP JSR process led by IFPRI. MSU initiated studies on input policy review in West Africa (seed, fertilizer, pesticides and veterinary drugs). The ECOWAS Department of Agriculture, Environment and Water Resources in collaboration with the Government of Senegal and NEPAD finally organized the International Conference on Agriculture in West Africa (ECOWAP+10) in Dakar, on 17-19 November 2015. Three MSU faculty members attended the Conference (John Staatz, Bino Teme and Boubacar Diallo).

Achievements: At the request of the JSR group, MSU has delivered three research reports on regional fertilizer, pesticides and veterinary drugs, and seed policy that are available on the FSP website (www.foodsecuritypolicy.msu.edu). The research reports helped summarize information for the current implementation status of regional pesticides, seeds and fertilizer policies. MSU contributed to the Joint Sector Review report that has been used to feed the Conference presentation by the Director of ECOWAS Department of Agriculture. The policy recommendations are intended to be internalized and translated into a program and workplan by ECOWAS. Some progress has been made at the regional level in the design of inputs policy but with the exception of Ghana and Nigeria, there has been little success in the implementation of policies at the national level.

Outputs from this Activity:

- [Revue de la politique sur les engrais dans l'espace CEDEAO](#). Barthelemy G. Honfoga. FSP Research Paper 5, November 2015.
- [Revue des politiques sur les pesticides et les produits vétérinaires dans l'espace CEDEAO](#). Amadou DIARRA. FSP Research Paper 6, November 2015.
- [Revue de la politique régionale sur les intrants Rapport de Synthèse](#). Boubacar Diallo, John Staatz, Oyinkan Tasie, Bino Témé, Steve Haggblade. FSP Research Paper 7, November 2015.

In addition, MSU as a member of the regional M&E working group has attended many meetings to support the ECOWAS M&E work. A meeting aimed at defining the list of new indicators (coherent with the Malabo Declaration) was recently organized in Abuja.

Activity 2: Case Studies of Uneven Implementation of Regional Input Policies

Description: This work is fully funded under the USAID/West Africa Regional Buy-In. This activity originated in response to concerns expressed by ECOWAS Agricultural Commissioner Marc Atouga to USAID/WAS about uneven rates of country implementation of regional policies. Research under this activity aims to understand why some countries move rapidly to implement agreed-upon regional policies, while others move slowly or not at all. Ultimately, this understanding aims to help identify key factors favoring country-level implementation of regionally agreed-upon agricultural policies.

Achievements: Work on uneven implementation of regional input policies began, as planned, in January 2016. Since then, the team has produced two outputs:

- Case Study Options: Uneven Implementation of Regional Input Policies in West Africa.
- Research Protocol for Case Studies of Uneven Implementation of Regional Pesticide Policies

The first output reviews strategic options for learning how to improve country level implementation of regional input policies. Given the complexity and changing country implementation status of various regional input policies, the MSU team began by summarizing information from the recent JSR on the current implementation status of regional pesticides, seeds and fertilizer policies. This review revealed two key changes over the past year. First, country implementation has improved significantly over the past year, particularly for seeds. Secondly, the World Bank has produced an impressive review of regional seed and fertilizer policy implementation (Keyser et al. 2015). In view of these findings, and in order to avoid duplication, the team has opted to focus new case study work on pesticides. The second output outlines a research protocol for studying uneven implementation of regional pesticide policies. The team has hired a consultant, Amadou Diarra, retired from the CILSS Secretariat of the Conseil Sahelien des Pesticides (CSP), on which ECOWAS has modeled its West Africa-wide regional pesticide regulations. Following on trial field visits in March, five team members – Steven Haggblade, Boubacar Diallo, Amadou Diarra, Abdramane Traoré and Oyinkan Tasié-CONDUCTED the initial country case study in Mali during May and June. After this initial experience, the team revised the case study protocol, then conducted the remaining pesticide case studies beginning in July 2016.

Activity 4: Support to ECOWAS' Regional Joint Sector Review (JSR) and Regional Monitoring and Evaluation (M&E) System

Description: An essential element of the successful monitoring and evaluation of ECOWAS's Agricultural Policy (ECOWAP), national agriculture investment plans (NAIPs), and the regional agriculture investment plan (RAIP) is the establishment of regular agriculture joint sector reviews (JSRs). JSRs are a key instrument for supporting mutual accountability and implementing the CAADP Results Framework. They allow state and non-state stakeholders to hold each other accountable with respect to fulfilling pledges and commitments stipulated in the CAADP compacts, NAIPs and RAIPs, and related cooperation agreements such as those under the New Alliance for Food Security and Nutrition. USAID West Africa is funding technical assistance from IFPRI and ReSAKSS to support ECOWAS in successfully implementing CAADP and ECOWAP in West Africa. In particular, IFPRI and ReSAKSS are supporting ECOWAS in i) setting up an M&E unit and improving its M&E system and ii) establishing a regular, comprehensive, and inclusive regional JSR.

Achievements: As part of strengthening ECOWAS's M&E unit, a technical expert from ReSAKSS, Mr. Manson Nwafor, has been stationed at ECOWAS's Directorate for Agriculture and Rural Development since September 2015. During the reporting period, the ReSAKSS and IFPRI team worked with staff from ECOWAS to review the status of implementing an M&E unit proposed in the operational plan for ECOWAS's Agricultural Policy (ECOWAP). Following the review, discussions were held with ECOWAS on how best to strengthen the unit. The team also reviewed ECOWAS's M&E framework and

updated it to align it with the emerging issues and the Malabo Declaration. A draft of the revised framework was finalized during regional workshops held in Abuja, Nigeria from April 20–22, 2016 and in Accra, Ghana from September 14–16, 2016. The draft framework document includes indicators and a guide for using the framework. The team also helped to prepare a concept note and background documents for the upcoming regional workshop planned. The team has been working with various partners on developing technical guides for assessing the first generation of national agriculture investment plans (NAIPs) and the regional agriculture investment plan (RAIP) as well as for the formulation of second generation NAIPs and RAIP. The steering committee for the formulation of the second generation of NAIP and RAIP process met from May 31 to June 1 in Abidjan, Côte d’Ivoire to review progress on the RAIP and NAIP implementation. Meanwhile, the regional Monitoring Task Force met prior to this from April 26 to 27 in Accra, Ghana to deliberate on technical input for the steering committee meeting. In support of a regular, comprehensive, and inclusive regional JSR, the team finalized and submitted to ECOWAS the regional JSR assessment report. An earlier draft of the report was presented at the ECOWAP + 10 preparatory meeting in October 2015. The finalized JSR assessment report was formally reviewed and validated during the ECOWAS workshop in Abidjan, Côte d’Ivoire from May 31 to June 1. The team also developed a concept note on evidence-based policy planning, implementation and review in the ECOWAS region, including the regional JSR.

Activity 5: Support to national programs: Mali

Description: Recent democratic elections in Mali, followed by a cabinet reshuffling, opened many opportunities for productive policy discussion within the new Malian government and administration. Agriculture remains a strategic economic sector for Mali and the backbone of a national strategy for achieving food security and poverty reduction. The recently adopted Politique de Développement Agricole (PDA), which outlines a program aimed at making Mali a regional agricultural power, will require a revised investment plan (PNISA) for the period 2015 – 2019. As a result, both GOM and donors share a common interest in building an enabling environment for agribusiness development and sustainable productivity growth to encourage youth employment in farming and post-farm agricultural value added enterprises. Despite this common interest, limited analytical capacity for policy analysis and investment planning constrain efforts to improve the agricultural policy environment. In spite of large agricultural public sector budget expenditures (half of them on fertilizer subsidies), information on the effectiveness of these expenditures remains similarly weak. GOM budget allocations identify implicit priorities, suggesting that improved farm productivity via increased fertilizer and improved seed access remain the top agricultural concerns of the Malian government.

Funding update: FSP activities in Mali have been supported by a Mali buy-in and FSP C1/C2 core funding. In late February, USAID/Mali issued a new, five-year Associate Award to MSU for the conduct of applied policy research, outreach and capacity building. FSP has agreed to provide core funding for the new five-year USAID/Mali Associate Award starting in February 2016. Funded primarily under this Associate Award, the newly christened Projet de Recherche sur la Politique de Sécurité Alimentaire (PRPoSAM) will receive core FSP funding in the amount of \$172,000 per year for each of the first two years of operation. To launch the PRPoSAM program, the MSU team has received USAID mission approval to initiate workplan activities focusing on the following three priority research themes:

1. Productivity and gender impact of improved sorghum seeds in the sudano-guinean zone (Koutiala Plateau) of Mali
2. Productivity and gender impact of fertilizer use on sorghum and competing cereal crops in the sudano-guinean zone (Koutiala Plateau) of Mali
3. The emerging herbicide revolution in the sudano-guinean zone (Koutiala Plateau) of Mali: adoption, labor market implications and productivity impact

Achievements: Working with colleagues at the Institut d’Economie Rurale (IER), the team produced four working papers (in French and in English), as well as policy briefs summarizing the results of the two policy reviews – on fertilizer and seeds.

- [Rapport d’enquête de recherche : Enquête de diagnostic de la production de sorgho dans la Savane soudanienne](#). Melinda Smale, Amidou Assima, Alpha Kergna, Assitan Traoré, Naman Keita. FSP Research Paper 9, Décembre 2015.
- [Revue de la Structure et de la Performance de la Filière Engrais au Mali](#). Véronique Thériault, Alpha Kergna, Abdramane Traoré, Bino Teme et Melinda Smale. FSP Research Paper 10, Décembre 2015.
- [Revue du système semencier au Mali](#). Steven Haggblade, Boubacar Diallo, Melinda Smale, Lamissa Diakité et BinoTémé. FSP Research Paper 11, Décembre 2015.
- [Programme de Recherche a l’attention des étudiants de l’ipr/Ifra de Katibougou : Bilan de l’opération pilote et programme 2015-2020](#). Bino Teme, John Staatz, Steve Haggblade. FSP Research Paper 12, Décembre 2015.
- [Système semencier en transition: tendances et défis](#). Steven Haggblade, Boubacar Diallo, Melinda Smale, Lamissa Diakité et BinoTémé. Mars 2016
- [Comment améliorer la performance de la filière engrais au Mali? Des pistes de solutions](#). Veronique Theriault, Alpha Kergna, Abdramane Traoré, Bino Temé et Melinda Smale. Février 2016

Formal discussion of these research findings with stakeholders in Mali took place at the following outreach events:

- October 22 and 23, 2015. The team presented preliminary research findings to stakeholders during a one and a half day workshop. Based on this feedback, the team revised and finalized the Research Papers noted above.
 - [Enquête diagnostique dans la savane soudanienne au Mali. Utilisation des engrais par les producteurs](#). Amidou Assima. 22 octobre 2015.
 - [Diffusion des variétés de sorgho et l’Impact Economique Potentiel des Hybrides de Sorgho en zone Soudanienne du Mali](#). Alpha O. Kergna, Melinda Smale, Amidou Assima et Naman Keita. Bamako. 22 Octobre 2015.
 - [Structure et performance de la filière engrais au Mali](#). Véronique Thériault, Alpha Kergna, Abdramane Traoré, Bino Témé et Melinda Smale. Bamako. 22 Octobre 2015.
- January 22, 2016. The team presented findings from the fertilizer and seed system reviews to the Agricultural Sector Donors’ Forum.
 - [Rapport d’enquête de recherche: Enquête de diagnostic de la production de sorgho dans la Savane soudanienne](#). Melinda Smale, Amidou Assima, Alpha Kergna, Assitan Traoré, Naman Keita. Bamako. 22 janvier 2016.
 - [Système semencier en transition: tendances, défis et opportunités](#). Steven Haggblade, Boubacar Diallo, Melinda Smale, Lamissa Diakité et Bino Témé. 22 janvier 2016.
 - [Revue de la structure et de la performance de la filière engrais au Mali](#). Véronique Thériault, Alpha Kergna, Abdramane Traoré, Bino Témé et Melinda Smale. Bamako. 22 janvier 2016.

In addition to the planned workplan activities, the MSU team responded to a special request from USAID to address an official complaint lodged by Grands Moulins du Mali, the largest grain miller in the country, about the price depressing effects of rice procurement by the Office des Produits Agricoles du Mali (OPAM). In order to respond, the MSU team conducted several weeks of market interviews with key private sector players in the major paddy selling zones as well as an analysis of changes in price seasonality over the past two seasons. This analysis resulted in the preparation of the following document, presented to USAID and, through them, the full set of agricultural sector donors in Mali.

- Mars 2016. Bino Teme, Abdramane Traore et Boubacar Diallo. Achat du riz décortiqué par l’OPAM en 2015 et 2016 pour la constitution de stocks d’intervention: Quelles conséquences pour les Grands Moulins du Mali?

COMPONENT C1/C2 ASIA

FSP core support in Asia is focused on Burma. Major activities in Burma are carried out using funding from an Associate Award from USAID/Burma signed in September 2014. Following elections in November 2015, a new government took office in April 2016. FSP core funds supported capacity building dimensions through three activities. The first is the implementation of a rural livelihoods household survey in Mon State to provide an empirical foundation for a state-level rural development strategy. The second activity consists of providing capacity support to support civil society engagement (e. g., the Food Security Working Group) on how best to target their efforts to engage in the policy process. Lastly, FSP provided contributions to an Agriculture Strategy White Paper led by the National Economic and Social Advisory Committee (NESAC) and Nathan Associates for presentation to the incoming national government. The new government warmly received the white paper which laid the foundation for a new agricultural development strategy. Also, the Minister of Agriculture, Livestock and Irrigation accepted the recommendation to establish a new agricultural policy unit as a means to strengthen evidence-based policy formulation and implementation. The new agricultural policy unit is a vital component for Myanmar's policy architecture. In the past, policy has been made by Ministerial fiat with no evidence-based analysis. In the future, the Permanent Secretary and senior Ministry officials will be able to make policy recommendations to the political leadership based on informed analysis to be undertaken by this policy unit.

Activity 1: Capacity Building Support for Mon State Rural Livelihoods Survey

Description: FSP is carrying out capacity building activities to support Myanmar Center for Economic and Social Development staff through technical training and practical experience of analyzing data from a rural livelihoods household survey of Mon State, to support development of a state level rural development strategy for the new decentralized state administration.

Achievements: After having delivered two week-long STATA training workshops during the summer and fall of 2015, IFPRI researchers teamed up with CESD staff to continue training on a learning-by-doing basis. Four pairs of researchers were assigned several sections of the Mon State Rural Livelihoods Survey to clean, analyze, and report on. This allowed CESD researchers to take the knowledge they had accumulated in the classroom and apply it in the context of real-world data. Recurrent interaction with their IFPRI partner helped them move quickly along the learning curve as they learned to deal with the realities of large survey data.

In addition to the practical coding and programming skills with STATA, which involved primarily data management and statistical analysis, the training also focused on technical reporting. Pairs of researchers compiled sections of the Mon State Rural Livelihoods Report. This provided opportunities to help CESD staff to get familiar with the requirements of technical writing and reporting based on quantitative data analysis. Cleaning, analysis and reporting for the entire survey was completed over the November 2015 – February 2016 period. Hands-on training continued as a new survey on agricultural and rural transformation in four townships close to Yangon were designed and implemented..

Activity 2: Capacity Building for CSOs

Description: In September 2014 USAID requested the support of FSP-Burma to assist the Food Security Working Group (FSWG), a key civil society organization. The Food Security Working Group (FSWG) is an umbrella NGO with nearly 150 members through which member concerns are shared with policy makers and through which trainings and grants are provided to members to build capacity and facilitate activities. USAID requested that FSP conduct a capacity assessment of FSWG and provide assistance in developing an organizational strategy to ensure that they are leveraging the skills of their various members to ensure that farmers' concerns are heard and voiced in the policy process.

Achievements: Suresh Babu of IFPRI maintained contact with FSWG but multiple changes in leadership made it difficult to engage constructively. Given strong interest on the part of the new government on the agricultural strategy white paper, attention shifted to helping the Ministry of Agriculture, Livestock and Irrigation conceptualize the formation of a new agricultural policy analysis unit. .

Activity 3: Agriculture Component of Burma Economic Development Strategy

Description: USAID Burma financed the preparation of an economic development strategy, led by the National Economic and Social Advisory Committee (NESAC), through Nathan Associates. FSP contributed to the agricultural and rural development components of the strategy through the preparation of an agricultural strategy white paper, which included priority policy reform and public expenditure priorities in support of agricultural transformation.

Achievements: Work on this activity has been undertaken by in-country MSU faculty and local partner CESD funded under USAID Burma Associate Award. The draft strategy was reviewed by IFPRI team members. The agricultural strategy white paper was well received by the new government. IFPRI and MSU developed a concept note for the formation of an agricultural policy unit in the Department of Planning of the Ministry. The concept note was presented to the Minister by the USAID Mission Director. Following completion of the new agricultural development strategy (based in large part on the white paper), the Ministry will formally establish the new agricultural policy unit.

COMPONENT C1/C2 EASTERN AND SOUTHERN AFRICA – MALAWI

Activity 1: Support to the project New Alliance Policy Acceleration Support: Malawi (NAPAS: Malawi)

Description: Most of the activities in Malawi that fall under FSP are carried out using funding from an Associate Award from USAID/Malawi. Under NAPAS: Malawi, the FSP partners support the government of Malawi as it works to implement the policy reform agenda to which it committed in late-2013 under the New Alliance Country Cooperation Framework for Malawi. In light of the NAPAS: Malawi associate award, only limited core resources from the global FSP project are needed to support FSP activities in Malawi.

Achievements: Over all of 2015, the NAPAS: Malawi project provided dedicated support to the Ministry of Agriculture in the drafting of the National Agriculture Policy. Following about a dozen district-level consultations earlier in 2015, the document was validated internally with senior management of the Ministry of Agriculture, Irrigation and Water Development (MoAIWD) and externally with stakeholders in the agriculture sector by November 2015. The draft was submitted to the Office of the President and Cabinet (OPC) in March 2016. It was endorsed by Cabinet in September 2016. Over the past six months support to NAPAS-Malawi has been to the following sub-sectoral strategy formulation and policy communication activities.

- National Fertilizer Policy – NAPAS: Malawi is supporting the government of Malawi to develop the National Fertilizer Policy, which is also one of the government commitments under New Alliance Framework. Stakeholder consultations on developing the National Fertilizer Policy started in November 2015 and have continued in the second quarter (January to March 2016). The government of Malawi prepared a draft Fertilizer Bill in 2014 that could not be tabled in parliament because there was no fertilizer policy to anchor it. The Department of Research Services (DARS) had been tasked by the Ministry of Agriculture, Irrigation and Water Development to develop the fertilizer bill. The Alliance for a Green Revolution in Africa (AGRA) supported DARS, financially, to develop the fertilizer bill. NAPAS: Malawi is therefore working closely with DARS, AGRA and other organizations to develop the required fertilizer policy and revised fertilizer bill.
- Review of the National Extension Policy – Reorganization of extension services is one of the government commitments under the New Alliance Framework. Extension was also identified as the most critical area that the National Agriculture Policy (NAP) should address, during the extensive consultations that were held to develop the NAP. NAPAS: Malawi is therefore conducting the literature review to inform the review of the extension policy and has started engaging the Department of Agriculture Extension Services to support the review of the policy and development of the extension strategy. This is being done in close collaboration with a new USAID-funded activity, Strengthening Agriculture and Nutrition Extension Services (SANE).
- Agricultural Zonation Scheme for planning purposes – One of the commitments of the government of Malawi under the New Alliance Framework was to develop an agricultural zonation scheme for the country to guide investment planning. NAPAS: Malawi has been working on a two-level zonation scheme based on broad agricultural development domains at the district level and detailed crop suitability maps at the sub-district level that were developed from the results of the 1988-1992 Malawi Land Resources Evaluation Project. This zonation scheme was presented at the NAPAS: Malawi convened National Land Symposium in mid-April. An FSP Research Paper containing all of the maps developed for the agricultural zonation scheme was prepared. (available at <http://foodsecuritypolicy.msu.edu/publications as Research Paper 17>).
- Irrigation for food security concept note – In light of the current food insecurity in Malawi, NAPAS: Malawi staff have worked with the Ministry of Agriculture to formulate a range of strategies to respond to the current food crisis. The most detailed of these has been to develop a business plan for engaging commercial agricultural enterprises with irrigation facilities to engage in dry season production of irrigated maize. This resulted in a call for tenders from commercial farmers to engage in such production. Several private sector companies

participated in a small pilot of the proposed ideas. The Ministry of Agriculture, Irrigation and Water Development will prepare a report of the pilot.

- Quality of agriculture and food security policy processes- In January 2016, the NAPAS team produced a draft report and a policy brief on the quality of agriculture and food security policy processes at national level in Malawi (FSP Research Paper 13 and Policy Research Brief 10). These are two analytical outputs based on a survey of stakeholders in these policy processes in Malawi that the NAPAS team conducted in mid-2015 as part of its monitoring and evaluation plan.
- Malawi Land Symposium -The Malawi Land Symposium was held on April 20, 2016 at the Bingu International Conference Centre in Lilongwe, Malawi, and was considered a milestone event in terms of facilitating communication of research evidence on land issues in Malawi (and other developing countries) to policymakers. The NAPAS team spent several months preparing for the event, liaising with the Principal Secretary (PS) of Lands (Dr Ivy Luhanga) as well as the Principal Secretary of Agriculture (Mrs Erica Maganga). In addition, several technical staff in the respective Ministries were engaged and worked closely with NAPAS, primarily the Chief of Party (COP) of NAPAS. The NAPAS team also made arrangements to bring in international experts on land policy issues, including Michigan State University Professor, Thomas Jayne that gave presentations at the symposium. Despite this intensive process of organizing the event collaboratively with the respective line ministries, several challenges were met, including at some point, the prospect of cancelling the event due to sensitivities within government regarding land issues and fears that the event could derail the debate on the land bills in Parliament. Ultimately, the event took place after concerted and coordinated efforts between the NAPAS team and the USAID/Malawi Mission to convince government on the importance of holding the event.
 - At the end, the Symposium was hailed a resounding success by various stakeholders, having brought together over 100 participants from various sectors to discuss the important and at times controversial issues on land policy and legislation in Malawi. A detailed report was produced by the NAPAS COP, which included the symposium proceedings as well as policy and legislative recommendations emanating from the debates and discussion that took place at the Land Symposium. The report included results from a short survey that was administered during the symposium to gauge the perspectives of participant stakeholders on a variety of issues pertaining to land policy and land laws in Malawi.
 - Several components of the Symposium raised issues linked to the processes of debating the Land Bills that were in Parliament at the time as they relate to commercial investments in agriculture for food security and nutrition. For instance, the keynote address by professor Thomas Jayne of Michigan State University and the panel discussion amongst key stakeholders in the land sector in Malawi brought up key issues around the role of Traditional Authorities in land administration in Malawi as well as unclear processes of land transactions and equity-related challenges associated with the rise of medium-scale emergent farmers who are found to be acquiring pieces of land from poorer households. These and many other issues are reflected in the detail symposium report, which can be accessed at:
http://fsg.afre.msu.edu/fsp/malawi/MALAWI_LAND_SYMPOSIUM_EVENT_REPORT.pdf

Activity 2: Journalist training

The NAPAS: Malawi activity, with assistance from the University of Pretoria and IFPRI Washington DC staff (Suresh Babu (IFPRI and FSP C3 program), and IFPRI-Lilongwe staff conducted a series of training courses for journalists. Planning for this training was done during the reporting period and included development of a Memorandum of Understanding between the Ministry of Agriculture, Irrigation and Water Development, the Ministry Partners (including the NAPAS: Malawi project, the Farmers Union of Malawi, the Alliance for a Green Revolution in Africa in Malawi, the Food

Agriculture Organization of the United Nations in Malawi, and the Civil Society in Agriculture Network in Malawi) and all major Media Institutions in Malawi, to train journalists in effective communication of agriculture, food security and nutrition information to the public. The memorandum is yet to be formalized. However, a series of journalist trainings was launched with the first training session in February 2016. The second training, where University of Pretoria participated, took place in April 2016. The thematic focus of this journalist training were the results of the FSP C3 study on micronutrient fortification in Malawi that was completed in FY2015.

COMPONENT C1/C2 EASTERN AND SOUTHERN AFRICA – TANZANIA

Beginning in November 2013, FSP began applied policy research and policy process engagement in Tanzania funded by FSP-core resources. This work has complemented and built upon analytical work and capacity building activities led by MSU's Dr. David Nyange, who has been embedded since August 2013 within the Department of Policy/Planning of the Ministry of Agriculture, Food Security and Cooperatives (DPP/MAFC) under the BMGF-funded GISAIA/Tanzania project. Dr. Nyange provides support to DPP/MAFC in agricultural policy analysis, capacity building, and policy coordination activities to meet MAFC-driven research and capacity building priorities.

In Year 1 of FSP, Dr. Nyange and a team of MSU faculty and local analysts responded to a direct request from MAFC and the Prime Minister's Office for Local and Regional Government (PMO-RALG) to lead a study and policy outreach activities related to the GoT's commitment to 'reduce or remove the Local Government Authority (LGA) Crop Cess (tax)'. This study was co-funded by FSP core and GISAIA-Tanzania. Beginning in October 2014, FSP increased its research, policy engagement and capacity building activities in Tanzania through additional funding provided by both FSP-core and funds from a USAID/Tanzania Buy-in (Table 1). Activities 3 to 7 below are all activities that have been driven by MAFC and GoT agricultural policy priorities. Like the LGA crop cess study in 2014/15, these activities are jointly funded by GISAIA/Tanzania, FSP-Tanzania and/or the original/first Tanzania Buy-in. In addition, each activity below involves local faculty from Sokoine University of Agriculture (SUA) and/or analysts or staff from MAFC so that each activity serves as an opportunity for capacity building of local public sector researchers and analysts.

In April 2016, the USAID/Tanzania mission confirmed that they would fund a new buy-in to FSP to continue and expand on-going FSP and MSU work in Tanzania. Established on May 1, 2016, the Agriculture Sector Policy and Institutional Reforms Strengthening (ASPIRES) Project is a 36-month, \$5 million initiative funded as a buy-in from the USAID/Tanzania mission to the Food Security Policy Innovation Lab. ASPIRES is being implemented by Michigan State University (MSU) in partnership with its major counterpart the Ministry of Agriculture, Livestock, and Fisheries of Tanzania. Other partners and sub-awardees (current or anticipated) are the International Food Policy Research Institute (IFPRI), Sokoine University of Agriculture of Tanzania, and the Sokoine University Graduate Employees Cooperative (SUGECO). The goal of ASPIRES is to accelerate Tanzania's adoption of more effective policies and programs in order to drive broad-based agricultural sector growth, improve household food security and nutrition, and reduce poverty. The goal will be achieved by promoting the use of evidence-based research to inform agricultural policy decisions at country and regional levels.

Table 1: Tanzania Activities- Demand and funding source

	Source of Demand		Source of funding				
	Requested by MAFC/GoT	MAFC & GoT policy priorities	FSP-C1/2 Tanz-core	FSP-C4 core	1 st Tanz buy-in	2 nd Tanz buy-in (ASPIRES)	GISAIA /Tanz
Activity 1: Deepen the existing institutional architecture assessment of agricultural policy in Tanzania.		X	X				
Activity 3: Support the legislative process for reforms of the Local Government Authority crop cess	X	X			X	X	X
Activity 4: Broaden the scope of the LGA crop cess study to include other agricultural taxes & regulatory fees: Feasibility Study of Crop & Livestock Marketing Board Reform and/or Consolidation	X	X	X		X	X	X
Activity 6: Coordinate a pilot e-payment (mobile phone) platform for collection of LGA crop cess payments and evaluate its performance	X	X			X	X	X
Activity 7: Support development and piloting of a Results Tracking System (RTS) for key MAFC investments using a mobile phone platform	X	X			X	X	X
Activity 8: Design & begin implementation of a FSP-C4 Agri-food System Transformation study of the extent and nature of change in the level of processing in several key food crop value chains in Tanzania		X	X	X	X	X	
Activity 9: Design and begin implementation of a Tanzania case study under the FSP-C4 Upstream/Land Access/farm productivity theme		X	X	X	X	X	
Activity 11: Capacity Building in the use of Partial Equilibrium Modeling for Policy Analysis and Crop Outlook Modeling		X	X				

Activity 1: Deepen the existing institutional architecture assessment of agricultural policy in Tanzania.

Description: This study goes beyond the existing Institutional Architecture (IA) assessment completed by Africa-LEAD, which covered the whole agriculture sector yet was relatively general. This FSP study uses policy process tools developed by the FSP-C3 team (policy process mapping; stakeholder mapping) and applies them to two high-profile policy areas of interest to the USAID, the Tanzanian Ministry of Agriculture, and many private and CSO stakeholders: agricultural input

policy and agricultural trade policy. Once completed, the study will include: i) a stakeholder inventory; ii) policy process map; iii) identification of gaps in stakeholder capacity and coordination mechanisms that constrain inclusivity and generation of, access to and use of solid evidence in the policy process.

Achievements: In September 2015, February 2016 and August 2016, D.Mather of MSU and D.Ndyetabula of Sokoine University of Agriculture (SUA) conducted key informant interviews with representatives from government, the private sector, and civil society organizations. The report write-up has been delayed by health problems faced by D.Mather beginning in September 2016, but will continue in early 2017. Once the Institutional Architecture report is completed, drafts of the policy process maps for each domain will be shared with government and non-government stakeholders for feedback and validation.

Activity 3: Support the legislative process for reforms of the Local Government Authority crop cess

Description: The produce cess research and policy outreach in Years 1 & 2 achieved consensus across key stakeholders for the following reforms to LGA crop cess (tax): a) reduction in cess rate from the ceiling of 5 percent to 3 percent for cash crops and 2 percent for food crops to make agriculture competitive; b) adoption of a uniform rate across 188 LGAs to avoid market distortion; c) institution of electronic payment system to enhance transparency and accountability; d) establish an appeal board as incentive to compliance. FSP research and policy outreach led to the development of an official GoT 'white paper' on LGA crop cess reform that began in an inter-ministerial committee in December 2014. During 2014/15, this white paper made its way from one approval step to the next until it reached the President's cabinet in Q3-2015. However, it was not forwarded by the Cabinet to Parliament given more pressing concerns for the government in the months leading up to the October 2015 presidential and parliamentary elections (i.e. the proposed reforms require amendment of the 1982 Local Government Finance Act (LGFA)).

Achievements in 2015/16: As soon as a new government was in place (February 2016), Dr. Nyange met with the new Permanent Secretary of the Ministry of Agriculture, Livestock and Fisheries (Dr. Florens Turuka) to debrief him on the produce cess issue and share the study's results. Dr. Nyange also met with Mr. Godfrey Simbeye, the Executive Secretary for Tanzania Private Sector Foundation (TPSF), and agreed to partner strategically on policy dialogue with the GoT to push for LGA crop cess reform. Dr. Nyange then made a presentation on the proposed LGA produce cess reform at a meeting attended by the new Minister for the President's Office –Regional and Local Government (PO-RALG) (Mr. George Simbachawene) as well as CEOs of various local and international companies. This meeting was organized by TPSF to discuss challenges faced by private sector in dealing with local government taxes. During the discussion, there was a consensus among the CEOs that some of the problems they face regarding the LGA crop produce cess (i.e., variation in tax rates across LGAs and over time) are very similar to those they face from other local government taxes such as those for billboard advertising – thus they plan to emulate FSP's strategy in stakeholder engagement so as to hopefully produce harmonized LGA billboard tax rates.

In March 2016, PO-RALG produced a draft amendment to the LGFA. Key features of the amendment include (a) reduction in cess on cash/export crops from 5% to 3%; (b) reduction on food crops from 5% to 3%, then later to 1%; (c) harmonization of rates across all 188 LGAs, (d) reduction in the number of rates for non-agricultural products, and (e) establishment of a national Local Government Tax Appeals Board.

In April 2016, ASPIRES hosted two meetings to finalize the amendment, including one with approximately 100 participants, officiated by the Deputy Permanent Secretary of PO-RALG, and a follow-up meeting with leaders of business associations. In August 2016, ASPIRES supported a three-day technical workshop hosted by PO-RALG. In addition, FSP has supported PO-RALG in preparing the necessary documents for internal approval by the GoT. During this workshop, the amended Act was edited and vetted with real-time input from all stakeholders present, and the result was an agreed version of the proposed amended LGFA.

In September 2016, PO-RALG organized a government team to write a new white paper and draft the official bill for

legislation. The official amendment of the LGFA is now ready to go to Cabinet and thereafter to Parliament. Anticipating approval of the bill, in FY17, ASPIRES plans to collaborate with other USAID-funded projects to support public education about the bill and capacity building of LGAs on its implementation.

Activity 4: Feasibility Study of Crop & Livestock Marketing Board Reform and/or Consolidation

Description: Agricultural commodity boards have been a feature of most African economies for many decades. In Tanzania, the wave of economic reform during the 1990s ended these boards' direct market interventions and converted them into regulatory and coordination bodies. Properly managed, such boards could make positive contributions towards agricultural research, industry promotion, and general coordination among stakeholders. Yet in recent years, questions have been raised in Tanzania regarding the efficiency and effectiveness of these boards. Of special concern to the Treasury was the cost of the boards: Tanzania has 11 Agricultural Commodity Boards, for coffee, sugar, tea, sisal, cashew, cotton, tobacco, pyrethrum and mixed crops meat, and dairy, each containing up to 15 board members and several managers. With many of the boards not generating sufficient revenue to sustain themselves, they imposed a financial burden to MALF. In an effort to address these challenges, the Government of Tanzania approached D.Nyange/MSU in August 2015 to conduct an assessment of the feasibility of reform and/or consolidation of the existing Agricultural Commodity Boards.

Achievements: In Year 3, David Nyange led a team of eight analysts in conducting this assessment, which built on a previously commissioned study by the World Bank from 2002. Because the topic is so politically sensitive, the team took a highly consultative approach to the work, interacting extensively with political leadership, nine of the 11 boards, participants in the earlier study, and stakeholders in each sector. Three key positive results have emerged. First, the team re-conceived the objective of the study from the politically infeasible one of immediate consolidation and restructuring to a medium-term process of incremental reform, followed by learning, followed by decisions regarding additional potential reforms. This readjustment of the study objectives allowed the team to make what progress was practically feasible in the current political environment. Second, concrete proposals for cost savings were put on the table that garnered broad support among those consulted. These include reducing the number of managers; reducing the number of board members from as many as 15 to 5; and removal of members of parliament and company owners as board members to be substituted with representatives of associations from the private sector.

The third accomplishment to date has been to broaden the focus of the study from the narrow question of efficiency (cost) to the more fundamental question of effectiveness. The study has thus become a mechanism for dealing with much broader policy issues within each sector, such as how to adequately fund farm-level research, and how to coordinate stakeholders' activities to promote the interests of the sector.

Activity 6: Coordinate a pilot e-payment (mobile phone) platform for collection of LGA crop cess payments and evaluate its performance

Description: A second major success emerging from the work on local taxation is that the reforms requiring all LGAs to adopt electronic payment systems for local government taxes was incorporated and passed under the 2015/16 Finance Bill. The reforms are now being incorporated into the parent law – the 2016 LGFA. A third major success is FSP coordinating the piloting, then scaling, of an electronic payment system (e-payment) for local taxes. One of the key recommendations from the FSP-funded LGA crop cess study was to develop, pilot and test an e-payment system for crop cess payments as an alternative to the current payment system of cash transactions at markets and at district borders. The paper-based system used to date by LGAs lacks transparency and leaves room for poor monitoring of tax records by LGAs. Information such as taxpayer identity, type of tax (e.g. commodity concerned) and amount charged has not been easily available. Further, under this system, traders had to pay produce cess prior to selling their

produce, which could create cash flow difficulties for some. Theoretically, an e-payment system for such payments would reduce the transaction costs, and greatly increase transparency of where the tax revenues go (i.e. reduce potential for embezzlement).

In 2014/15, an e-platform for payment of LGA crop (and other) taxes was developed with government and private sector participation. Piloting in Kilombero district started in June 2015, which is now collecting all its LGA taxes for through the e-payment platform.

Achievements in 2015/16: Piloting of the new electronic payment system for LGA taxes (not only the crop cess) continued in Kilombero LGA. This LGA has received visits from a number of other LGAs who are anxious to learn how the new system works.

In May 2016, ASPIRES began to support a public awareness campaign for the system, featuring a “road show” with truck using a public address system to advertise the system, public education radio announcements over two stations, and monitors examining how the system is performing.

As of September 2016, the e-payment system has been adopted by 45 of 188 LGAs across the country. All data from e-payments will feed into the government of Tanzania’s newly integrated financial system and its Local Government Revenue Collection Information System – LGRCIS. This data system will provide unparalleled detail on the timing, level, source, and location of local tax payments.

Activity 7: Support development and piloting of a Results Tracking System (RTS) for key MAFC investments using a mobile phone platform

Description: In 2014/15, 36 of the 72 rice irrigation schemes in the country began receiving Big Results Now (BRN) investments from the Ministry of Agriculture (MAFC) including investments to improve water control and the quality and timeliness of extension services. In mid-2014, the M&E division within MAFC asked Dr. Nyange for assistance to improve monitoring of the new rice irrigation investments. Dr. Nyange responded by working with MAFC M&E to coordinate the development and piloting of a mobile-phone based survey platform called a Results Tracking System (RTS). The RTS uses monthly text message surveys to collect real-time data from thousands of farmers, extension agents and service providers. The RTS enables both participating farmers and extension agents to respond in real-time to identified problems as well as to gather basic data on production (i.e. planting dates, weather data, input use, area planted) that M&E uses to assess aggregate and farmer-level production and marketing outcomes. Unlike conventional farmer surveys using paper based questionnaires, Mobile-RTS:

- Is much cheaper (costing 10-15% of conventional surveys)
- Provides real time data for corrective measures to be taken within the season (unlike conventional surveys undertaken at the end of the season)
- Minimizes errors in data that could arise during transfer of responses from paper based questionnaires to the computer
- The platform could be upgraded to provide other services e.g. extension messages, etc.
- Mobile-RTS would enhance the efficiency of M&E staff as they would visit specific irrigation scheme to address challenges identified through mobile-RTS

Achievements in 2015/16: The pilot survey was conducted during the 2014/15 cropping season. After completion of the first round and evaluation of data set we observed that there is considerable room for improving the quality of data provided by participating farmers. This will require better farmer training by extension officers. FSP thus plans to institute direct training (instruction) to farmers through their mobile phone in addition to training by extension staff. Because of the discontinuation of BRN, the number of irrigation schemes have been downscaled from 39 to 20. The second round of the survey will be carried out during the 2016/17 cropping season in these 20 schemes.

Activity 8: Design & begin implementation of a FSP-C4 Agri-food System Transformation study of the extent and nature of change in the level of processing in several key food crop value chains in Tanzania:

This work is part of the C4b (downstream) workflow but has benefited also from funding from C1/C2. See Component 4b for details.

Activity 9: Design and begin implementation of a Tanzania case study under the FSP-C4 Land Access/Use theme:

This work is part of the C4a (upstream) workflow but has benefited also from funding from C1/C2. See Component 4a, Activity 3 for a description of this activity.

Activity 11: Capacity Building in the use of Partial Equilibrium Modeling for Policy Analysis and Crop Outlook Modeling

Description: This activity is led by UP and aims to strengthen the capacity of regional researchers at Sokoine University of Agriculture in Tanzania and the Research Centre for Agricultural and Food Policies and Programs (CEPPAG) in Mozambique in the creation, use and maintenance of partial equilibrium (PE) models for maize, rice and wheat. Once trained, faculty at these institutions, are expected to use these modeling techniques to conduct policy analysis and 10-year outlook projections for regional maize, rice and wheat markets. The ReNAPRI outlook is the only official outlook that provides a detailed projection of the basic fundamentals (supply, demand, trade, price) of regional maize markets in East and Southern Africa (ESA). The major benefit of this initiative is that it forms part of and strengthens an on-going research activity that informs strategic decision-making and fore-sighting for key crops in ESA. The applied PE modeling tool can also be integrated by faculty into their own courses on the set topics and/or used by MSc students for their thesis research where appropriate.

Achievements: SUA faculty member Zena Mpenda presented a 10-year outlook for the Tanzanian wheat and rice sector at the 2nd Annual ReNAPRI Stakeholder Conference in Maputo, Mozambique on October 27th –28th, 2015. The ReNAPRI Regional Agricultural Outlook Symposium is a forum for researchers, policy makers and businesses to share ideas, empirical evidence and expertise on anticipating and responding to the region’s policy challenges in the decade ahead. More than 100 delegates attended this meeting. In February 2016, the maize numbers in the partial equilibrium modules for Tanzania were updated in order to simulate the regional impact of the drought (mainly in the Southern part of the continent) on maize prices and trade flow. In addition, the updated data was used to present an updated 10-year outlook for maize, rice and wheat at the 3rd Annual ReNAPRI Stakeholder Conference in Nairobi, Kenya on November 10th–12th 2016.

During 18-22 July 2016, Mpenda and Akyoo attended a one-week summer course on PE market and policy models held at the Food and Agricultural Policy Research Institute (FAPRI), University of Missouri. Mpenda/Akyoo then visited the Tanzania sugar board in order to collect sufficient data to create a PE crop model for sugar (a new PE crop model). This model was then used to generate a 10 year outlook for the Tanzania sugar market. The SUA researchers plan to meet with sugar industry stakeholders in February 2017 in order to present and validate the PE sugar model.

COMPONENT C1/C2 EASTERN AND SOUTHERN AFRICA – ZAMBIA

The Zambia buy-in to the Innovation Lab of Food Security Policy (FSP) compliments core BFS funds to enable Michigan State University (MSU) to continue its long-term efforts to enhance food and agricultural policy engagement in Zambia. The primary mechanism by which this occurs is through capacity building of Indaba Agricultural Policy Research Institute (IAPRI). This component is built on three pillars: 1) Enhance IAPRI's technical capacity to conduct and disseminate high quality socio-economic research, with a particular emphasis on publishing research findings through international peer-reviewed journals; 2) Support IAPRI's capacity to engage in regional policy debates, and; 3) Strengthen IAPRI's capacity to conduct high caliber research in thematic areas relevant to USAID's expanding portfolio in natural resource management, regional trade, nutrition, and gender studies, with particular emphasis on using new methodological approaches.

FY2016 Performance

Although this award only operated for the second half of FY2016, it has achieved several important outcomes. In total this award has contributed to the production of 6 major research reports:

- Understanding Fertilizer Effectiveness and Adoption on Maize in Zambia. William J. Burke, Emmanuel Frossard, Stephen Kabwe, and Thomas S. Jayne. International Development Working Paper 147 and FSP Research Paper 30. October 2016
- Analyzing Trends in Herbicide Use in Sub-Saharan Africa. Philip Grabowski and Thom Jayne. IDWP 142 and FSP Research Paper 16. April 2016.
- An In-depth Analysis of Zambia's Agricultural Budget: Distributional Effects and Opportunity Cost. Auckland N. Kuteya, Nicholas J. Sitko, Antony Chapoto and Emma Malawo. IAPRI Working Paper No. 107. April 2016
- Can Input Subsidy Programs Promote Climate Smart Agriculture in Africa? T.S. Jayne, Nicholas J. Sitko, Nicole M. Mason, and David Skole. MSU Policy Synthesis #93 and FSP Policy Research Brief 16. July 2016.
- What Drives Input Subsidy Policy Reform? The Case of Zambia, 2002-2016. Danielle Resnick and Nicole Mason. FSP Research Paper 28. October 2016.
- How Is Multinational Investment in Grain and Oilseed Trading Reshaping the Smallholder Markets in Zambia? Nicholas J. Sitko and Brian Chisanga. IAPRI Working Paper 104. April 2016

Topics of these studies ranged from quantifying available customary land, to the role of multinational investment in transforming Zambian grain markets, to understanding the underlying factors that influence fertilizer use efficiency. These are timely topics, related directly to on-going policy debates on: cross border trade, output market subsidy programs, land policy, and input subsidy design. Findings from these studies were shared broadly through 6 significant learning forums, held within Zambia as well as within international forums.

- Strategic thinking in preparation of journal articles. T. S. Jayne. Indaba Agricultural Policy Research Institute seminar, Lusaka, Zambia. 16 November 2016.
- Analysis of the Farm-to-Retail Maize Marketing Margins in Zambia. Olipa Zulu-Mbata, Thomas Jayne, Johann Kirsten. 5th International Conference of AAAE Transforming Smallholder Agriculture in Africa: The Role of Policy and Governance. Addis Ababa, Ethiopia. 23-26 September 2016.
- An evolution in the middle: Examining the rise of multinational investment in smallholder grain trading in Zambia. Nicholas J Sitko, David Tschirley, and Brian Chisanga. Rural Transformation, Agricultural and Food System Transition Workshop. FAO Headquarters, Rome, Italy. 19-20 September 2016.
- The Role of Legume Technologies in the Agriculture-Nutrition-Food Security Nexus: Evidence from Zambia. C. Sauer, N. Mason, M. Maredia, and R. Mofya-Mukuka. AAFA Annual Meeting, Boston, MA. 2 August 2016.
- Incentivizing unsustainable intensification? The case of Zambia's fertilizer subsidy program. N. Kendra Levine, Nicole M. Mason, Stephen N. Morgan, and Olipa Zulu-Mbata. Invited seminar at Allegheny College. Meadville, PA. 21 April 2016.

- The Geography of Zambia's Customary Land: Assessing the Prospects for Smallholder Development. Nicholas J. Sitko, Jordan Chamberlin, and Munguzwe Hichaambwa. Customary Land Management Research Symposium. Lusaka, Zambia. April 6-7, 2016.

In addition, this award supported 3 short-term training events with IAPRI researchers and students from the University of Zambia.

- IAPRI-MSU Technical Training: An Introduction to Experimental Economics Methodologies. Stephen N. Morgan, Indaba Agricultural Policy Research Institute, Lusaka, Zambia, June 29, 2016.
- IAPRI-MSU Technical Training: An Introduction to Agricultural Household Models. Materials developed by Nicole Mason & Saweda Liverpool-Tasie. Indaba Agricultural Policy Research Institute, Lusaka, Zambia. June 22-23, 2016.
 - Part 1 Using Economic Theory to Guide Our Empirical Work: Insights from Basic Producer and Consumer Theory.
 - Part 2 Agricultural Households as Producers and Consumers: Set-Up and Insights from a Basic Ag Household Model.

These courses were designed to address key methodological gaps identified jointly by IAPRI management and MSU. Finally, this award enabled MSU to provide backstop support to the mission and BFS to analyze mid-line population survey data in the FtF zone of influence.

Successes

In collaboration with IAPRI, this award contributed to an enhanced evidence base to support the new Minister of Agriculture to respond to the regional food deficit. As a consequence, Zambian policies sought to minimize disruptions to the private sector, while at the same time supporting the food price needs of local consumers. This component has also contributed to a significant enhancement of the capacity of the IAPRI research through short-course methodological training. The combination of enhanced research capacity and a strong, yet developing working relationship with the new Minister will lead to continued positive dialogue and policy reform in the coming year.

Challenges

The combination of general election and a regional food deficit placed significant pressure on the policy making system in Zambia and made reform difficult. Despite a victory by the ruling party, the Ministry of Agriculture leadership was changed, creating the need to establish new relationships and bring her up to speed on the evidence related to agricultural policy. Internally this component does not yet have an in-country presence established in Zambia. A candidate has been identified and will begin in January. This has forced our collaboration with IAPRI to be carried out remotely.

Lessons Learned

The major lesson learned during this reporting period is about the need to invest in relationships lower down the hierarchy within the Ministry of Agriculture in order to maintain progress on policy reform despite leadership change. We seek to intensify this effort in the coming year by implementing several key activities. First, at the request of the Ministry of Agriculture, we will support data collection on medium-scale farms in Zambia. This is a segment of the farm population that our research has shown is growing rapidly, but for which standard survey in Zambia does not collect data. Based on our research, the Ministry has requested that we collect data on this population to inform their land and development policies. Second, IAPRI has requested that we provide capacity building support to enhancing the writing skills of the researchers. We will hold a writer workshop in January to respond to this request. Finally, over the years IAPRI and MSU have generated a significant evidence base on the intersection between agriculture and climate change. To raise the visibility of this work and to place these findings on policy-makers' agenda, we will hold a major regional conference in Zambia on the topic, March 16-17, 2017, which will be co-sponsored with several international organizations.

COMPONENT 3: GLOBAL COLLABORATIVE RESEARCH ON POLICY PROCESS AND CAPACITY

FSP conducts global collaborative research and outreach to inform best practices in policy process and capacity building. The primary objective is to understand policy processes that lead to effective policy change, the nature of capacity required for generating evidence, effective policy advocacy, and an institutional architecture which enables transparent and inclusive policy changes. Such an understanding can help policy makers and development partners identify the bottlenecks in the policy process and intervene accordingly to strengthen the policy system. The research is helping to uncover, among other things, when research is most likely to have an impact on policymakers, what set of stakeholders need to be persuaded for improved food and nutrition policies to be adopted, and whether and how resource constraints and major political and administrative shifts shape the opportunities for reform.

More specifically, the Component 3 team has pursued a multi-pronged approach that ensures both research rigor and policy utility. This approach spans four main activities. **Activity 1**, which was the primary major focus in years 1 and 2 of FSP, involved deriving and refining a conceptual, predictive, and generalizable framework (Kaleidoscope Model) that is guided by testable and operational hypotheses. The framework is further guided by a practitioner's guidebook for pursuing application of the Kaleidoscope Model in any country or policy domain as well as a toolkit for enhanced engagement with decision makers in policy areas that seem most viable to reform. **Activity 2**, which was a key focus in years 2 and 3, involved conducting a series of in-depth case studies in multiple African countries that were chosen to test the rigor of the model across different food security policy domains and disparate institutional, political, and economic settings. During the October 2015-September 2016 period, the team proceeded to begin its work on *policy systems*, which refer to the broader institutional, legal, and political contexts in which discrete policy changes are embedded. **Activity 3** therefore analyzes how different experiments with institutional reforms (e.g. coordinating units, service delivery units, devolution of agricultural ministries) have emerged and how reform of policy institutions has altered the transparency, volatility, and effectiveness of policy decisions in the food security arena. Finally, **Activity 4** involves a series of policy engagement activities employing the Kaleidoscope Model and other tools in a variety of settings including international policy forums, national stakeholder workshops, and CAADP-Malabo Declaration follow-up processes.

Component 3 continues to offer two main contributions. First, it provides empirically-grounded guidance to national governments, regional policymakers, and development partners on the key ingredients for facilitating improved agriculture and food security policies. Secondly, it offers robust research methodologies and tools aimed at enhancing the capacity of civil society, national governments, donor partners, and researchers to both engage in and study the policy process. The early outputs from this component feed into African Union and ECOWAS efforts on policies and institutions as well as Africa LEAD's revision of its Institutional Architecture Assessments.

Specific achievements related to each of these activities during the October 2015-September 2016 period include the following.

Activity 1: Develop conceptual framework for studying policy process and change

Description: Tasked with coming up with a conceptual framework for understanding food security policy processes, the C3 team developed the Kaleidoscope Model (KM) based on empirical examples of policy change as well as key insights from political economy and public administration scholarship. The KM has been refined through various case studies (see Activity 2) and is now broadly disseminated.

Achievements:

Publications

- Work began on transforming the 2015 Kaleidoscope Model Research Paper into a peer-reviewed journal article that would be submitted in Quarter 1 of 2017

Presentations

- II) “Conceptualizing Drivers of Change for Improved Food Security Policies,” October 28, 2015, Maputo, Mozambique, presented to ReNAPRI network of private sector, government, and civil society stakeholders at the RENAPRI meetings in Mozambique in October 2015
- As part of the Nepal country support program, a two-day national workshop on Public Private Partnerships was conducted on January 12-13, 2016 where the Kaleidoscope Model was presented and discussed. This activity was supported by the USAID –Nepal Mission.
- A [brown bag seminar](#) was presented to the World Bank agriculture group on February 3, 2016 on the “The Quest for Evidence-Based Policy Change: Lessons Learned for Enhancing Impact on Agricultural Policy” that drew on the Kaleidoscope Model and other approaches.
- “What Drives Agricultural Policy Reform in Africa? *Insights from the Kaleidoscope Model of Food Security Change*,” June 30, 2016, Abuja, Nigeria, presented at seminar for the Feed the Future Nigeria Agricultural Policy Project

Selected Media

- “Uniting researchers and journalists to bring about positive change,” University of Pretoria’s blogpost for his work on strengthening capacity of journalists in Malawi. May 19, 2016. (http://www.up.ac.za/en/institute-for-food-nutrition-and-well-being/news/post_2281950-uniting-researchers-and-journalists-to-bring-about-positive-change)
- “Scientists develop framework to promote agricultural policies,” September 27, 2016. (<https://www.daily-mail.co.zm/?p=80724>)

Capacity Building

- Nick Sitko joined the C3 team to work on specific tools for guiding USAID missions on studying policy change. After developing a concept note on these tools, they were field tested in Malawi and Tanzania and are currently being refined. Simultaneously, the team began working on the practitioner’s guidebook to using the Kaleidoscope Model across multiple countries and policy domains.
- III) A training session on policy process and communication conducted at the Central Asia Workshop. Bishkek, Kyrgyzstan, February 25, 2016.
 - IV) Organize and conduct a training with the South Asia Office under the ReSAKSS Asia program and the Policy Research and Strategy Support Program (PRSSP) on “Communication for Policy Research and Impact” in the South Asia region. Dhaka, Bangladesh, March 26-April 1, 2016.

Activity 2: Conduct case studies of policy process and change

Description: To field test the Kaleidoscope Model, the C3 team engaged in extensive fieldwork and process tracing in 6 African countries across three different policy domains. The domains were selected due to their very different implications for policy engagement, visibility in terms of benefits for stakeholders, degree to which they involve inter-ministerial cooperation, and whether they have long- or short-term impacts on beneficiary populations. Initially, agricultural input subsidies and micronutrient interventions were selected. Three cases of input subsidies were conducted in Ghana, Tanzania, and Zambia while the micronutrient work occurred in Malawi, South Africa and Zambia. At the request of the FSP-support Nigeria Agriculture Policy Project (NAPP), a study was also conducted on

land governance reform in Nigeria, which revealed particular nuances of policymaking under a federal setting. The fieldwork on differential implementation of pesticide policies in West Africa, which were referenced under C1/C2 above, has also been informed by the Kaleidoscope Model.

To draw together lessons from these initial case studies, the C3 group conducted a team meeting on November 17th, 2015 where team members presented preliminary results from the first round of case studies. A second meeting occurred in Pretoria, South Africa in September 2016 to further refine the Kaleidoscope model and hypotheses and to plan for three synthesis studies to be finalized in the second quarter 2017.

Achievements:

Publications

- Babu SC, Haggblade S, Mkandawire E, Nankhuni F and Hendriks SL (2016). Micronutrient policy process in Malawi. IFPRI: Washington DC.
<https://books.google.co.za/books?id=sQSMDQAAQBAJ&pg=PA103&lpg=PA103&dq=Drivers+of+micronutrient+policy+change+in+Malawi:+An+application+of+the+Kaleidoscope+Model.&source=bl&ots=pM8-HtsZmL&sig=4s0GpbGK4GGHRvgeA879WhjQWJM&hl=en&sa=X&ved=0ahUKEwizzJX-sv7RAhWpKcAKHR65DB0Q6AEIMjAE#v=onepage&q=Drivers%20of%20micronutrient%20policy%20change%20in%20Malawi%3A%20An%20application%20of%20the%20Kaleidoscope%20Model.&f=false>

Also, published as FSP Research Paper 38:

http://foodsecuritypolicy.msu.edu/resources/micronutrient_policy_process_in_malawi

- Haggblade S, Babu SC, Harris J, Mkandawire E, Nthani D, Hendriks SL (2016). [Drivers of micronutrient policy change in Zambia: An application of the Kaleidoscope Model](#). Innovation Lab for Food Security Policy Working Paper No.C3-3. IFPRI: Washington DC.

Also published as FSP Research Paper 14:

http://foodsecuritypolicy.msu.edu/resources/drivers_of_micronutrient_policy_change_in_zambia_an_application_of_the_kale

- Hendriks SL, Mkandawire E, Hall N, Oliver NJJ, Schönfeldt HC, Randall P, Morgan S, Babu S, and Haggblade S (2016). Micronutrient Policy Change in South Africa: Implication for the Kaleidoscope Model for food security policy change. Innovation Lab for Food Security Policy Working Paper No.18. Institute for Food, Nutrition and Well-being, University of Pretoria, Pretoria. http://www.up.ac.za/media/shared/661/ZP_Resources/fsp-research-paper-sa-case-study-22-august-2016.zp96264.pdf. DOI: 10.13140/RG.2.2.17998.66884

Also published as FSP Research Paper 18:

http://foodsecuritypolicy.msu.edu/resources/micronutrient_policy_change_in_south_africa_implications_for_the_kaleidosco

- Mather, David and Daniel Ndyetabula. 2016. [Assessing the Drivers of Tanzania's Fertilizer Subsidy Programs from 2003-2016: An Application of the Kaleidoscope Model of Policy Change](#). FSP Research Paper 34.
- Mkandawire E, Hendriks SL and Mkandawire L (2016). Gendering Malawi's National Nutrition Policy using the integrated framework for gender analysis in nutrition policy. Feed the Future Innovation Lab for Food Security [Policy Research Brief No. 18](#). University of Pretoria and Michigan State University, Pretoria and East Lansing.

http://www.up.ac.za/en/food-security-policy-innovation-lab/homepage/preview/744?module=frontpage&slug=homepages&id=2326496&_zpid=sl8gd75ouphuo3skjgiuqfhjndj42mkl

- Resnick, Danielle and Nicole Mason. (2016). [What Drives Input Subsidy Policy Reform? The Case of Zambia, 2002-2016](#). FSP Research Paper 28.
- Resnick, Danielle and David Mather. (2016). [Agricultural Inputs Policy Under Macroeconomic Uncertainty: Applying The Kaleidoscope Model to Ghana's Fertilizer Subsidy Programme \(2008–2015\)](#). Research Paper 19.

Capacity Building

- Training workshop on Policy Communications for journalists in collaboration with Michigan State University and University of Pretoria. Blantyre, Malawi. April 16 – 21, 2016.
- Conduct training workshop on 'Conceptualizing Drivers of Agriculture and Nutrition Policy change through the Kaleidoscope Model: Consultative workshop on micronutrient policy change'. Pretoria, South Africa, 22st-22nd September, 2016.
 - See also: [Validating the Kaleidoscope Model of Food Policy Change](#)

Policy Engagement

- [Gendering Malawi's National Nutrition Policy Report](#)
- The South African case study was included in South Africa's National Food Security and Nutrition Plan that will go to Cabinet by March 2017 for approval.

Activity 3: Innovations in Policy Architecture: Origins and Impact

Description: This Activity moves from looking at discrete policy changes, which were the main foci of Activities 1 and 2, to the broader policy system in which those changes are embedded. The research under this component will begin by examining key efforts to reform policy systems to improve efficiency and specialization, enhance mutual accountability, and improve inter-sectoral coordination.

Achievements: A concept note on potential countries for the case studies under this activity was submitted to USAID in October 2015 for feedback and subsequently revised in February 2016. Based on the suggestions received, fieldwork will begin in the second quarter of 2017 to look at the impact of presidential delivery units in driving policy change. Initial attention will be given to Tanzania's Big Results Now model, which is also under consideration by other African governments (e.g. Rwanda and Ghana). A second case study on South Africa's Big Fast Results will be considered for the following fiscal year.

Activity 4: Policy Engagement and Tool Development

Description: The sustainability and utility of the Kaleidoscope Model depends on the institutionalization of the approach through a practical guidebook that enables others to replicate its application in diverse contexts. In addition, it involves integrating the insights from the Model into ongoing policy development led by government decision makers, particularly those engaged in CAADP and ECOWAS policy processes. Achievement of Malabo declaration goals through the second generation CAADP Investment plans will require stronger comprehensive policies and greater attention to inter-sectoral planning, coordination and implementation. This will require a new set of capacities, skills and competencies across governments along with new methodologies, new institutional structures and operations and new tool sets that include greater facilitation, communication and integrated

analysis skills. Such skills go beyond current formal education programs and will require re-tooling of the current cadre of officials. In order to improve these skills in the national systems, there is an urgent need for understanding the bottlenecks in the food security and nutrition policy, regulatory, and implementation processes in sub-Saharan African countries.

The Kaleidoscope model provides a convenient lens to reflect on the first generation CAADP policy and implementation processes as a means to identifying and recommending improvements in the design process to improve the likelihood of the second generation investment plans and their institutional architecture delivering on the Malabo commitments. To this end, Activity 4 will help bring together the other three activities.

Achievements:

Nick Sitko joined the C3 team to work on specific tools for guiding USAID missions on studying policy change. After developing a concept note on these tools, they were field tested in Malawi and Tanzania and are currently being refined. Simultaneously, the C3 team began working on the practitioner’s guidebook to using the Kaleidoscope Model across multiple countries and policy domains.

Nic Olivier joined the C3 team to assist with this activity and greater collaboration was established with Flora Nankuni and the Malawi NAPAS project on post-Malabo goals. A pilot case study of comprehensive policy stocktaking and mapping was planned for the first quarter of 2017 in Malawi led by UP and with participation and input from IFPRI and MSU. It will be conducted in close collaboration and coordination with NAPAS and USAID Malawi country office.

Another comprehensive policy stocktaking and mapping of the post-Malabo food security policy context is also planned in Ghana for the end of fiscal year 2017 while the work on West African pesticides in ECOWAS (described in C1/C2 earlier) will be finalized and presented in a West Africa regional pesticide policy workshop.

COMPONENT 4a: ENGAGEMENT ON GLOBAL POLICY DEBATES ON FOOD SECURITY AND UPSTREAM AGRIFOOD SYSTEM TRANSFORMATION:

Activity 1 / 2: Fertilizer Policy and a Holistic Sustainable Intensification Strategy for Smallholder Farmers in Increasingly Densely Populated Areas of Africa²

Description: Many governments continue to seek technical support to help re-design their input subsidy programs. MSU and IFPRI conduct research on input subsidy programs and other strategies for promoting fertilizer use by African farmers to provide policy guidance to interested governments attempting to improve the effectiveness of these programs. FSP activities under this sub-component focus on updating the evidence on the benefits of market-driven approaches to input distribution and the benefits of considering fertilizer promotion from a holistic standpoint that focuses on helping farmers to raise the efficiency with which they use fertilizer rather than just increasing farmers' use of fertilizer. FSP work in this area has emphasized the importance of attending to soil quality and farm management issues in order to raise crop response rates to fertilizer raising the profitability and effective demand for fertilizer and other inputs and the development of commercial input markets.

Achievements: A number of new studies and outreach events on this theme were held during the reporting period.

- FSP has worked with AFAP, IFDC, AGRA/MIRA, and other partners to coordinate fertilizer policy engagement activities in eight African countries. This is an ongoing process designed to harmonize the activities of the various development partners in each country and collaborate on outreach events with local governments.
- FSP is collaborating with the BFS-funded Africa Rising Project and Kansas State University Sustainable Intensification Innovation Lab (SIIL) in Tanzania and Malawi to help governments assist farmers in raising the efficiency with which they use fertilizer to raise the effective demand for fertilizer. This inter-disciplinary work is producing important implications for African governments, emphasizing the need for governments to devote more resources to their agricultural research and extension systems and modify the way extension systems are set up to more effectively promote bi-directional learning between farmers and agricultural scientists seeking to promote the use of sustainable intensification and climate smart agriculture (CSA) practices by farmers. Greater commitment to revitalizing adaptive research and public extension programs can not only directly help farmers to improve the level and stability of yields in response to rising climate variability, it can also help farmers use fertilizer more efficiently and hence pull in private sector investment in commercial input distribution systems that have additional knock-on effects that enhance resilience and CSA objectives.
- Analysis on raising fertilizer use efficiency through improved farm management practices is underway in Kenya in collaboration with Tegemeo Institute and the Kenya Agricultural and Livestock Research Organization.
- In February 2016, FSP initiated a study examining how input subsidy programs might be modified to better achieve climate-smart agricultural objectives. This study is based on the premise that many African governments are likely to implement large-scale fertilizer subsidy programs for the foreseeable future, hence it may be useful to consider ways in which these programs can be modified to contribute effectively to climate-smart and sustainable intensification objectives.

² Because Activity 1 and 2 are so closely aligned, we propose to hereafter combine reporting of fertilizer policy and sustainable intensification policy activities in an integrated manner.

- Under this Activity, following publication outputs were generated or initiated in this reporting period: FSP and IFDC prepared a policy brief on Kenya ([The Rewards of an Improved Enabling Environment: How Input Market Reform Helped Kenyan Farmers Raise Their Fertilizer Use By 36%](#)), which was finalized in February 2016 (FSP Policy Research Brief 14). FSP and IFDC are currently liaising with BFS to plan an outreach event in Washington and in Kenya on this study. This study documents the effects of input marketing policy reforms in Kenya in the early 1990s and the extent to which Kenyan farmers are even today benefitting from these policy reforms implemented over 20 years ago.
- Megan Sheahan, Joshua Ariga, T. S. Jayne. [Modeling the Effects of Input Market Reforms on Fertilizer Demand and Maize Production: A Case Study from Kenya](#). Journal of Agricultural Economics. November 2015. This study provides the detailed empirical evidence for the conclusions contained in the aforementioned policy brief.
- Jayne, Mason and Burke have prepared a comprehensive review of fertilizer subsidy programs in sub-Saharan Africa, December, 2015. This report is being prepared as a MSU International Development Working Paper and is being summarized in a policy brief.
- [The effects of Kenya's 'smarter' input subsidy program on crop production, incomes, and poverty](#). Nicole M. Mason, Ayala Wineman, Lilian Kirimi, and David Mather. Policy Brief No. 11. October, 2015. This study documents why Kenya's fertilizer subsidy program may offer guidance to other countries aiming to improve the benefits of their input subsidy programs.
- [The Effects of Kenya's 'Smarter' Input Subsidy Program on Smallholder Behavior and Incomes: Do Different Quasi-Experimental Approaches Lead to the Same Conclusions?](#) Nicole M. Mason, Ayala Wineman, Lilian Kirimi and David Mather. Tegemeo Institute Of Agricultural Policy And Development. WPS 56/2016.

Outreach and policy engagement activities conducted in this reporting period include:

- Session on fertilizer policy at the Regional Network of Agricultural Policy Research Institutes Second Annual Regional Agricultural Stakeholders' Conference, Maputo. October 28-29, 2015.
- [The effects of Kenya's 'smarter' input subsidy program on crop production, incomes, and poverty](#) was presented by Ayala Wineman and Lilian Kirimi at the Tegemeo Policy Conference, November 10, 2016, Nairobi, Kenya
- [Effects of climate variability and change on agricultural production and household welfare in Kenya](#). Justus Ochieng, Ayala Wineman, Lilian Kirimi, Mary Mathenge, and Nicole Mason, presented at the Tegemeo Institute Agricultural Policy Conference, Nairobi, November 10, 2015.
- [Transforming Smallholder Agriculture in the Face of Rising Land Scarcity and Low Productivity](#). T. S. Jayne, Kwame Yeboah, Lulama Traub, Milu Muyanga, Jordan Chamberlin, Ferdinand Meyer. Keynote Address by T. Jayne at the Tegemeo Institute Agricultural Policy Conference, Nairobi. November 10, 2015.

Activity 3: Land Dynamics and Land Policy

3a: Understanding the drivers of tenure insecurity and demand for land rights

Description: Land pressures are increasing in many parts of the continent and land administration policies and their interpretation and implementation are likely to greatly influence the changes in farmland ownership and the scale of farming in Africa, which will in turn affect the pace and distributional impacts of agricultural and rural transformation more generally. Work under focuses on understanding the drivers of tenure insecurity and demand for land rights formalization at individual, household and community level in Nigeria, Ghana, Uganda, and Ethiopia.

Achievements: FSP, under the leadership of Hosaena Ghebru of IFPRI, has begun preparations for an impact evaluation of a pilot Systematic Land Titling & Registration (SLTR) program in Ondo State, **Nigeria**. A Memorandum of Understanding between IFPRI and the Land Record Bureau (LRB) of Ondo state has been agreed on in principle for the impact evaluation study to facilitate state-level engagement to communicate the results. The LRB has already agreed to facilitate state-level buy-in to implement an endline survey of the 4000 households from two local government

authorities in the state. Several discussions have taken place involving officials of the State Bureau of Statistics, LRB, and LGA SLTR officers: 1) to sensitize on the scope and timeline of the upcoming survey; 2) acquire all necessary outstanding administrative data for assessing the compliance of the intervention strategy with the previously agreed impact evaluation design; 3) to get the state-level buy-in for partnership and collaboration on the implementation of the survey and sharing its outputs. In addition, to enrich both the quality of survey-based and administrative data collection and analytical ability of state government employees, IFPRI has been training employees from Ondo state Bureau of Statistics on: (i) Computer Assisted Personal Interview (CAPI) techniques; and (ii) Age and gender disaggregated survey data collection. In collaboration with Akure Federal College of Agriculture - Ondo state, further capacity building activities involving 20-30 state government employees from the LRB and Bureau of statistics as well as post-graduate students from the Federal College of Agriculture.

Additional work in Nigeria during the past quarter has included a survey questionnaire of 426 stakeholders involved in land administration service delivery in six states (Cross River, Benue, Kaduna, FCT-Abuja, Bauchi and Lagos) that involves stakeholders, service providers (land ministries, land record bureau, LGA authorities, etc); professionals (lawyers, surveyors, town planners, etc.) and beneficiary groups. Data cleaning and organization is underway and data analysis and write-up will continue in the next quarter.

In **Ethiopia**, a draft report on “Second-stage land certification: perceptions and early lessons learnt” is published as IFPRI DP and was presented at a national symposium on “Transformation and vulnerability in rural Ethiopia” May 27, 2016 organized jointly by the Ethiopian Development Research Institute (EDRI) and IFPRI in Addis Ababa, Ethiopia.

In **Ghana**, a draft report on “Agricultural transformation and the Fate of Customary Tenure System in Africa: the case of Ghana” was finalized and submitted for presentation at the 5th African Association of Agricultural Economists (AAAE) Conference held in Addis Ababa, Ethiopia, 23 - 26 September 2016. A revised version of the report is to be submitted for publication as IFPRI DP.

In **Uganda**, FSP responded to a demand from Uganda Office of the Prime Minister (OPM) and the Ministry of Lands, Housing and Urban Development (MLHUD) for an assessment of the implementation of the 2013 Uganda National Land Policy. During the reporting period, following the strong government buy-in, a proposal for impact evaluation of “Effectiveness of Land Policy in Curbing Illegal Land Evictions in Uganda” has been submitted, reviewed and endorsed by both the OPM and MLHUD. This was after extensive interaction and an inception workshop in Kampala in December 2015 at which details of the design of the impact evaluation and proposed intervention (policy actions) were presented.

Partnerships: The United Nations Economic Commission, the German Federal Ministry for Economic Cooperation and Development (BMZ) and the World Bank have established a new Network of Excellence on Land Governance in Africa (NELGA). NELGA is supported by the German government under the program “Strengthening capacities for land governance in Africa”. NELGA is established to anchor a program for training and research on land policy development, implementation, and monitoring in Africa, and to foster cooperation of African governments and institutions on land-related issues. NELGA is envisioned to complement and support the AU Land Policy Initiative - a tripartite partnership of the African Union Commission, African Development Bank and UN-ECA. Given FSP’s excellence in research and capacity building activities on land governance issues, the establishment of this network generates a new window of opportunity for engagement and FSP C4 team is now exploring new collaborative engagements with AU-LPI.

Publications:

1. Ghebru, Hosaena; Pitoro, Raul; and Woldeyohannes, Sileshi. 2015. [Customary tenure and innovative measures of safeguarding land rights in Africa: The community land initiative \(iniciativa de terras comunitárias\) in Mozambique](#). IFPRI Discussion Paper 1484. Washington, D. C.: International Food Policy Research Institute (IFPRI).
2. Ghebru, Hosaena; Koru, Bethlehem; and Taffesse, Alemayehu Seyoum. 2016. [Household perception and demand for better protection of land rights in Ethiopia](#). ESSP Working Paper 83. Washington, D. C. and Addis Ababa, Ethiopia: International Food Policy Research Institute (IFPRI) and Ethiopian Development Research Institute (EDRI).
3. Ghebru, Hosaena; Koru, Bethlehem; and Taffesse, Alemayehu Seyoum. 2016. [Synopsis: Household perception and demand for better protection of land rights in Ethiopia](#). ESSP II Research Note 52. Washington, D. C.: International Food Policy Research Institute (IFPRI).
4. Holden, Stein Terje; and Ghebru, Hosaena. 2016. [Links between tenure security and food security in poor agrarian economies: Causal linkages and policy implications](#). CLTS Working Paper 7/16. Norway: Centre for Land Tenure Studies Norwegian University of Life Sciences (CLTSUMB).
5. Holden, Stein; and Ghebru, Hosaena. 2016. [Land rental market legal restrictions in Northern Ethiopia](#). Land Use Policy. Vol. 55 (pp: 212–221)

Outreach and policy engagement activities

1. Links between Tenure Security and Food Security: Evidence from Ethiopia, Paper presented at the 2nd [International Conference on Global Food Security](#), 11- 14 October 2015, Ithaca, New York, USA
2. Drivers of tenure insecurity and the customary tenure system in Africa: Empirical evidence from selected African countries. Presented at IFPRI-SIG workshop on "Integrating Multi-level Governance into the Post-2015 Development Agenda: Opportunities, Trade-offs and Implications. November 9 – 10, 2015, Washington DC, USA
3. Mainstreaming land governance into the CAADP process: Informing future planning of NAIPs. Presented at the technical meeting to support preparation of the Technical Guide & Road Map for the appraisal and preparation of next generation of NAIPs. November 23 - 24, 2015, Dakar, Senegal
4. Tenure insecurity and the customary tenure system in Africa: Empirical evidence from selected African countries. Presented at "Policy Research Seminar" of the CGIAR organized by the Uganda Strategy Support Program – USSP. December 2, 2015. Kampala, Uganda.
5. Seminar on "Options for Impact Evaluation of Interventions to Curb Illegal Land Evictions in Uganda: A Broader Perspective" presented at a consultative workshop with representatives from Uganda Office of Prime Minister (OPM) and Ministry of Lands and Urban Housing Development, December 4, 2015, Kampala, Uganda
6. [Land Access, Land Rental Markets and Rural Poverty Dynamics in Tigray Region of Ethiopia: Panel Data evidence using Survival Models](#). Paper presented at the Annual World Bank Conference on Land and Poverty, March 14 – 17, 2016, Washington DC, USA
7. Papers presented at the Annual World Bank Conference on Land and Poverty, March 14 – 17, 2016, Washington DC, USA
 - [Effective Land Administration Services Delivery in Nigeria: a Pre-requisite to Economic Development](#)
 - [Move Up or Move Out: Land Rights, Agricultural Transformation and the Fate of Rural Youth: Panel Data Evidence from Ethiopia](#).
 - [Access to Land and Youth Employment Decisions: Evidence from a Natural Experiment in Ethiopia](#).

3b: Land Dynamics and implications for land policy

Description: During the reporting period FSP has continued to develop the evidence base on land dynamics in Africa to inform important agricultural and rural development policy issues. Based on analyses to date, we are concluding that many agricultural and overall economic development issues cannot be comprehensively addressed without a better understanding of changes in farmland ownership and use patterns, and how these changes are altering the way in which agricultural policy decisions affect the achievement of national policy objectives. During the reporting period, FSP has sought to increase the number of country cases to draw upon through the collection of data in collaboration with local partners (in Mozambique and Senegal) in order to establish whether findings so far are generalizable or (if not) to determine the factors responsible for cross-country differences. Our work during this reporting period has focused on widening the evidence base through new analysis, preparation of new reports, and outreach activities in Africa and internationally.

Achievements: The University of Pretoria, ISRA-BAME, MSU, CIRAD have been designing a land study in Senegal. The objective is to understand the causes and consequences of changes in operated farm size distributions and farmland ownership patterns in three districts in Senegal and to consider the policy implications of these changes. The four partners have worked together to prepare the sampling frame and survey instruments. The survey began in May 2016, but was temporarily interrupted due to late receipt of funds to complete field work. The field work is to be completed in early 2017, and data analysis will proceed as soon thereafter as possible.

Tanzania: Sokoine University of Agriculture and MSU have been undertaking full listings of farms over 10 hectares in 8 districts of **Tanzania** and preparing for subsequent surveys of medium-scale farms. This FSP exercise has received auxiliary support from PIM and the USAID-supported SERA project in Tanzania. FSP and the World Bank (Klaus Deininger) have shared data on medium/large-scale farms in these districts and will continue to liaise closely on land activities in Tanzania. A grand concept note for the SUA-FSP land dynamics work was prepared and circulated to the World Bank and at a land stakeholder's session at the Ministry of Agriculture conference in February 2016.

The objectives of the Tanzania land activities are: (a) to understand the rate of land expansion of medium- and large-scale farms and to consider the policy implications of consequent changes in farm structure and the concentration of food production and marketed output; (b) to determine whether the pace of acquisition of agricultural land by medium- and large-scale investors through *de facto* land administration policies may be foreclosing on the potential to achieve official development goals that remain predicated on area expansion for smallholder-led development; (c) to examine the implication of such dynamics on rural youth land accessibility in the context of customary tenure systems; (d) to assess the broader effects of changing farm structure on the types of pace of non-farm employment growth; (e) to understand the relationship between farm size and efficiency, including the range of factors and policies that might condition this relationship; (f) to specifically examine the impacts of large commercial agricultural operations on the welfare of rural communities around them; (g) determine the extent of youth migration from Tanzania's rural areas, the relative importance of rural-to-urban migration vs. rural-to-rural migration, and the characteristics of rural areas exhibiting high rates of out-migration; and (h) to examine the implications of the formal and informal land tenure systems in shaping incidence and intensity of land dynamics.

Achievements: The study has started with a complete listing of medium- and large- scale farms in 8 regions (one district in each region) of Tanzania following the household listing protocol developed by the research team. Listing is already completed in four districts (Moshi, Njombe, Mvumero, and Kilombero). After the completion of the medium- and large-farms listing phase, the next phase will involve detailed interviews with a subsample of the listed households' heads using a questionnaire. To assess the welfare effects of the medium- and large- farms on the surrounding smallholder as well as comparisons in farm productivity and efficiency, a sample of smallholders at close proximity to the medium- and large- farms will be surveyed,

During the reporting period, Dr. Milu Muyanga (MSU) attended and presented the study concept note in the second Annual Agricultural Policy Conference (AAPC) held in Dar es Salaam, Tanzania, on February 23-25, 2016. This presentation generated a lot of land policy debate and very useful comments were received that has helped reshape the study.

In March 2016, Drs. Milu Muyanga and Thomas Jayne (MSU) and their SUA collaborators prepared a draft questionnaire for the farm household level survey. As in Senegal, the purpose of this work is to explore the causes and consequences of changes in operated farm size distributions and farmland ownership patterns in three districts in Senegal and to consider the policy implications of these changes. The team is also utilizing the data to examine the role of land access in influencing the probability of rural youth migration, and to understand whether and how migration of rural people generally leads to improved livelihoods. The listing exercise (listings of all landholdings over 10 hectares in 8 districts of Tanzania) was completed in August 2016, and the household survey sampled from these lists was completed in December, 2016. Data cleaning is in progress and is to be completed by end February, 2016. Initial analysis from this study will be presented at the Ministry of Agriculture Agricultural Policy Conference in Dar es Salaam, March 1-3 in separate presentations by Jayne, Muyanga, Minde and Mdoe (SUA).

Mozambique: CEPPAG, University of Pretoria and MSU have completed field work in late 2015 to examine how the distribution of farmland in **Mozambique** is changing. This data is being used to produce three studies to guide Mozambican policy makers in their efforts to raise farm productivity and generate gainful employment for rural communities. The first study examines the extent to which medium- and large-scale farms are accounting for an increasing share of total land under production and the implications of this for land policy decisions. The second study examines how changing farmland ownership is altering youth access to land and decisions to migrate to non-farm employment activities. The third study is examining the relationship between farm size and farm productivity. Policy outreach activities in Mozambique are planned for late 2016.

FSP is examining the “inverse farm size-productivity relationship” (IR) in **Kenya, Zambia, and Mozambique**. We have revisited these issues because of the rising importance of medium-scale farms in Africa, and therefore seek to understand whether raising the share of farmland under medium-scale farms is a source of agricultural productivity growth or a setback for both productivity and equity. We believe that this work is making three contributions to agricultural policy debates in Africa. First, unlike earlier studies, we examine the IR over a much wider range of farm sizes, which is particularly relevant in Africa given the rapid rise of medium- and large-scale farms. Second, we examine the IR hypothesis using several different measures of productivity that are arguably more meaningful than measures such as yield or output value per hectare. Third, we make several advances in the conceptualization and measurement of the IR relationship, by controlling for a number of exogenous factors seldom accounted for in prior analyses, by accounting for the possibility that the technical efficiency of input use may vary with farm size rather than assuming constant returns to scale, and by incorporating fixed costs in the examination of the IR hypothesis.

Publications

- [Africa’s Changing Farmland Ownership: The Rise of the Emergent Investor Farmer](#). T. S. Jayne, Jordan Chamberlin, Lulama Traub, N. Sitko, Milu Muyanga, Felix K. Yeboah, Chewe Nkonde, Ward Anseeuw, A. Chapoto, and Richard Kachule. AFRE Staff Paper and FSP Research Paper 15, February, Michigan State University, East Lansing, 2016.

Outreach and policy engagement activities

- [Africa’s Changing Farmland Ownership and Use: Considering the Policy Implications](#). T. S. Jayne, Ward Anseeuw, Richard Kachule, Milu Muyanga, Kwame Yeboah, and Nicholas Sitko. Keynote Address, Malawi Land Symposium. Lilongwe, Malawi. April 20, 2016.
- [Africa’s Changing Farmland Ownership: The Rise of the Emergent Investor Farmer](#). T. S. Jayne, Jordan

- Chamberlin, Lulama Ndibongo Traub, N. Sitko, Milu Muyanga, Felix K. Yeboah, Chewe Nkonde, Ward Anseeuw, A. Chapoto, and Richard Kachule. Annual World Bank Conference on Land and Poverty. Washington D. C. March 14–18, 2016.
- [Is Small Still Beautiful? The Farm Size-Productivity Relationship Revisited in Kenya](#). Milu Muyanga & T. S. Jayne. Annual World Bank Conference on Land and Poverty 2016, Washington, DC. March 14-18, 2016.
- [The Role of Land Policy in Agricultural Transformation and Inclusive Economic Growth: Implications for Africa](#). Thomas Jayne, M. Mercedes Stickler, Caleb Stevens, and Sarah Lowery. March 16, 2016.
- [Agricultural land dynamics and land policy in rural Tanzania](#). Milu Muyanga, Isaac Minde, David Nyange, Ntengua Mdoe, Charles Mgeni, Christopher G. Magomba, Judith V. Rejea, Ayala Wineman, T. S. Jayne. 2nd Annual Agricultural Policy Conference. Dar Es Salaam, Tanzania. February 25, 2016.
- Land Policy Sharing and Coordination Session, Thom Jayne and Emily Weeks (facilitators), Bureau for Food Security Policy Division Partners Meeting, Arlington, VA, December 14-15, 2015.
- Thom Jayne, learning session with Bill and Melinda Gates Foundation Front Office, December 8, 2015, Seattle, Washington.
- [Transforming Smallholder Agriculture in the Face of Rising Land Scarcity and Low Productivity](#). T. S. Jayne, Kwame Yeboah, Lulama Traub, Milu Muyanga, Jordan Chamberlin, Ferdinand Meyer. Keynote Address, Tegemeo Institute Agricultural Policy Conference, Nairobi. November 10, 2015.
- FSP (Jayne and Muyanga) participated in the Feed The Future Innovation Lab for Food Security Policy country and global research engagement meeting held in Maputo, October 26 – 29, 2015.
- Muyanga participated in the African Economic Conference held in Kinshasa, November 2-4, 2015.

Activity 4: Mechanization in Agricultural Transformation: South-South Learning and Knowledge Exchange:

Description: Trends in land dynamics studied under Activity 3, together with the ‘megatrends’ identified under FSP-C4 in Year 1 define some key characteristics of Africa’s recent agricultural as well as broad economic transformation. In this process agricultural mechanization has been rapidly emerging in Africa, but has drawn less attention in development studies. This activity begins to examine the determinants of mechanization including various resource endowments and rural wages in different geographic locations within a country, while also paying attention to the interactions with labor market. It also considers policy options to encourage private sector investment in mechanization at the appropriate scale and through appropriate market approaches that explicitly benefit smallholders.

The activity relies on two main components: (1) the empirical case studies on smallholder mechanization initiated in a few African countries including Ghana, Nigeria, Ethiopia, as well as comparable Asian countries that have been undergoing fast mechanization growth, such as Indo-Gangetic Plain of Nepal and Vietnam; and (2) facilitation of south-south expert dialogues, bilateral/trilateral country visits, and knowledge exchanges on mechanization strategies and policies. These country visits engage Asian and Africa experts to undertake diagnostic analyses of African countries’ mechanization policy issues to influence new thinking of African governments on facilitating the leadership role of the private sector in mechanization supply chain development.

Achievements: Nine government officials from Nigeria, Ghana, Ethiopia, and Kenya who participated in the FSP- supported South-South knowledge exchange on mechanization in Bangladesh expressed appreciation for the exposure and a new understanding of the respective roles that the private and public sectors can play in importation of machinery and provision of mechanized services. As wages rise in Africa with rural transformation, demand for machinery services is increasing. Exposure of public officials to the array of machines available to smallholders and institutional arrangements to facilitate access without replicating failed models of public provision from the past is very important.

Personal communications with these officials indicate that some of them are exploring the possibility of increasing the promotion of smaller, two-wheel tractors widely seen in Bangladesh, to their countries. The perspectives by the

participating government officials are summarized in two policy notes produced ([1] and [2]). In addition, two Asian mechanization experts (one from Bangladesh and one from India) drafted a report comparing some of the key aspects of the differences in the mechanization sector between their countries and Ghana.

A study using the Living Standard Survey in Nepal has provided some direct evidence that hiring in tractor services directly raises the returns to scale in agriculture among smallholder farmers, which is an important process of agricultural transformation that has been experienced in other more developed regions in the world, and has important effects on the farm size dynamics and demand for intensification ([3]). Similarly, prevalent custom-hiring based mechanization of smallholders in many African countries may have similar effects, which warrant future investigations.

In Nigeria, studies are ongoing to understand the nature of the demand for agricultural mechanization, to identify some indirect evidence of whether there is an imperfection in custom hiring market, given the dominance of large, expensive tractors in Nigeria. Preliminary analyses were conducted under the joint funding with IFPRI's Nigeria Strategy Support Program, providing indicative evidence of the presence of such market imperfection, meaning that the government's interventions in some form are still necessary for the custom hiring market in Nigeria [4]. A new study has been initiated to characterize the heterogeneity of agricultural mechanization demand and their impacts in Ghana and Nigeria.

In addition, under the joint funding by IFPRI's Policy, Institution and Markets (PIM) project (CGIAR Research Program 2), this study initiated the writing of the manuscript of a book on smallholder agricultural mechanization, documenting the processes of mechanization growth (particularly tractors and combine harvesters), roles of custom hiring services, their effects on overall agricultural transformation, and their linkages with broader economic transformation in selected Asian and African countries. The book is aimed to both derive lessons from Asian countries that can be applied to African countries, and also document the evolutions of agricultural mechanization and related policies in selected African countries. The draft chapter manuscript has been completed for Nigeria and Nepal, which, combined with chapters on other countries, will be submitted to a formal review in 2017 ([5], [6]).

Publications

- [1] Aboagye PO, AG Abubakar, AI Adama, AO Lawal, & AA Musa (Synthesized by H Takeshima). (2016). [*Agricultural mechanization and south-south knowledge exchange: What can Ghanaian and Nigerian policymakers learn from Bangladesh's experience?*](#) GSSP Policy Note 6 and NSSP Policy Note 36, IFPRI. Also published as FSP Policy Research Brief 11
- [2] Animaw AT, JAM Nkanya, JM Nyakiba & TH Woldemariam (Synthesized by H Takeshima). (2016). [*Agricultural mechanization and south-south knowledge exchange: What can Ethiopian and Kenyan policymakers learn from Bangladesh's experience?*](#) ESSP Policy Note 47, IFPRI. Also published as FSP Policy Research Brief 12.
- [3] Takeshima H. (2017). Custom-hired tractor services and returns to scale in smallholder agriculture: A production function approach. *Agricultural Economics*, in press.
- [4] Takeshima H. (2016). [*Market Imperfections for Tractor Service Provision in Nigeria International Perspectives and Empirical Evidence*](#). IFPRI NSSP Working Paper 32.
- [5] Takeshima H. (2016). *Smallholder Agricultural Mechanization in Nepal*. Draft book chapter manuscript.
- [6] Takeshima H. (2016). *Smallholder Agricultural Mechanization in Nigeria*. Draft book chapter manuscript.

Outreach and policy engagement activities

- Meeting with the Deputy Director of Engineering & Mechanization Division, Federal Ministry of Agriculture & Rural Development, in Abuja, Nigeria, on February 20, 2016.
- "Custom hiring of agricultural machinery services in Ghana and Nigeria: Implications for Nepal". Hiroyuki Takeshima. Workshop on Agricultural Mechanization in South Asia: Trends, Patterns and Implications for Agricultural Development in Nepal, Kathmandu, Nepal, April 26-27, 2016.
- "Use of Chemical Fertilizers and Agricultural Machineries in Nepal: Issues and Implications". Hiroyuki Takeshima. Conference on "Sustainable Agricultural Growth in Nepal: Challenges, Opportunities and Options" held in Kathmandu,

- Nepal on May 29-30, 2016, which was organized by IFPRI Nepal project.
- Conference on "Sustainable Agricultural Growth in Nepal: Challenges, Opportunities and Options" held in Kathmandu, Nepal on May 29-30, 2016, which was organized by IFPRI Nepal project.
- Symposium "Mechanization & Postharvest Opportunities for Smallholders in Sustainable Agriculture" in Champaign, USA, on July 22, 2016; experiences of small-holder mechanization growth through custom hiring service in Ghana and Nigeria were presented to the other researchers working on agricultural mechanization and postharvest losses under USAID FTF in various Asian and African countries.
- Conference on "Promoting Agricultural Policy in Nigeria: Challenges and Opportunities", organized by IFPRI Nigeria Strategy Support Program, Abuja, Nigeria. September 27-28, 2016.

Activity 5: Exploring the Relationships between Land Dynamics and Rural Employment in Africa's Transformation

Description: Under this activity, FSP has sought to develop the evidence base on how agricultural policy choices may inform broader economy-wide agricultural and rural development policy issues. For example, we are currently conducting research that examines the extent to which labor productivity growth in farming and non-farm sectors is influenced by land distribution patterns. Are the multiplier effects from agricultural productivity growth influenced by different patterns of land distribution? Is the rate of rural outmigration influenced by rural youth's access to land? And if so, how should governments in the region set their land policies to more effectively contribute to broader national policy objectives? FSP is also exploring the evolving dynamics within Africa's workforce and employment structure to understand the trends and key drivers of job growth in the region.

Achievements: FSP has continued its work on the megatrends and drivers of food systems transformation initiated in Year 2, with a focus on land dynamics, rapidly rising labor force driven by the "youth bulge", land degradation, urbanization, climate change, drivers and costs of land tenure insecurity.

FSP also produced a new report in March 2016 on employment trends in Africa, which is currently being published as a working paper (Yeboah and Jayne, 2016, "Africa's Evolving Employment Structure"). This study contributes to current policy discussions of employment issues in Africa by documenting the evolving trends in the composition of Africa's workforce and identifying the main socio-economic factors associated with these trends. Using nationally representative, multi-year survey data for nine African countries, the analysis pays particular attention to youth- employment trends disaggregated by gender and by rural vs. urban areas.

Lesson Learned: While acknowledging substantial cross-country variations, the results suggest a general sharp increase over the past 15 years in the pace at which Africans are exiting farming in favor of off-farm activities. In most countries, the number of working-age individuals engaged in farming is still increasing in absolute terms but farming's share of employment is declining over time because of more rapid job growth in the off-farm sectors. Despite its declining employment share, farming remains extremely important for youth livelihoods for two reasons. First, farming remains the dominant employer of the workforce, accounting for 42% to 67% of all jobs and is a major source of new jobs. Off-farm jobs are growing rapidly in percentage terms but they are generally starting from a low initial base, meaning that the absolute number of jobs being created particularly in the off-farm segments of agri-food systems are considerably less than in farming. The off-farm segment of agri-food systems, currently accounts for less than 10% of the jobs held by the youth (15-25 years) and 23% of the working-age population. Farming will thus remain the single largest employer of the workforce in most countries for at least the next decade. Second, farm productivity growth is so important in generating new jobs in the rest of the economy. Consistent with historical industrialization experiences, the study identified lagged labor productivity in agriculture as a significant major driver of sectoral shifts in the labor force. Countries that achieved the highest rates of agricultural productivity growth are those that experienced the most rapid exit of labor from farming into off-farm sectors and the highest growth in labor productivity in non-agriculture sector. These patterns, also documented in Asia's structural transformation process several decades ago, suggest that the expansion of job opportunities in sub-Saharan Africa will be greatly affected by government policies and programs affecting the rate of

productivity growth in farming.

Publications:

- Foreign Affairs, special edition on African Farmers in the Digital Age: How Digital Solutions Can Enable Rural Development, February 2016.
- T. S. Jayne and Lulama Traub. [Where Will They Land? Keeping Rural Youth in Business](#).
- T. S. Jayne and Lulama Traub. [Megatrends Transforming Africa's Food Systems](#). A draft policy brief on structural transformation / land policy has now been prepared and was presented at the World Bank Land and Poverty Conference in Washington DC on March 16, 2016.
- Draft publication in press: Yeboah, K. and T. S. Jayne. 2016. Africa's Evolving Employment Structure.

Outreach and policy engagement activities:

- Drivers of Change in African Food Systems and Economic Transformation. T.S. Jayne, Milu Muyanga, Kwame Yeboah and Nicholas Sitko. Millennium Challenge Corporation, Washington, DC. September 29, 2016.
- Invited Plenary Session on Evolving Land Dynamics in African Agriculture, Triennial Meetings of the Association of African Agricultural Economists, September 23-26, 2016, Addis Ababa, Ethiopia.
 - The Rise of Medium Scale Farms in Africa. T.S. Jayne, Antony Chapoto, Jordan Chamberlin, Milu Muyanga, Nicholas Sitko, Ayala Wineman, Chewie Nkonde, Ward Anseeuw)
 - Is Small Still Beautiful? The Farm Size-Productivity Relationship Revisited. Milu Muyanga and T.S. Jayne
- Africa's evolving employment trends: Implications for youth livelihoods in the agrifood system. F. Kwame Yeboah, Thomas S. Jayne. 5th International Conference of AAEA. Addis Ababa, Ethiopia. September 23-26, 2016.
- Africa's evolving employment structure: Causes and Consequences. F. Kwame Yeboah and Thomas S. Jayne. FAO Technical Workshop. Rome, Italy. September 19-20, 2016.
- Launch of the 2016 Africa Agricultural Status Report, African Green Revolution Forum, Opening Plenary Session moderated by Thomas Jayne, co-author of the report, 6 September, 2016, Nairobi, Kenya.
- Africa's evolving employment structure: Trends and implications for youth livelihoods. F. Kwame Yeboah, Thomas S. Jayne. Annual Meeting of Agricultural and Applied Economics Association (AAEA). Boston, MA. August 1, 2016.
- Africa's Evolving Employment Structure: Implications for economic transformation. Kwame Yeboah and T.S. Jayne. Plenary Presentation, International Conference on Applied Bioeconomy Research. June 27, 2016. Ravello, Italy.
- Africa's Changing Farmland Ownership and Use: Considering the Policy Implications. T.S. Jayne, Ward Anseeuw, Richard Kachule, Milu Muyanga, Kwame Yeboah, and Nicholas Sitko. Keynote Address, Malawi Land Symposium. Lilongwe, Malawi. April 20, 2016
- [Africa's evolving employment structure: Trends and implications for economic transformation](#). Felix K. Yeboah and Thomas S. Jayne. Development Brown Bag Seminar. April 6, 2016.
- Thom Jayne, learning session with Bill and Melinda Gates Foundation Front Office, December 8, 2015, Seattle, Washington.
- [Transforming Smallholder Agriculture in the Face of Rising Land Scarcity and Low Productivity](#). T. S. Jayne, Kwame Yeboah, Lulama Traub, Milu Muyanga, Jordan Chamberlin, Ferdinand Meyer. Keynote Address, Tegemeo Institute Agricultural Policy Conference, Nairobi. November 10, 2015.
- [Emerging Land Issues In Kenyan Agriculture And Their Implications For Food Policy And Institutional Reforms](#). Milu Muyanga & TS Jayne. Tegemeo National Policy Conference 2015. Kenya School of Monetary Studies, Nairobi, Kenya. November 10, 2015.

- African Economic Conference 2015. Kinshasa, Democratic Republic of Congo. November 3-4, 2015.
 - [Is Small Still Beautiful? Review Of The Inverse Farm Size-Efficiency Relationship In Africa](#). Milu Muyanga, Chewe Nkonde, Godwin Debrah, T. S. Jayne.
 - [Africa's Changing Farmland Ownership: Causes and Consequences](#). Milu Muyanga & Thom Jayne.
- Thom Jayne, panel discussant on a session highlighting role of agricultural policies in affecting youth employment trends in Africa, MasterCard Foundation Young Africa Works Conference, October 29-30, 2015, Cape Town, South Africa.
- Ayala Wineman and T. Jayne have completed a report on rural-to-rural migration and its effects on household welfare at an upcoming FAO Conference on Structural Transformation and at the Addis Ababa 2016 AAAE meetings, September 23-26.

COMPONENT 4b: ENGAGEMENT ON GLOBAL POLICY DEBATES ON FOOD SECURITY: AGRIFOOD SYSTEM TRANSFORMATION IN THE DOWNSTREAM

The purpose of work under this component is to (a) document the extremely rapid changes underway in agrifood systems of the African continent and (b) help policy makers design programs and policies that promote rapid but equitable growth in the systems. Key drivers of this transformation are rapid growth in per capita incomes and urbanization. Six key messages are emerging from the work. These are:

1. A diet transformation on the demand side: Population growth, rapid urbanization, and per capita income growth are driving very rapid growth in the amount of food demanded through markets, and in its composition: a diet transformation towards non-cereal foods, fresh foods (both animal and vegetable/fruit) processed foods, and food away from home, all increasingly sourced (even in rural areas) through markets. This demand-side transformation represents an enormous opportunity for local and regional agribusiness firms if they can be competitive in supplying these rapidly growing and transforming markets. It also has troubling implications for nutrition and for the emerging “double burden” of malnutrition.
2. A quiet revolution on the supply side: In most countries, this diet transformation and its associated urbanization and income growth are fueling a quiet revolution in the “hidden middle” of the continent’s agrifood systems: investment, huge in aggregate, by millions of micro, small, and medium-sized firms (as well as large firms) in the wholesaling, processing, and logistical operations between farming and retailing. This segment of the agrifood system, and the rise of SMEs within it, have largely escaped the attention of donors and government policymakers.
3. The primacy of domestic food value chains: Most food is coming from domestic food value chains – in most countries, food import bills amount to only about 10% of total food consumption. Furthermore, while imports are higher in urban areas (about 20%), in most urban areas of Africa their share does not rise with incomes. This means that, in most countries, domestic food systems, including for higher value foods, are competing with imports. Whether they are able to continue competing, and capture most of the growth in demand going forward, depends on the business enabling environment put in place by governments.
4. The primacy of urban demand, especially in secondary and tertiary cities: Most food is flowing in rural-urban supply chains to urban areas that now are the majority of food markets. In Africa, secondary and tertiary cities and towns now hold more people than primary cities. They are thus crucial as demanders of food and as intermediate nodes for supply chains. The urban agenda and the food security/food system agendas thus cannot be separated.
5. But also a reverse flow of processed foods from urban- to rural areas: About half of food consumption in rural areas is now sourced through markets. Most of this purchased food is processed in some way. A major emerging trend therefore is the flow of processed foods through markets within rural areas (rural-rural flows) and from urban areas to rural areas (urban-rural flows). There is almost no empirical research on this emerging phenomenon.
6. Major implications for employment: These agribusiness opportunities have major implications for employment. The specific implications, however, depend critically on the size distribution of the firms that capture growing demand. Policies that help micro firms grow in size, and that favor competitive response by small and medium-size firms, can generate substantial employment within the hidden middle. On the other hand, policies that favor consolidation into fewer, larger firms will result in less employment growth from this quiet revolution. Because women play major roles in most food processing and food away from home, pro-employment policies in this area will favor gender equity.

Outreach activities carried out to influence policy around these six messages

Overview: During October, 2015 through September, 2016, the C4b team targeted four sets of stakeholders (host country governments, bilateral and multi-lateral donors, the private sector, and civil society) through various outreach events at national, regional, and global levels. It has also promoted and built capacity for research in this area with local research institutions. Broadly, the approach has featured the following:

1. **National:** The team has engaged at national level with (a) policy-makers in and beyond the agricultural sector, (b) bilateral and multi-lateral donors, (c) private sector, and (d) civil society in all four countries over the past two years. This engagement has taken the form of:
 - a. Annual national agricultural policy conferences;
 - b. Media events;
 - c. National stakeholder meetings;
 - d. Other formal public presentations; and
 - e. Briefings of USAID missions and policy makers in all four countries;
2. **Regional:** C4b has engaged with ReSAKSS through its Annual Trends and Outlook Report of 2015, its continental conference that same year, and ReSAKSS meetings in Washington that brought together selected African policy makers.
3. **Global:** C4b has formally engaged through roundtables, invited chapters, keynote speeches, invited talks, invited reviews, and informal requests with USAID/Washington, IFAD, FAO, World Bank, The MasterCard Foundation, the Chicago Council on Global Affairs, and the CG system's A4NH program (Agriculture for Nutrition and Health).

Specific Policy Outreach Activities: We list here the specific outreach activities carried out at national, regional, and global levels during the reporting period.

1. National level
 - a. Presentations (including one keynote) at national agricultural policy conferences in Tanzania and Mozambique (two total), organized jointly with ministries of agriculture and bringing together all four sets of stakeholders;
 - b. Stakeholder meetings in Mozambique (October 2015), with presentation of research results and discussion of policy priorities
 - c. Media events:
 - i. Televised interviews in Mozambique after a speech to the Mozambican Economics Association (October 2015);
 - d. Other formal public presentations:
 - i. "Transformation of food processing and its implications" at Ethiopian Economics Association (EEA) Conference (July 21-22, 2016)
 - ii. "Diet transformation in Ethiopia" at national conference on "Transformation and vulnerability in Ethiopia: New evidence to inform policy and investments", May 27th, 2016 (Addis Ababa);
 - iii. "Food processing, transformation and job creation: The case of commercial injera markets in Ethiopia" at seminar at the Ethiopian Development Research Institute, September 3rd, 2016, Addis Ababa;
 - iv. "Assessment of food security and nutrition situation" (research used from diet transformation analysis) at Compact2025 (Addis Ababa), March 26th, 2016.
 - v. Presentation to faculty and students at University of Ibadan, Oyo State on "Urbanization and Food Systems" in Nigeria, April 4-5, 2016.
 - vi. Seminar to faculty, students, and administrators of Oyo State College of Agriculture, Igbo Ara, Nigeria on "Value Chains and Rapid Food Systems Transformation in Nigeria" April 6, 2016.
 - vii. Special symposium with three presentations on food system transformation at African Association of Agricultural Economists (AAAE) in Addis Ababa, September 2016
 - e. Briefings
 - i. In Tanzania through the FSP-ASPIRES project and Dr. David Nyange, ASPIRES in-country director and an Agricultural Policy Advisor embedded within the Department of Policy and Planning (DPP) in the Ministry of Agriculture, Livestock, and Forestry (MALF). Through Dr. Nyange, C4b works closely with the Platform for Agricultural Policy Analysis and Coordination (PAPAC) at DPP/MALF. PAPAC interventions are through the Policy Analysis Group (PAG; chaired by Dr. Nyange), which

brings together donors and other non-governmental stakeholders, the Partnership Accountability Committee (PAC) at the Prime Minister's Office, and the Policy Resource Center (PRC) at MALF. Through these mechanisms, C4b results and policy perspectives have been regularly shared with a wide range of policy makers in the country.

- ii. In Ethiopia, we worked closely with the Ethiopia Strategy Support Program (ESSP), a joint program of IFPRI with the Ethiopian Development Research Institute (EDRI). This program is well-embedded in the country and is advised by a national advisory committee (NAC) composed of high-level local policy makers. Briefings of results of research are presented and debated in this committee.
- iii. In Nigeria, we worked with research institutes and institutions of higher learning; particularly those with the mandate to support the agricultural policy process at various levels (national and/or state). We also leveraged the networks of the Nigerian associate award called FTF Nigeria Agricultural Policy Project (including IFPRI's NSSP office) to disseminate these findings.

2. Regional level

- a. Chapter in 2014 ReSAKSS Annual Trends and Outlook Report "Beyond a Middle Income Africa: Transforming African Economies for Sustained Growth with Rising Employment and Incomes" (Beyond a Middle Income Africa: Transforming African Economies for Sustained Growth with Rising Employment and Incomes. ReSAKSS Annual Trends and Outlook Report 2014);
- b. Presentation at 2015 ReSAKSS ATOR conference: "Agribusiness in Africa: Prospects and challenges for contributing to industrialization and economic transformation".

3. Global level: during the reporting period, C4b researchers:

- a. Organized one USAID roundtable (The "Cities Roundtable" in March, 2016) and participated in two others in May of 2016 that fed into USAID/BFS deliberations on its post-FTF programmatic approach and the Global Food Security Act;
- b. Were principal authors on two chapters of IFAD's 2016 Rural Development report, each of which strongly featured C4b research and policy messages. IFAD's RDR is specifically designed to influence its programming and that of other UN organizations.
- c. Made keynote- and other presentations at the FAO conference on rural transformation in September, 2016. A key function of FAO is to work through country level ministerial structures to drive programming and public investment; influencing FAO's thinking is thus one avenue to reinforce country-level work.
- d. Were regularly sought-out by the World Bank agribusiness advisor, who used C4b research results in many outreach events with foundations, private sector, and others;
- e. Persistently engaged with The MasterCard Foundation, with the result that its research results are directly influencing TMCF's programming in the area of youth employment;
- f. Formally reviewed the proposed new A4NH (Agriculture for Nutrition and Health) program and participated in at least two A4NH program planning workshops in Netherlands and Ethiopia. C4b results on the diet transformation were extensively used in the A4NH strategy.
- g. Authored "Growing Food for Growing Cities: Transforming Food Systems in an Urbanizing World" (2016) for the Chicago Council on Global Affairs, one of the key organizations engaged in setting the global development agenda.

Field activities carried out to empirically form C4b outreach

Description: While continental trends are clear there exists an extremely weak knowledge base at country level on who (local firms, regional firms, multi-nationals) is producing what products, where (in urban areas, peri-urban, nearby rural, or distant rural), and how (with what technology and at what scale). Even less is known about how this mix of who / what / where / how has evolved in recent years, how it is likely to change in the coming five- to ten years, and what this implies about needed public policy and investment. These information gaps make it difficult to determine what steps government and development agencies need to take to ensure robust and equitable growth in this sector that serves the needs of consumers for a safe, nutritious, and high quality food supply while assisting local entrepreneurs to

respond vigorously and competitively to these opportunities.

Field work under C4b was designed to begin filling these gaps in five countries of Africa: Senegal, Nigeria, Ethiopia, Tanzania, and Mozambique. Since inception, the work features a combination, with different relative emphases depending on the country, of processed food mapping at retail and selection of one value chain that features substantial processing for more in-depth study.

Achievements during the reporting period: Multiple surveys were started and completed in three countries:

- Tanzania: The retail survey was completed in Dar es Salaam and Arusha. All data have been cleaned and analysis has begun. The miller survey was completed only in Dar es Salaam, due to high costs and budget constraints. That data is currently undergoing cleaning. Data from both surveys will be used for presentation during the third Annual Agricultural Policy Conference in Tanzania, to take place 1-3 March, 2017.
 - Additionally, in Tanzania, research began in collaboration with colleagues at SUA (Waized, Ndyetabula, and Alphonse) investigating the penetration of processed foods into rural- and small urban areas in the center of the country. Rapid appraisal work was carried out in July and August, and a detailed research design was finalized. Formal data collection is scheduled to start
 - Reardon conducted 2-day training session in Morogoro, organized jointly with SUGECO and SUA, on value chain research methods. Session involved over 40 participants from SUGECO, SUA, MALF, and ASPIRES. The training built on similar trainings done by Dr. Reardon in Senegal and Nigeria. Feedback was highly positive, with multiple follow-ups regarding participants' own research activities.
- In Ethiopia, the retail and teff miller surveys were completed in three cities (Addis, Dire Dawa, and Nekemte). Much data analysis has been completed and at least two papers/reports prepared.
- In Senegal, an inventory of background information including policy issues, and a rapid reconnaissance of the midstream of the millet and sorghum value chains has been completed. This study is partially funded by the FSP Senegal AA.
- In Nigeria, a processed food inventory was conducted in Ibadan and repeated in Kaduna, in northern Nigeria. The purpose was to establish the extent to which the response of the local processed food sector to the rapidly growing demand for these products, differs across very different cities. Findings included (a) there is a huge number of processed food products in the market, far higher than in Tanzania or Maputo, (b) local products are important across all retail outlet types include modern supermarkets, and (c) these local products account for about 30% of the product list, higher in Ibadan than in there has been a very vigorous response. In addition, Saweda Liverpool-Tasie, working with Tom Reardon and local colleagues, conducted a rapid appraisal of the poultry sector in Ibadan and Kaduna. This will serve as a basis for full design of the poultry producer survey to be conducted later in the year. This study is partially funded by the FSP Nigeria AA.
 - Additionally, in Nigeria, Reardon and Liverpool-Tasie conducted two value chain trainings (along the model being applied now in Tanzania), one at the University of Ibadan and another at the State College. Approximately 20 participants (including from Ministry of Agriculture) participated in each session.
 - In Nigeria, work began on the study of the poultry value chain, based on funding from the Nigeria Associate Award for in-country time and fieldwork costs, and C4 funding for Reardon's time

Papers prepared:

- Adjognon, Serge G., Lenis Saweda O Liverpool-Tasie, Thomas A Reardon (2016). "Agricultural input credit in Sub-Saharan Africa: Telling myth from facts." *Food Policy* (October, 2016)
- Dolislager, M., D. Tschirley, T. Reardon (2016). "East & Southern Africa diet diversification originating across intra-poor segments of the population." Full draft now under revision.
- Dolislager, M., D. Tschirley, T. Reardon (2016). "City size, supermarkets, and processed foods: Evidence from Zambia." Full draft now under revision.

- Dolislager, M., D. Tschirley, T. Reardon (2016). "The impact of city type and distances to city types on diet diversification, a study of Eastern Africa." Full draft now under revision.
- Ortega, D. and D. Tschirley (2016). "Demand for Food Safety in Emerging and Developing Countries: A Research Agenda for Asia and Sub-Saharan Africa". *Journal of Agribusiness in Developing and Emerging Economies*, 6(1).
- Richards, P., Reardon, T., Tschirley, D. et al. *Food Sec.* (2016). "Cities and the future of agriculture and food security: a policy and programmatic roundtable." *Food Security*, 8(4), pp. 871-877.
- Minten, B., Thomas Assefa, Girum Abebe, Ermias Engida, and Seneshaw Tamru (2016). "Food processing, transformation, and job creation: The case of the ready-to-eat staple food (enjera) markets in urban Ethiopia". Full draft prepared and under review. Presented at the AAAE meetings in Addis Ababa on 26 September, 2016
- Tschirley, David, B. Cunguara, S. Haggblade, T. Reardon, and M. Kondo (2016). "Africa's unfolding diet transformation and farm employment: Evidence from Tanzania". Submitted to special issue of *Journal of Development Studies* and published as Tanzania Research Report.
- Worku, I., M Dereje, and B. Minten (2015). "[Diet transformation in Ethiopia](#)." ESSP Research Note 46.
- Worku, I., M Dereje, B. Minten, and (2016). "[Diet transformation in Africa: The case of Ethiopia](#)." ESSP Working Paper 87.
- Worku, I., M Dereje, and B. Minten (2016). "A decomposition analysis of diet transformation in Ethiopia, with policy- and programmatic implications." Working paper and policy research briefs both completed.
- Three policy briefs in Tanzania and one in Mozambique on the processed foods inventory work.

COMPONENT 5: STRATEGIC ANALYTICAL AGENDA AND SUPPORT TO DONOR POLICY AND STRATEGY

Description: This component provides a synthesis of research findings from FSP activities or customized on-demand technical support through analytics, dialogue, in-country consultation, and training drawing from the wealth of research outputs produced by the FSP member institutions.

Achievements: FSP provided support to USAID / FTF on a number of different items in FY 2016. USAID requested Danielle Resnick’s assistance in the preparation of a brief that identified, based on emerging insights from various policy and research communities (Yale, William and Mary, C3, AfricaLead, etc.), some focused hypotheses regarding when and how evidence may (or may not) influence policy change. This involved specifically addressing 1) how is evidence used by policymakers and 2) what particular types of evidence, as well as which features of the policy process and broader policy system, determine when evidence may (or may not) influence change. The second task was to determine whether testing those hypotheses in more depth constitutes a valid long-term research agenda and what types of data would be needed in order to fulfill that agenda. The resulting insights from the two tasks were shared with a wide array of partners working on the evidence-to-policy interface at the mid-December partners’ meeting.

Michael Johnson also provided support to the BFS Policy Unit and ReSAKSS in the development of guidance documents that support the appraisal and design on the next round of CAADP National Agricultural Investment Plans (NAIPs); especially in light of the Malabo Commitments. His assistance has included supporting the design and facilitation of a technical convening in Dakar, November 23-24, 2015 and follow-up work in collating various thematic work streams into a coherent guidance document that was submitted to the AUC on December 15th. Other guidance documents were prepared around Mutual Accountability, the development of Policy Plans and Coordination Plans.

Adam Kennedy has provided support to the BFS Policy Unit on a number of items. He and Jed Silver provided some rapid-response assistance synthesizing research results for a paper on agricultural marketing for usage by USAID at a meeting organized by African Development Bank in Dakar in early October. He also helped organize and report on discussions at the USAID BFS Policy Unit Partners Meeting held on Dec 14-15, 2015. Specific tasks included development of a lengthy presentation summarizing progress made on BFS policy targets and the 2015-16 workplans of the Policy Unit in each of the FTF policy areas for Jeff Hill, head of the Policy Unit, as well as reviewing and collating partner contributions to the event. Syntheses of discussion sessions on seeds and structural transformation were also produced. In February he also assisted the BFS Policy Unit with reviewing and synthesizing FTF policy matrix reports, producing analysis and graphics to augment the final report.

FSP team members (namely, Tschirley, Kennedy, and Reardon) also responded to requests from USAID/Washington in organizing (with USAID personnel) the Cities and Food Security Roundtable to help USAID’s thinking about the changing landscape for development assistance. Other FSP team members (Jayne, Haggblade, Resnick, and Liverpool-Tasie) also participated in this Roundtable. A summary document of the outcomes of this discussion was released by [Food Security Journal](#).

In August, IFPRI submitted a draft paper to USAID entitled “The Role of Agriculture in Achieving the Sustainable Development Goals: Helpful Answers to 20 Questions”. The paper summarized how and what types of agri-food system investments and policies contribute to poverty reduction, improved nutrition and enhanced resilience by answering 20 questions developed by the BFS Policy Unit. The paper represents an update of a previous version submitted by IFPRI in 2009 and makes the case for the continued support of agriculture to achieve the SDGs.

MANAGEMENT SUPPORT FOR COORDINATION, COMMUNICATION, COMPLIANCE AND IMPACT

This Food Security Policy Innovation Lab is led by a management team at MSU, IFPRI and UP that serves as a liaison between USAID and the FSP Consortium partners. The FSP program as a whole underwent a change in leadership with Duncan Boughton transitioning to Burma to lead the FSP Associate Award and other MSU projects in the country, and Mywish Maredia taking up the role of the Program Director, effective January 1, 2016.

In FY 16, the FSP management team continued to provide a supporting role to the component teams and the FSP Consortium. Specific tasks accomplished during this time period include:

1. Participating in and facilitating participation of research teams in the Policy Partners meeting in December and in meetings organized by the regional policy network (ReNAPRI) in November to identify opportunities where greater coordination within FSP and across partners could yield significant short term benefits in terms of policy change and capacity building
2. Organizing a project partner meeting in East Lansing in March that brought together team members cross Components, consortium partners, country teams and USAID. This meeting served as a platform to review progress, gaps and achievements, and brainstorm on strategies to fill these gaps and prepare for the external review planned by USAD in the end of 2016. This event also served as an opportunity for global and country teams to learn about past accomplishments, and ongoing and planned activities, which helped towards better coordination of the planned research activities within the FSP program. This also facilitated communication between different Component teams, Country teams, and Consortium partners. Several action items were identified for follow up and implementation in the remaining months of FY 16 and beyond.
3. Web page redesign and communication plan: The FSP management team started discussions within AFRE and the College IT team on redesigning the project web page with a new redesigned FSP website launched in early FY 17. The plan is to use the project website as a key 'communications' tools that will feature spotlight articles, videos, and policy Briefs related to research, capacity building and outreach achievements by FSP team members. In addition, the management team is consulting with various experts to develop a Communications Strategy that outlines the tools and mechanisms the project can use to better communicate and coordinate the ongoing and planned activities of FSP across components, countries, other partners and stakeholders.
4. A search for the Communications manager for the FSP project was initiated in summer and a candidate was successfully identified. The new Communications Manager joined the team in October 2016.
5. Two program-wide publication series were initiated to disseminate the research and policy insights of the FSP project in a standardized FTF compliant format. The FSP Research Paper series is targeted to an audience of researchers, policy makers, and development practitioners, and provide the evidence for policy recommendations. These papers present the research methodology and detailed results with a synthetic conclusion. The Policy Research Brief series articulates the evidence-base and knowledge acquired from the research, with the policy recommendations. These are short synopses (2-4 pagers) outlining the main results and their possible implications for policy. This series more directly addresses government officials, policy- and decision-makers.
6. Data Management Plan for the FSP project was developed and submitted to USAID for review and approval.

7. In April 2016, Nicholas Sitko, formerly the COP for the USAID/Zambia project, joined the MSU campus team to help the project explicitly link the research activities and insights generated under C3 and C4 to country level activities. Nick's focus in this past six months has primarily been on developing a "Practitioners guide to strategic policy engagement" and developing a web based tool. These guide and tool are a systematic approach for linking research, communication, and capacity building activities to identified policy constraints. It draws heavily on insights generated by the policy system analysis carried out by C3. Country specific applications of this tool are planned in FY 17. The aim is to identify opportunities where insights generated by C4 can be brought to bear on specific, country-level policy debates and constraints to reform;
8. In year 3, the project had set aside some resources to explore initiating competitive grant program as proposed in the program description. However, due to late submission of workplan and budget by UP, funds reserved for competitive grants were allocated to carry out activities already committed in year 3 workplan for UP. As a result, this activity was not implemented in year 3 as envisioned.
9. The management team also continued to play a major role in providing support to the FSP program Core and Associate Awards in terms of:
 - a. Managing institutional sub-contracts and consultancy contracts (including reviewing workplans, budgets, invoicing, meeting Institutional Review Board requirements)
 - i. Nonresident Alien Professional Services Contracts
 - ii. Travel Notifications
 - iii. Sub-Contracts
 - b. Sub-Contract payments
 - c. Submitting required USAID reports: bi-monthly (2), and financial reports, accruals, pipeline analysis, etc.
 - i. SEG Partner Quarterly Financial Analysis Worksheets
 - ii. Federal Financial Reports (SF-425)
 - d. Submitting published outputs to USAID's DEC system
 - e. Collecting, maintaining and submitting to FTFMS system project M&E data
10. Support to operationalize M&E plan: The management team also provided support to teams engaged in Associate Awards and mission buy-ins in the development of the M&E plan, data collection templates, and conducting the baseline surveys for the qualitative indicators (survey analysis completed in Malawi, survey completed in Nigeria, and initiated in Tanzania and Zambia, planning initiated in Myanmar, Senegal and Mali). In this reporting period, one Associate Award was funded under the FSP LWA (from Mali mission), and three USAID-country /regional offices invested in the program through buy-ins (West Africa, Tanzania and Zambia).

APPENDIX A: LIST OF ONGOING AND PROSPECTIVE BUY INS AND ASSOCIATE AWARDS

Description	Dates	Amount	Status (as of 11 Nov 16)
Food Security Policy Leader Award RC102750	Signed: 7/15/2013 - 1/14/2020	Amount: \$8,550,000 Obligated: \$8,606,045	Operational
Modification Buy-In:			
USAID/Mali RC104270	Signed: 9/8/2014 – 7/14/2018	Amount: \$900,000 Obligated: \$898,538.82	Operational
USAID/Tanzania (ASPIRE) RC106131	Signed:	Amount: \$2,500,000 Obligated: \$804,729.95	Operational
USAID/Tanzania RC104271	Signed: 9/8/2014 – 7/14/2018	Amount: \$500,000 Obligated: \$382,154.55	Operational
USAID ZAMBIA RC106132	Signed:	Amount: \$400,000 Obligated: \$149,590.26	Operational
USAID/West Africa RC104272	Signed: 9/8/2014 – 7/14/2018	Amount: \$600,000 Obligated: \$506,423.64	Operational
Associate Awards:			
Food Security Policy Project (Burma) RC104236	9/24/2014-9/23/2019	Amount: \$4,493,307 Obligated: \$3,089,944.08	Operational
Malawi New Alliance Policy Acceleration Support (NAPAS) RC104584	11/24/2014-11/24/2017	Amount: \$2,000,000 Obligated: \$1,374,602.33	Operational
Senegal Agricultural Policy Project (PAPA) RC105142	7/27/2015-7/26/2018	Amount: \$1,300,000 Obligated: \$687,049.12	Operational
Nigeria Agricultural Policy Project RC105214	7/1/2015-6/30/2020	Amount: \$3,500,000 Obligated: \$1,607,190.88	Operational
<i>Mali</i> RC105885	Signed:	Amount: \$1,000,000 Obligated: \$541,366.60	Operational
African Great Lakes Coffee RC105110	7/20/2015-7/19/2018	Amount: \$850,000 Obligated: \$725,981.11	Operational

APPENDIX B: MEETINGS

- [Africa's Changing Farmland Ownership and Use: Considering the Policy Implications](#). T. S. Jayne, Ward Anseeuw, Richard Kachule, Milu Muyanga, Kwame Yeboah, and Nicholas Sitko. Keynote Address, Malawi Land Symposium. Lilongwe, Malawi. April 20, 2016
- [Toward Sustainable Intensification of Agriculture in East and Southern Africa: What Have We Learned?](#) T. S. Jayne. GISAIA Policy Symposium, Ministry of Agriculture. Lilongwe, Malawi. 21 April 2016.
- [Africa's evolving employment structure: Trends and implications for economic transformation](#). Felix K. Yeboah and Thomas S. Jayne. Development Brown Bag Seminar. April 6, 2016.
- [Africa's Changing Farmland Ownership: The Rise of the Emergent Investor Farmer](#). T. S. Jayne, Jordan Chamberlin, Lulama Ndibongo Traub, N. Sitko, Milu Muyanga, Felix K. Yeboah, Chewe Nkonde, Ward Anseeuw, A. Chapoto, and Richard Kachule. Annual World Bank Conference on Land and Poverty. Washington D. C. March 14–18, 2016.
- [Is Small Still Beautiful? The Farm Size-Productivity Relationship Revisited in Kenya](#). Milu Muyanga & T. S. Jayne. Annual World Bank Conference on Land and Poverty 2016, Washington, DC. March 14-18, 2016.
- [The Role of Land Policy in Agricultural Transformation and Inclusive Economic Growth: Implications for Africa](#). Thomas Jayne, M. Mercedes Stickler, Caleb Stevens, and Sarah Lowery. March 16, 2016.
- [Agricultural land dynamics and land policy in rural Tanzania](#). Milu Muyanga, Isaac Minde, David Nyange, Ntengua Mdoe, Charles Mgeni, Christopher G. Magomba, Judith V. Rejea, Ayala Wineman, T. S. Jayne. 2nd Annual Agricultural Policy Conference. Dar Es Salaam, Tanzania. February 25, 2016.
- Land Policy Sharing and Coordination Session, Thom Jayne and Emily Weeks (facilitators), Bureau for Food Security Policy Division Partners Meeting, Arlington, VA, December 14-15, 2015.
- Thom Jayne, learning session on land policy issues in Africa with Bill and Melinda Gates Foundation Front Office, December 8, 2015, Seattle, Washington.
- [Transforming Smallholder Agriculture in the Face of Rising Land Scarcity and Low Productivity](#). T. S. Jayne, Kwame Yeboah, Lulama Traub, Milu Muyanga, Jordan Chamberlin, Ferdinand Meyer. Keynote Address, Tegemeo Institute Agricultural Policy Conference, Nairobi. November 10, 2015.
- [Emerging Land Issues In Kenyan Agriculture And Their Implications For Food Policy And Institutional Reforms](#). Milu Muyanga & TS Jayne. Tegemeo National Policy Conference 2015. Kenya School of Monetary Studies, Nairobi, Kenya. November 10, 2015.
- African Economic Conference 2015. Kinshasa, Democratic Republic of Congo. November 3-4, 2015:
 - [Is Small Still Beautiful? Review Of The Inverse Farm Size-Efficiency Relationship In Africa](#). Milu Muyanga, Chewe Nkonde, Godwin Debrah, T. S. Jayne.
 - [Africa's Changing Farmland Ownership: Causes and Consequences](#). Milu Muyanga.
- Thom Jayne, panel discussant on a session highlighting role of agricultural policies in affecting youth employment trends in Africa, MasterCard Foundation Young Africa Works Conference, October 29-30, 2015, Cape Town, South Africa.

- 2nd Annual Regional Agricultural Stakeholders' Conference. Maputo. October 28-29, 2015. Sponsored by Regional Agricultural Policy Research Institutes (ReNAPRI).
- [Reassessing the Concept and Measurement of Market Access: Evidence from Zambian Maize Markets](#). Antony Chapoto and Thom Jayne. 2nd International Conference on Global Food Security 11-14 October 2015, Ithaca, NY, USA.
- [Megatrends and the Future of the Agri-food System in West Africa](#). Felix K. Yeboah, T. S. Jayne, Lulama N. Traub, Ferdinand Meyer. BMGF's Convening for Dryland Farming Systems in W. Africa. Dakar, Senegal. September 28, 2015.
- [Smallholder farmers' access to seeds and fertilizer in sub-Saharan Africa](#). J. Ricker-Gilbert and T. S. Jayne. European Commission Workshop on Local Level Food and Nutrition Security and The Role of Subsistence/Smallholder Farms. Seville, Spain. September 9-10, 2015.
- [Agricultural Input Subsidy Programs in Africa: An assessment of recent evidence](#). T. S. Jayne, Nicole Mason, William J. Burke, Joshua Ariga. World Bank Workshop on "Options for Improving Agricultural Public Expenditures in Africa." Washington, DC. September 22-23, 2015.
- ReSAKSS Annual Conference. Addis Ababa, Ethiopia. September 2, 2015.
- [Megatrends and the Future of African Economies](#). Lulama Ndibongo Traub, T. S. Jayne, Felix K. Yeboah, and Ferdinand Meyer.

APPENDIX C. FY 2016 OUTPUTS POSTED ON FSP WEB SITE

FSP Research Papers

These papers address researchers, policy makers, donor agencies, educators, and international development practitioners. They provide the evidence for policy recommendations. They explain the research methodology and analysis, detail and synthesize the results with a recapitulative conclusion. These can have a country, regional, or more global focus. They are co-authored, reflecting the multi-disciplinary, collaborative and cross-institutional work of FSP. The Papers are listed in descending chronological order, and are also linked from the relevant country, component and thematic pages.

- [Growth and Transformation of Chicken & Eggs Value Chains in Nigeria](#)

Research Paper 22. Saweda Liverpool-Tasie, Bolarin Omonona, Awa Sanou, Wale Ogunleye, Samantha Padilla, Thomas Reardon. September 2016

- [Towards a Systemic Analysis of the Impacts of Climate Change on Agricultural Production in Nigeria](#)

Research Paper 21. Laura Schmitt Olabisi, Saweda Liverpool-Tasie, Adeola Olajide. September 2016

- [Rural Livelihoods in Mon State: Evidence from a Representative Household Survey](#)

Research Paper 20. Aung Hein et al. August 2016

- [Agricultural Inputs Policy under Macroeconomic Uncertainty](#)

Research Paper 19. Resnick and Mather. August 2016

- [Micronutrient Policy Change in South Africa: Implications for the Kaleidoscope Model for FSP Change](#)

Research Paper 18. Hendriks, Mkandawire, Hall, Olivier, Schönfeldt, Randall, Morgan, Haggblade, Babu. August 2016

- [Detailed Crop Suitability Maps and an Agricultural Zonation Scheme for Malawi](#)

Research Paper 17. Todd Benson, Athur Mabiso, Flora Nankhuni. July 2016

- [Analyzing Trends in Herbicide Use in sub-Saharan Africa](#)

Research Paper 16. Philip Grabowski, Thomas S. Jayne. April 2016

- [Africa's Changing Farmland Ownership: The Rise of the Emergent Investor Farmer](#)

Research Paper 15. T.S. Jayne, Jordan Chamberlin, Lulama Traub, N. Sitko, Milu Muyanga, Felix K. Yeboah, Chew Nkonde, Ward Anseeuw, A. Chapoto, Richard Kachule. February 2016

- [Drivers of Micronutrient Policy Change in Zambia: An Application of the Kaleidoscope Model](#)

Research Paper 14. Steven Haggblade, Suresh Babu, Jody Harris, Elizabeth Mkandawire, Dorothy Nthani and Sheryl L. Hendriks. February 2016

- [The Quality of Agriculture and Food Security Policy Processes at National Level in Malawi](#)

Research Paper 13. Todd Benson, Flora Nankhuni, Athur Mabiso, Mywish Maredia. January 2016

- [Programme de recherche à l'attention des étudiants de l'IPR/IFRA de Katibougou](#)

Research Paper 12. Bino Témé, John Staatz, Steve Haggblade. Décembre 2015

- [Revue du système semencier au Mali](#)

Research Paper 11. Steven Haggblade, Boubacar Diallo, Melinda Smale, Lamissa Diakité, Bino Témé. Décembre 2015

- [Revue de la structure et de la performance de la filière engrais au Mali](#)

Research Paper 10. Véronique Thériault, Alpha Kergna, Abdramane Traoré, Bino Témé, Melinda Smale. Décembre 2015

- [Rapport d'enquête de recherche: Enquête de diagnostic de la production de sorgho dans la Savane](#)

Research Paper 9. Melinda Smale, Amidou Assima, Alpha Kergna, Assitan Traoré, Naman Keita. Décembre 2015

- [Aquaculture in Transition: Value Chain Transformation, Fish and Food Security in Myanmar](#)

Research Paper 8. Ben Belton, Aung Hein, Kyan Htoo, L. Seng Kham, Ulrike Nischan, Thomas Reardon, Duncan Boughton. December 2015

- [Revue de la politique régionale sur les intrants: Rapport de Synthèse](#)

Research Paper 7. Boubacar Diallo, John Staatz, Oyinkan Tasie, Bino Témé, Steve Haggblade. Novembre 2015

- [Revue des politiques sur les pesticides et les produits vétérinaires dans l'espace CEDEAO](#)

Research Paper 6. Amadou Diarra. Novembre 2015

- [Revue de la politique sur les engrais dans l'espace CEDEAO](#)

Research Paper 5. Barthelemy G. Honfoga. Novembre 2015

- [Promoting Agricultural Growth in Myanmar: A Review of Policies and an Assessment of Knowledge Gaps](#)

Research Paper 4. Than Tun, Adam Kennedy, and Ulrike Nischan. November 2015

FSP Policy Briefs

The mission of FSP is to inform the (policy) process and help improve local capacity for policy analysis and advocacy. To this end, FSP has developed its own series of short policy briefs that address various stakeholders and potential policy makers. They outline key scientific findings to guide an informed decision making and policy process. The Policy Research Briefs are listed in descending chronological order, and are also linked from the relevant country, component and thematic pages.

- [Gendering Malawi's National Nutrition Policy using the integrated framework for gender analysis](#)

Policy Research Brief 18. Elizabeth Mkandawire, Sheryl L. Hendriks and Lucy Mkandawire. September 2016

- [Revitalized Agriculture for Balanced Growth and Resilient Livelihoods](#)

Policy Research Brief 17. Prepared by CESD, IFPRI and MSU. July 2016

- [Can Input Subsidy Programs Promote Climate Smart Agriculture in Africa?](#)

Policy Research Brief 16. Thomas S. Jayne, Nicholas J. Sitko, Nicole M. Mason, and David Skole. July 2016

- [Système semencier en transition: tendances et défis](#)

Policy Research Brief 15. Steven Haggblade, Boubacar Diallo, Melinda Smale, Lamissa Diakité et Bino Témé. March 2016

- [The Rewards of an Improved Enabling Environment: How Input Market Reform Helped Kenyan Farmers....](#)

Policy Research Brief 14. Megan Sheahan, Joshua Ariga, and T.S. Jayne. February 2016

- [Comment améliorer la performance de la filière engrais au Mali ? Des pistes de solutions](#)

Policy Research Brief 13. Véronique Thériault, Alpha Kergna, Abdramane Traoré, Bino Temé et Melinda Smale. February 2016

- [Agricultural Mechanization and South-South Knowledge Exchange: What can Ghanaian and Nigerian ...](#)

Policy Research Brief 12. Patrick O. Aboagye, Abdullahi Garba Abubakar, Abdulai Iddrisu Adama, Akeem Oyeyemi Lawal, and Aliyu Abdullahi Musa Synthesized by Hiroyuki Takeshima. February 2016

- [Agricultural Mechanization and South-South Knowledge Exchange: What can Ethiopian and Kenyan ...](#)

Policy Research Brief 11. Addisu Tadege Animaw, Jasper Alfred Mutegi Nkanya, John Mogaka Nyakiba, and Tamiru Habte Woldemariam Synthesized by Hiroyuki Takeshima. February 2016

- [The Quality of Agriculture and Food Security Policy Processes at National Level in Malawi: Results..](#)

Policy Research Brief 10. Todd Benson, Flora Nankhuni, Athur Mabiso, and Mywish Maredia. January 2016

- [A Quiet Revolution Emerging in the Fish-farming Value Chain in Myanmar: Implication for National ...](#)

Policy Research Brief 9. Ben Belton, Aung Hein, Kyan Htoo, L. Seng Kham, Ulrike Nischan, Thomas Reardon, and Duncan Boughton. November 2015

Peer Reviewed Publications

FSP team members publish their findings in peer reviewed scientific journals of national and international reputation.

- [Agricultural Input Credit in sub-Saharan Africa: Telling Myth from Facts](#)

Adjognon, Serge G., Lenis Saweda O Liverpool-Tasie, Thomas A Reardon, Food Policy, October, 2016

- [Land Rental Market Legal Restrictions in Northern Ethiopia](#)

Holden, Stein; and Ghebru, Hosaena, Land Use Policy, 2016

- Cities and the Future of Agriculture and Food Security: A Policy and Programmatic Roundtable

Richards, P., Reardon, T., Tschirley, D. et al., Food Security, 2016

- Diet Transformation in Ethiopia

Worku, I., M Dereje, and B. Minten, ESSP Research Note 46, 2015

- Modeling the Effects of Input Market Reforms on Fertilizer Demand and Maize Production: A Case Study

Megan Sheahan, Joshua Ariga, Thomas S. Jayne, Journal of Agricultural Economics, November 2015

- Characteristics of Private-Sector Tractor Service Provisions: Insights from Nigeria

Takehima H., E. Edeh, A. Lawal & M. Isiaka, Developing Economies, 2015

- The Rise of a Middle Class in East and Southern Africa: Implications for Food System Transformation.

Tschirley David, Thomas Reardon, Michael Dolislager, Jason Snyder, Journal of International Development, J. Int. Dev. 27, 2015

- Motivating and Preparing African Youth for Successful Careers in Agribusiness

Steven Haggblade, A. Chapoto, A. Drame-Yayé, S. L. Hendriks, S. Kabwe, I.C Minde, J. Mugisha, S. Terblanche, Journal of Agribusiness in Developing and Emerging Economies, 2015

Presentations

- Is Small Still Beautiful? The Farm Size-Productivity Relationship Revisited

Milu Muyanga & T.S. Jayne. 5th International Conference of AAAE, Addis Ababa, Ethiopia. September 25, 2016

- Access to Agricultural Land, Youth Migration and Livelihoods in Tanzania

Ntengua Mdoe, Milu Muyanga, T.S. Jayne and Isaac Minde. 5th Conference of AAAE, Invited Panel Session 2. Addis Ababa, Ethiopia. September 25, 2016

- The Potential Economic Impact of Guinea-Race Sorghum Hybrids: A Comparison of Research & Development

Alpha Kergna, Melinda Smale, Amidou Assima, Abdoulaye Diallo, Eva Weltzien, and Fred Rattunde. 5th International Conference of the African Association of Agricultural Economists. Addis Ababa, Ethiopia. September 23-26, 2016

- [Impacts of Improved Sorghum Varieties on Farm Families: A Multivalued Treatment Effects Approach](#)

Amidou Assima, Melinda Smale, Alpha Kergna, Veronique Theriault, & Eva Weltzien. 5th International Conference of the African Association of Agricultural Economists. Addis Ababa, Ethiopia. September 23-26, 2016

- [Smallholder-led Agricultural Transformation: Requirements for Success in Myanmar](#)

Duncan Boughton and Tin Htut Oo. Conference on Smallholder Development: The Foundation of Economic Development. Nay Pyi Taw. August 16, 2016

- [Gender, Generation, and Agricultural Intensification: A Case of Two Cereals in the Sudanian Savanna](#)

Veronique Theriault, Melinda Smale, Alpha Kergna, Amidou Assima, and Naman Keita. Agricultural and Applied Economics Association annual meeting. Boston, MA. August 2, 2016

- [Origins and Impact of Increasing Herbicide Use in Mali](#)

Steven Haggblade, Melinda Smale, Alpha Kergna, Veronique Theriault, and Amidou Assima. Agricultural and Applied Economics Association annual meeting. Boston, MA. August 2, 2016

- [Measuring Hope: A Quantitative Approach with Validation in Rural Myanmar](#)

Jeffrey R. Bloem. AAEA Annual Meetings. Boston, MA. August 2, 2016

- [Intra-Rural Migration in Tanzania and Pathways of Welfare Change](#)

Ayala Wineman and Thomas S. Jayne, Paper presented at the Agricultural & Applied Economics Association Annual Meeting, Boston, Massachusetts, July 31-August 2, 2016

- [Policy Innovation for Inclusive Agricultural and Rural Economic Growth in Myanmar](#)

Duncan Boughton. Yangon, July 21, and Nay Pyi Taw, July 26, 2016

- [What Rice Policy Framework Will Best Support Myanmar Agricultural Strategy?](#)

Duncan Boughton. Agricultural Policy Working Group Discussion Forum. Yangon, Myanmar. May 9, 2016

- [Mon State Livelihoods and Rural Development Strategy](#)

Zaw Oo, Mateusz Filipski, Duncan Boughton, Paul Dorosh. Mawlamyaing, Myanmar. May 2, 2016

- [Improving Access to Pre-Financing for Cooperatives and Coffee Washing Stations](#)

Feed the Future Africa Great Lakes Region Coffee Support Program (AGLC) Policy Roundtable. Kigali, Rwanda. May 2016.

- [Ensuring Farmers have Timely Access to Improved Inputs](#)

Feed the Future Africa Great Lakes Region Coffee Support Program (AGLC) Policy Roundtable. Kigali, Rwanda. May 2016.

- [Ensuring a higher proportion of coffee moves through the fully washed channel](#)

Feed the Future Africa Great Lakes Region Coffee Support Program (AGLC) Policy Roundtable. Kigali, Rwanda. May 2016.

- [Motivating Farmers to Invest in Their Coffee Plantations](#)

Feed the Future Africa Great Lakes Region Coffee Support Program (AGLC) Policy Roundtable. Kigali, Rwanda. May 2016.

- [Toward Sustainable Intensification of Agriculture in East and Southern Africa: What Have We Learned?](#)

T.S. Jayne, Keynote Address. GISAIA Policy Symposium, Ministry of Agriculture. Lilongwe, Malawi. April 21, 2016

- [Africa's Changing Farmland Ownership and Use: Considering the Implications](#)

T.S. Jayne, Ward Anseeuw, Richard Kachule, Milu Muyanga, Kwame Yeboah, and Nicholas Sitko. Keynote Address, Malawi Land Symposium, Ministry of Lands. Lilongwe, Malawi. April 20, 2016

- [A Spatial Examination of Agricultural Use potential in Malawi](#)

Todd Benson, Athur Mabiso and Flora Nankhuni. An agricultural zonation scheme for Malawi for agricultural planning purposes. Presentation for the Malawi Land Symposium. Lilongwe, Malawi. April 20, 2016

- [Improving Estate Land Governance in Malawi: Towards a National Land Information Management System](#)

Davie Chilonga. Presentation for the Malawi Land Symposium. Lilongwe, Malawi. April 20, 2016

- [Closing the Gender Gap in Land Access, Control & Ownership in Eastern Africa](#)

Julia Behrman. Presentation for the Malawi Land Symposium. Lilongwe, Malawi. April 20, 2016

- [Participation in Rural Land Rental Markets in Malawi: Who Benefits and by How Much?](#)

Jacob Ricker-Gilbert & Jordan Chamberlin. Presentation for the Malawi Land Symposium. Lilongwe, Malawi. April 20, 2016

- [Africa's Changing Farmland Ownership and Use: Considering the Policy Implications](#)

Keynote presentation by Professor Thomas Jayne. Ministry of Lands Policy Conference. Lilongwe, Malawi. April 20, 2016

- Rapport de l'Atelier de Lancement du Projet d'Appui aux Politiques Agricoles: Mardi 22 mars 2016

Senegal Team

- Observations on the VSAT Draft White Paper

Duncan Boughton. March 3, 2016.

- Accelerating the Growth and Development of the Vegetable Sector in Myanmar: Principles for Success

Duncan Boughton. Second National Vegetable Sector Round Table. Naypyitaw. March 3, 2016

- Agricultural land dynamics and land policy in rural Tanzania

Milu Muyanga, Isaac Minde, David Nyange, Ntengua Mdoe, Charles Mgeni, Christopher G. Magomba, Judith V. Rejea, Ayala Wineman, & T.S. Jayne. 2nd Annual Agricultural Policy Conference Serena Hotel, Dar es Salaam. February 25, 2016

- Smallholder maize-nitrogen response rates, soil fertility, and profitability of inorganic fertilizer

David Mather, Isaac Minde, Betty Waized, Daniel Ndyetabula, and Anna Temu. 2nd Annual Agricultural Policy Conference Serena Hotel, Dar es Salaam. February 25, 2016

- 2nd Agrifood System Transformation in East And Southern Africa: Implications For Tanzania

David Tschirley, Jason Snyder, Claire Ijumba, & Thomas Reardon. Dar es Salaam, Feb 24, 2016

- Briefing Note for Agriculture & Rural Development Sector Working Gp Agricultural Public Expenditures

Myanmar. February 16, 2016

- Transformation of the Rural Economy in Myanmar: Essential Role of Agricultural Public Expenditure

Duncan Boughton. Presentation Notes. Agriculture and Rural Development Sector Working Group. Yangon. February 16, 2016

- A Quiet Revolution Emerging in the Fish-farming Value Chain in Myanmar

Ben Belton, Aung Hein, Kyan Htoo, L. Seng Kham, Ulrike Nischan, Thomas Reardon, Duncan Boughton. Yangon. January 28, 2016

- A Quiet Revolution in the Fish-Farming Industry

Press Release. Launch and workshop for the Aquaculture in transition: Value chain transformation, fish and food security in Myanmar. Sedona Hotel, Yangon. January 28, 2016

- [Aquaculture in Transition: Value Chain Transformation, Fish and Food Security in Myanmar](#)

Conference Agenda, Sedona Hotel, Yangon, January 28, 2016

- [Revue de la Structure et de la Performance de la Filière Engrais au Mali](#)

Véronique Thériault, Alpha Kergna, Abdramane Traoré, Bino Témé et Melinda Smale. Bamako. 22 janvier 2016.

- [Rapport d'Enquête de Recherche: Enquête de Diagnostic de la Production de Sorgho dans la Savane](#)

Melinda Smale, Amidou Assima, Alpha Kergna, Assitan Traoré, Naman Keita. Bamako. 22 janvier 2016.

- [Agrifood Value Chains: Concepts, Axes of Transformation, Research Methods](#)

Thomas Reardon. First talk, FSP Senegal PAPA, BAME Seminar, January 21, 2016

- [Value Chain Transformation in Asia: Emergence of a Quiet Revolution](#)

Thomas Reardon. Second talk, FSP Senegal PAPA, Seminar BAME. January 21, 2016.

- [The Essential Role of Agriculture in Myanmar's Economic Transition \(Burmese version\)](#)

Duncan Boughton, Aung Hein and Ben Belton. Ministry of National Planning and Economic Development, Nay Pyi Taw. January 20, 2016

- [The Essential Role of Agriculture in Myanmar's Economic Transition](#)

Duncan Boughton, Aung Hein and Ben Belton. Ministry of National Planning and Economic Development, Nay Pyi Taw. January 20, 2016

- [Agriculture: Engine of Rural Economic Growth in Myanmar](#)

Duncan Boughton, Aung Hein and Ben Belton. Yangon. December 8, 2015

- [Structure et Performance de la Filière Engrais au Mali](#)

Véronique Thériault, Alpha Kergna, Abdramane Traoré, Bino Témé et Melinda Smale. Bamako. 22 Octobre 2015.

- [Diffusion des Variétés de Sorgho et l'Impact Economique Potentiel des Hybrides de Sorgho en Zone](#)

Alpha O. Kergna, Melinda Smale, Amidou Assima et Naman Keita, Bamako, 22 Octobre 2015.

- Enquête Diagnostique dans la Savane Soudanienne au Mali. Utilisation des Engrais par les Producteurs

Amidou Assima. 22 octobre 2015.

- You Can Have your Rice & Eat Fish Too: Rice, Fish, Land Use Trade-offs and Food Security in Myanmar

Ben Belton, Aung Hein, Kyan Htoo, Seng Kham, Paul Dorosh, Emily Schmidt. Poster presented at the Global Food Security conference, Cornell University. October 11-14, 2015

ANNEX D: MATRIX OF COUNTRY LEVEL ACTIVITIES FUNDED UNDER THE FTF INNOVATION LAB FOR FOOD SECURITY POLICY RESEARCH AS OF SEPTEMBER 2016

ANNEX D: Matrix of Country Level Activities Funded Under the FTF Innovation Lab for Food Security Policy Research as of September 2016

Country	Research Component and Topic	Lead researcher/ Component	In-Country Mission Contact (if any)	Collaborating in-country partner (if any)	Short description for BFS to share with Mission in requesting concurrence (2-3 sentences or short paragraph, including possible utility to mission)
Burma	“Strategic Planning for Irrigation Development in Myanmar”	Duncan Boughton: C1/C2 Asia	Dan Swift, Leslie Marbury	CESD, Nathan Associates	to assess the current irrigation status and potential for development to enhance the agriculture sector of Myanmar, and to examine the effectiveness of alternative agricultural policies on water resources.
Burma	Backstopping application of kaleidoscope model for improved policy	Suresh Babu: C1/C2 Asia	Dan Swift, Leslie Marbury	CESD, FSWG	
Ethiopia	Rural Economic Development and Food Security	David Tschirley: C4b, Activity 5			In Ethiopia, the program has been asked by the Executive Committee of the RED&FS (the coordinating body on activities related to “Rural Economic Development and Food Security”; it is co-chaired by donors and the government), to make quantitative assessments of likely trajectories of the Ethiopian economy up to 2030. This will be done under alternative scenarios of public investment, economic policies, and external shocks. Results from the research from C4b (e.g. the diet transformation) will be an important input in developing different scenarios. Results will be presented at the end of 2017 to the stakeholders involved in the RED&FS group.
Ethiopia	Land Dynamics and Land Policy	Thom Jayne: C4a Activity 3			5. Impact evaluation reports on social and economic impacts (such as tenure security, investment, and over all welfare impacts) of various land rights protection programs (in Ethiopia, Nigeria, Mozambique)
Ethiopia	“Rural Economic Development and Food Security”	Dave Tschirley, C4b, Activity 5			the program has been asked by the Executive Committee of the RED&FS (the coordinating body on activities related to “Rural Economic Development and Food Security”; it is co-chaired by donors and the government), to make quantitative assessments of likely trajectories of the Ethiopian economy up to 2030. This will be done under alternative scenarios of public investment, economic policies, and external shocks. Results from the research from C4b (e.g. the diet transformation) will be an important input in developing different scenarios. Results will be presented at the end of 2017 to the stakeholders involved in the RED&FS group.

Country	Research Component and Topic	Lead researcher/ Component	In-Country Mission Contact (if any)	Collaborating in-country partner (if any)	Short description for BFS to share with Mission in requesting concurrence (2-3 sentences or short paragraph, including possible utility to mission)
Gambia	Case Studies of Uneven Implementation of Regional Input Policies	Steve Haggblade, C1/C2 W. Africa, Activity 2			Under USAID/WA funding, MSU team members (Haggblade, Diallo, Tasie and Traoré) are working with a series local researchers to conduct case studies of uneven national implementation of regional pesticide policies in Gambia, Senegal, Ghana, Ivory Coast, Mali and Nigeria. The work involves active engagement with local policy makers and private sector stakeholders. This work will culminate in a regional policy conference.
Ghana	Case Studies of Uneven Implementation of Regional Input Policies	Steve Haggblade, C1/C2 W. Africa, Activity 2			Case Studies of Uneven Implementation of Regional Input Policies
Ghana	Case Studies of Uneven Implementation of Regional Input Policies	Steve Haggblade, C1/C2 W. Africa, Activity 2			Under USAID/WA funding, MSU team members (Haggblade, Diallo, Tasie and Traoré) are working with a series local researchers to conduct case studies of uneven national implementation of regional pesticide policies in Gambia, Senegal, Ghana, Ivory Coast, Mali and Nigeria. The work involves active engagement with local policy makers and private sector stakeholders. This work will culminate in a regional policy conference.
Ghana	Case Studies of Policy Change	Steve Haggblade, C3, Activity 2			<ul style="list-style-type: none"> • 3 micro-nutrient policy studies (Malawi, South Africa , Zambia) • 3 fertilizer policy studies (Ghana, Tanzania, Zambia) • 1 gendering nutrition policy study (Malawi)
Ghana	Policy Engagement	Steve Haggblade, C3, Activity 4			Using the analytical tools and research findings from Activities 1-3, the FSP team will engage in a variety of ongoing policy processes with partners at MSU, IFPRI, UP, Africa Lead and possibly others. These efforts will include development and application of tools for guiding policy engagement, substantive engagement in various ongoing global and national policy. 4. Comprehensive policy stocktaking and mapping of the post-Malabo food security policy context in Ghana, background preparations
Ghana	Mechanization in Agricultural Transformation: South-South Learning and Knowledge Exchange	Xinshen Diao: C4a Activity 4			Empirical assessments of the demand for mechanization and its heterogeneity across locations in Nigeria and potentially Ghana

Country	Research Component and Topic	Lead researcher/ Component	In-Country Mission Contact (if any)	Collaborating in-country partner (if any)	Short description for BFS to share with Mission in requesting concurrence (2-3 sentences or short paragraph, including possible utility to mission)
Guinea	Case Studies of Uneven Implementation of Regional Input Policies	Steve Haggblade, C1/C2 W. Africa, Activity 2			Under USAID/WA funding, MSU team members (Haggblade, Diallo, Tasié and Traoré) are working with a series local researchers to conduct case studies of uneven national implementation of regional pesticide policies in Gambia, Senegal, Ghana, Ivory Coast, Mali and Nigeria. The work involves active engagement with local policy makers and private sector stakeholders. This work will culminate in a regional policy conference.
Ivory Coast	Case Studies of Uneven Implementation of Regional Input Policies	Steve Haggblade, C1/C2 W. Africa, Activity 2			Under USAID/WA funding, MSU team members (Haggblade, Diallo, Tasié and Traoré) are working with a series local researchers to conduct case studies of uneven national implementation of regional pesticide policies in Gambia, Senegal, Ghana, Ivory Coast, Mali and Nigeria. The work involves active engagement with local policy makers and private sector stakeholders. This work will culminate in a regional policy conference.
Malawi	Case Studies of Policy Change	Steve Haggblade, C3, Activity 2			<ul style="list-style-type: none"> • 3 micro-nutrient policy studies (Malawi, South Africa , Zambia) • 3 fertilizer policy studies (Ghana, Tanzania, Zambia) • 1 gendering nutrition policy study (Malawi)
Malawi	Policy Engagement	Steve Haggblade, C3, Activity 4			Using the analytical tools and research findings from Activities 1-3, the FSP team will engage in a variety of ongoing policy processes with partners at MSU, IFPRI, UP, Africa Lead and possibly others. These efforts will include development and application of tools for guiding policy engagement, substantive engagement in various ongoing global and national policy. 4. Comprehensive policy stocktaking and mapping of the post-Malabo food security policy context in Ghana, background preparations
Malawi	Fertilizer Policy	Thom Jayne: C4a Activity 1			policy engagement and outreach events on fertilizer policy in Africa including at the upcoming National Agricultural Policy Conference in Tanzania, March 1-3, 2017 and at upcoming 2017 NAPAS outreach events in Malawi to be determined

Country	Research Component and Topic	Lead researcher/ Component	In-Country Mission Contact (if any)	Collaborating in-country partner (if any)	Short description for BFS to share with Mission in requesting concurrence (2-3 sentences or short paragraph, including possible utility to mission)
Malawi	Toward a Holistic Sustainable Intensification Strategy for Smallholder Farmers in Increasingly Densely Populated Areas of Africa	Thom Jayne: C4a Activity 2			<p>3. policy engagement activities on promoting interventions and policies that are both climate smart and promote agricultural productivity, including at the upcoming 2017 Climate Change Summit in Zambia (contributing to C1/C2 Zambia buy-in activities) and at the upcoming Malawi Land Policy Conference, to deepen C4 contributions to the FSP Malawi Associate Award.</p> <p>4. a combination of research dissemination at policy outreach events in Africa (e.g., upcoming C1/C2 activities in Malawi, Zambia, and Tanzania) and high-level policy conferences reaching thought leaders at the World Bank, the MasterCard Foundation, AGRA, ReSAKSS, IFPRI, USAID, and other organizations.</p>
Malawi	Land Dynamics and Land Policy	Thom Jayne: C4a Activity 3			<p>1. to liaise more extensively with LPI through collaboration on country studies examining progress in protecting land rights of local communities (led by IFPRI but will engage MSU and UP in certain countries, e.g., Zambia, Malawi, Tanzania)</p> <p>2. a cross-country study examining in detail the relationship between farm scale and farm productivity</p> <p>3. policy brief on the report above</p> <p>4. a combination of research dissemination at policy outreach events in Africa (e.g., upcoming C1/C2 activities in Malawi, Zambia, and Tanzania) and high-level policy conferences reaching thought leaders at the World Bank, the MasterCard Foundation, AGRA, ReSAKSS, IFPRI, USAID, and other organizations.</p>
Malawi	Working towards policy change	Nick Sitko, 9.3			<ul style="list-style-type: none"> In response to USAID/Malawi's request, and in collaboration with Todd Benson, backstop an analysis of constraints to policy reform in three policy areas in Malawi. This study will be carried out by a consultant and will explicitly apply the tools developed for the practitioner's guide to the analysis.
Mali	Case Studies of Uneven Implementation of Regional Input Policies	Steve Haggblade, C1/C2 W. Africa, Activity 2	Halima Ouattara-Ayanou; David Yanggen		Under USAID/WA funding, MSU team members (Haggblade, Diallo, Tasie and Traoré) are working with a series local researchers to conduct case studies of uneven national implementation of regional pesticide policies in Gambia, Senegal, Ghana, Ivory Coast, Mali and Nigeria. The work involves active engagement with local policy makers and private sector stakeholders. This work will culminate in a regional policy conference.
Mali	Support to national programs: Mali	Steve Haggblade, C1/C2 W. Africa, Activity 5	Halima Ouattara-Ayanou; David Yanggen		MSU team members (Haggblade, Thériault, Smale, Témé and Traoré) are working closely with three local institutions – the Institut d'Economie Rurale (IER), Institut Polytechnique Rural (IPR) and Cellule de Planification et de Statistiques du Secteur Développement Rural (CPS/SDR) -- on a program of collaborative policy research and capacity building.

Country	Research Component and Topic	Lead researcher/Component	In-Country Mission Contact (if any)	Collaborating in-country partner (if any)	Short description for BFS to share with Mission in requesting concurrence (2-3 sentences or short paragraph, including possible utility to mission)
Mozambique	Land Dynamics and Land Policy	Thom Jayne: C4a Activity 3			5. Impact evaluation reports on social and economic impacts (such as tenure security, investment, and over all welfare impacts) of various land rights protection programs (in Ethiopia, Nigeria, Mozambique)
Nigeria	Case Studies of Uneven Implementation of Regional Input Policies	Steve Haggblade, C1/C2 W. Africa, Activity 2			Under USAID/WA funding, MSU team members (Haggblade, Diallo, Tasié and Traoré) are working with a series local researchers to conduct case studies of uneven national implementation of regional pesticide policies in Gambia, Senegal, Ghana, Ivory Coast, Mali and Nigeria. The work involves active engagement with local policy makers and private sector stakeholders. This work will culminate in a regional policy conference.
Nigeria	Mechanization in Agricultural Transformation: South-South Learning and Knowledge Exchange	Xinshen Diao: C4a Activity 4			Empirical assessments of the demand for mechanization and its heterogeneity across locations in Nigeria and potentially Ghana. (2) more analyses on agricultural mechanization in selected African countries including Nigeria and possibly Ghana, both jointly funded by CGIAR PIM.
Nigeria	Land Dynamics and Land Policy	Thom Jayne: C4a			5. Impact evaluation reports on social and economic impacts (such as tenure security, investment, and over all welfare impacts) of various land rights protection programs (in Ethiopia, Nigeria, Mozambique)
Nigeria	Poultry sector analysis and outreach	Saweda Liverpool-Tasié, C4b, Activity 2			i. Leveraging AA funds, the C4b Nigeria team will conduct surveys at the following nodes in Oyo State: (a) Poultry producers, (b) Feed mills, (c) Maize wholesalers, (d) Maize farmers, and (d) Poultry retailers. ii. The team will work with partners at various research institutes and institutions of higher learning with mandates to support governments in their agricultural policy development and implementation to disseminate this information at multiple levels. iii. While working at the federal level in Nigeria, the team will also work at the state level, due to the important role of the states in actual implementation of national policies and the fact that states often have their own specific agenda. In Spring, 2017, seminars on the sector will be organized at several federal and state level fora.
Senegal	Case Studies of Uneven Implementation of Regional Input Policies	Steve Haggblade, C1/C2 W. Africa, Activity 2			Under USAID/WA funding, MSU team members (Haggblade, Diallo, Tasié and Traoré) are working with a series local researchers to conduct case studies of uneven national implementation of regional pesticide policies in Gambia, Senegal, Ghana, Ivory Coast, Mali and Nigeria. The work involves active engagement with local policy makers and private sector stakeholders. This work will culminate in a regional policy conference.

Country	Research Component and Topic	Lead researcher/ Component	In-Country Mission Contact (if any)	Collaborating in-country partner (if any)	Short description for BFS to share with Mission in requesting concurrence (2-3 sentences or short paragraph, including possible utility to mission)
South Africa	Case Studies of Policy Change	Steve Haggblade, C3, Activity 2			<ul style="list-style-type: none"> • 3 micro-nutrient policy studies (Malawi, South Africa , Zambia) • 3 fertilizer policy studies (Ghana, Tanzania, Zambia) • 1 gendering nutrition policy study (Malawi)
Tanzania	Case Studies of Policy Change	Steve Haggblade, C3, Activity 2			<ul style="list-style-type: none"> • 3 micro-nutrient policy studies (Malawi, South Africa , Zambia) • 3 fertilizer policy studies (Ghana, Tanzania, Zambia) • 1 gendering nutrition policy study (Malawi)
Tanzania	Toward a Holistic Sustainable Intensification Strategy for Smallholder Farmers in Increasingly Densely Populated Areas of Africa	Thom Jayne: C4a Activity 2			<p>3. policy engagement activities on promoting interventions and policies that are both climate smart and promote agricultural productivity, including at the upcoming 2017 Climate Change Summit in Zambia (contributing to C1/C2 Zambia buy-in activities) and at the upcoming Malawi Land Policy Conference, to deepen C4 contributions to the FSP Malawi Associate Award.</p> <p>4. a combination of research dissemination at policy outreach events in Africa (e.g., upcoming C1/C2 activities in Malawi, Zambia, and Tanzania) and high-level policy conferences reaching thought leaders at the World Bank, the MasterCard Foundation, AGRA, ReSAKSS, IFPRI, USAID, and other organizations.</p>
Tanzania	Land Dynamics and Land Policy	Thom Jayne: C4a Activity 3			<ol style="list-style-type: none"> 1. to liaise more extensively with LPI through collaboration on country studies examining progress in protecting land rights of local communities (led by IFPRI but will engage MSU and UP in certain countries, e.g., Zambia, Malawi, Tanzania) 2. a cross-country study examining in detail the relationship between farm scale and farm productivity 3. policy brief on the report above 4. a combination of research dissemination at policy outreach events in Africa (e.g., upcoming C1/C2 activities in Malawi, Zambia, and Tanzania) and high-level policy conferences reaching thought leaders at the World Bank, the MasterCard Foundation, AGRA, ReSAKSS, IFPRI, USAID, and other organizations.

Country	Research Component and Topic	Lead researcher/ Component	In-Country Mission Contact (if any)	Collaborating in-country partner (if any)	Short description for BFS to share with Mission in requesting concurrence (2-3 sentences or short paragraph, including possible utility to mission)
Tanzania	Analysis and outreach stemming from the retail and miller surveys in Tanzania:	Dave Tschirley, C4b, Activity 1			This work will include (a) Data analysis of the retail and miller surveys; (b) Presentations in the third Annual Agricultural Policy Conference, which will bring together PS-level decision makers from various ministries along with private sector and civil society; (c) Intensive engagement with stakeholders built around the Policy Diagnostic Tool (see new activities section for more detail); (d) Collaboration with several partners, at Ministry of Agriculture request, to help develop the country's agroprocessing strategy. Together with the policy diagnostic tool, this will provide a platform for generating concrete policy impact from the C4b work; and (e) Continued use of policy structures in the country (Department of Policy and Planning in MALF; Policy Analysis Group) to raise knowledge and understanding. All will leverage Dr. Nyange's access to policy makers across sectors.
Tanzania	Application of the Policy Diagnostic Tool in Tanzania:	Dave Tschirley, C4b, Activity 4			This tool is related to, but separate from, the Kaleidoscope model that the C3 team has used. The purpose of the policy diagnostic tool is to identify and then pursue particular reforms in specific policies, programs, or regulations that national stakeholders have prioritized as both feasible and impactful identify. In Tanzania, C4b will work with the in-country SPIRES team to apply the tool during the first two quarters of FY17, then will engage intensively with policy makers around specific desired changes in policies, programs, or regulations.
Zambia	Oilseed and livestock market development for smallholders to inform policy and investment prioritization:	Thom Jayne, C1/C2 Zambia, Activity #1			In Zambia, there is a great deal of policy interest in identifying effective strategies to trigger smallholder income growth through agricultural diversification and market linkages. To build the evidence base to inform debates on this, the activity examines evolving grain, oilseed, and livestock markets in the context of dramatic changes in land access and farm size dynamics, uncertain trade policy, and growing urban demand. Research activities carried out under this activity area come from MSU and IAPRI.
Zambia	Analysis of land commodification and alienation to inform Zambia's draft Land Policy:	Thom Jayne, C1/C2 Zambia, Activity #2			In Zambia, the land policy is under review. To support the evidence base on land policy options, this work area focuses on the relationship between changing farm size dynamics and farm productivity in an effort to inform land and farm block policies. Research in this area will be carried out by researchers from MSU, IAPRI, and University of Zambia.

Country	Research Component and Topic	Lead researcher/ Component	In-Country Mission Contact (if any)	Collaborating in-country partner (if any)	Short description for BFS to share with Mission in requesting concurrence (2-3 sentences or short paragraph, including possible utility to mission)
Zambia	Developing an evidence base to guide food system climate resilience and adaptation.	Thom Jayne, C1/C2 Zambia, Activity #6			Significant policy interest and donor support exists in Zambia to improve the climate resilience of the country's food and agricultural system. However, the evidence base on effective strategies remains thin. This activity area will examine the intersections between climate change and smallholder agriculture using a range of methodological approaches in order to provide empirical guidance on policies and investments to improve the climate resilience of Zambian agriculture. Both MSU and IAPRI researchers are leads on outputs in this activity area.
Zambia	Gender relationships and agricultural growth:	Thom Jayne, C1/C2 Zambia, Activity #7			This activity area explores the gendered implications of land titling and the control over sales proceeds on productivity and agricultural investments in order to help facilitate greater gender mainstreaming in agricultural policy strategies and discussions. Activities will be carried out jointly between MSU and IAPRI researchers.
Zambia	Capacity building support to IAPRI	Thom Jayne, C1/C2 Zambia, Activity #7			This activity area responds to a request from IAPRI management to support improved technical writing skills, ability to identify priority issues/topics for maximizing IAPRI's research impact on policy processes, and more effective peer feedback within IAPRI. This will be facilitated by MSU and the Southern African Institute for Policy Research (SAIPAR)
Zambia	Methods for conducting impact assessments in agriculture	Thom Jayne, C1/C2 Zambia, Activity #8			There is growing interest in conducting rigorous impact assessments to evaluate agricultural investment and policy options. This seminar will aim to provide IAPRI researchers with basic tools for carrying out impact assessments. This will be carried out jointly by MSU and Diginights Zambia.
Zambia	Case Studies of Policy Change	Steve Haggblade, C3, Activity 2			<ul style="list-style-type: none"> • 3 micro-nutrient policy studies (Malawi, South Africa , Zambia) • 3 fertilizer policy studies (Ghana, Tanzania, Zambia) • 1 gendering nutrition policy study (Malawi)

Country	Research Component and Topic	Lead researcher/ Component	In-Country Mission Contact (if any)	Collaborating in-country partner (if any)	Short description for BFS to share with Mission in requesting concurrence (2-3 sentences or short paragraph, including possible utility to mission)
Zambia	Toward a Holistic Sustainable Intensification Strategy for Smallholder Farmers in Increasingly Densely Populated Areas of Africa	Thom Jayne: C4a Activity 2			<p>3. policy engagement activities on promoting interventions and policies that are both climate smart and promote agricultural productivity, including at the upcoming 2017 Climate Change Summit in Zambia (contributing to C1/C2 Zambia buy-in activities) and at the upcoming Malawi Land Policy Conference, to deepen C4 contributions to the FSP Malawi Associate Award.</p> <p>4. a combination of research dissemination at policy outreach events in Africa (e.g., upcoming C1/C2 activities in Malawi, Zambia, and Tanzania) and high-level policy conferences reaching thought leaders at the World Bank, the MasterCard Foundation, AGRA, ReSAKSS, IFPRI, USAID, and other organizations.</p>
Zambia	Land Dynamics and Land Policy	Thom Jayne: C4a Activity 3			<p>1. to liaise more extensively with LPI through collaboration on country studies examining progress in protecting land rights of local communities (led by IFPRI but will engage MSU and UP in certain countries, e.g., Zambia, Malawi, Tanzania)</p> <p>2. a cross-country study examining in detail the relationship between farm scale and farm productivity</p> <p>3. policy brief on the report above</p> <p>4. a combination of research dissemination at policy outreach events in Africa (e.g., upcoming C1/C2 activities in Malawi, Zambia, and Tanzania) and high-level policy conferences reaching thought leaders at the World Bank, the MasterCard Foundation, AGRA, ReSAKSS, IFPRI, USAID, and other organizations.</p>

C1: Country-Level Collaborative Research (on Farms, Firms, and Markets) and Formulation/Analysis of Policy Options

C2: Country-Level Capacity-Building for Policy (Data, Analysis, Advocacy, Formulation, Consultation, Coordination, and Implementation)

C3: Global Collaborative Research on Support to the Policy Process and Policy Capacity

C4:a Agrifood System Transformation in the Upstream: Land Dynamics, Land Governance, Mechanization and Implications for Rural Employment

C4:b Agrifood System Transformation in the Downstream and Implications for Linkages to the Upstream

C5: Strategic Analytical Agenda and Support to Donor Policy and Strategy