

Feed the Future Innovation Lab for Food Security Policy November 2019

Annual Report:

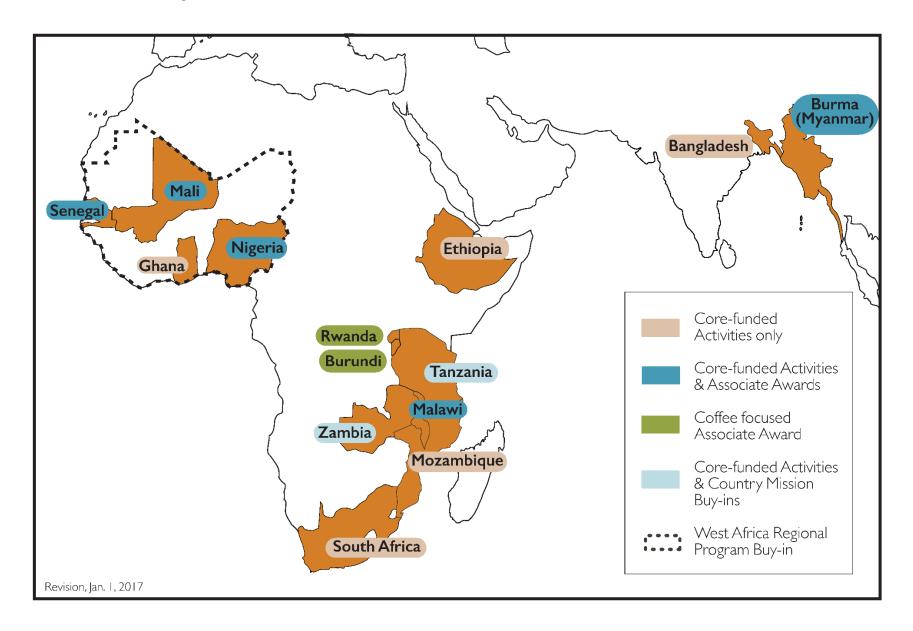
October 1, 2018 – September 30, 2019

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

Lead University: Michigan State University

Consortium Members: International Food Policy Research Institute, University of Pretoria

WHERE THE PROJECT WORKS



PROGRAM PARTNERS

Consortium Members

- Michigan State University (MSU)
- International Food Policy Research Institute (IFPRI)
- University of Pretoria

In-Country/Regional Collaborators:

- Ethiopia
 - Ethiopian Development Research Institute (EDRI)
- Malawi
 - Civil Society Agriculture Network (CISANET)
 - Malawi's Ministry of Agriculture, Irrigation and Water Development (MoAIWD)
 - MoAIWD Department of Agricultural Planning Services (DAPS)
 - Centre for Agricultural Research and Development (CARD) Bunda
 College Lilongwe University of Agriculture & Natural Resources, Malawi.
- Mali
 - o Institut Polytechnique Rural (IPR)
 - o Institut d'Economie Rurale (IER)
 - Cellule de Planification et de Statistiques du Secteur Développement Rural (CPS/SDR
- Myanmar
 - Food Security Working Group
 - Myanmar Development Resource Institute-Centre for Economic and Social Development (MDRI-CESD)
- Nigeria
 - o University of Ibadan
- Senegal
 - Min of Ag., Directorate for Analysis, Forecasting and Statistics (DAPS)

- Institute for Agricultural Research (ISRA)
- University Cheikh Anta Diop of Dakar.
- Tanzania
 - Directorate of Policy & Planning (MAFC)
 - Department of Agricultural Economics and Agribusiness (DAEA), Sokoine University
 - o Policy Analysis Group
- Zambia
 - o Zambia Land Alliance
 - Indaba Agricultural Policy Research Institute (IAPRI)
- International
 - o AFAP
 - o Africa Rising
 - Bill and Melinda Gates Foundation (BMGF)
 - o CGIAR PIM (CRP2)
 - o CIMMYT
 - o ECOWAS
 - Global Center for Food Systems Innovation (GCFSI)International Fertilizer Development Center (IFDC)
 - ICRISAT
 - KSU Sustainable Intensification Innovation Lab
 - o ReNAPRI
 - o ReSAKSS-Asia

ACRONYMS

AA	Associate Award			
AAEA	African Association of Agricultural Economists			
AfDB	African Development Bank			
AGRA	Alliance for a Green Revolution in Africa			
ALPC	Africa Land Policy Center			
AMSEC	Agricultural Mechanization Service Center			
ASPIRES	Agricultural Sector Policy and Institutional Reform Strengthening			
APU	Agricultural Policy Unit			
ASFNS	Agriculture Sector Food and Nutrition Strategy			
AU	Africa Union			
AUC	American University in Cairo			
BFAP	Bureau for Food and Agricultural Policy			
BFS	Bureau for Food Security			
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, Bunda College, Malawi			
CESD	Centre for Economic and Social Development, Myanmar			
CDAIS	S Capacity Development in Agricultural Innovation System			
CFS	Committee on World Food Security			
CIFOR	Center for International Forestry Research			
CILSS	Comité permanent Inter-Etats de Lutte contre la Sécheresse dans le Sahel			
CIMMYT	International Maize and Wheat Improvement Center			
CIP	International Potato Center (Centro Internacional de Papa)			
CISANET	Civil Society Agriculture Network			
COP	Chief of Party			
CLPA	Conference on Land Policy in Africa			
CSP	Comité Sahélian des Pesticides			
CRP	CGIAR Research Program			
CSA	Climate Smart Agriculture			
DAEA	Department of Agricultural & Agribusiness Economics			
DAES	Department of Agricultural Extension Services			
DAPS	Ministry of Agriculture, Directorate for Analysis, Forecasting and Statistics (Senegal)			
DEC	Development Experience Clearinghouse			
DPP	Directorate of Policy & Planning			
ECOWAS	Economic Community of West African States			
EDRI	Ethiopian Development Research Institute			

EPTD	Environment and Production Technology Division
FAO	Food and Agricultural Organization of the United Nations
FAPRI	Food and Agricultural Policy Research Institute
FAS	Foreign Agricultural Service
FISP	Farmer Input Support Program
FRA	Food Reserve Agency
FSN	Food Security And Nutrition
FSRP III	Food Security Research Project
FSP	Food Security Policy (Feed the Future Innovation Lab)
FTF	Feed the Future
FY	Fiscal Year
GCFSI	Global Center for Food Systems Innovation
GFSS	Global Food Security Strategy
GISAIA	Guiding Investments in Sustainable Agricultural Intensification in Africa
GOT	Government of Tanzania
HLPE	High Level Panel of Experts
IAPRI	Indaba Agricultural Policy Research Institute
ICAE	International Conference of Agricultural Economists
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IER	Institut d'Economie Rurale
IFAD	International Fund for Agricultural Development
IFDC	International Fertilizer Development Center
IFPRI	International Food Policy Research Institute
INSAH	CILSS Institut du Sahel
IPR	Institut Polytechnique Rural
IRs	Intermediate Results
ISP	Input Subsidy Programs
ISRA	Senegalese Institute for Agricultural Research
ISSD	Integrated Seed System Development
JICA	Japan International Cooperation Agency
KOICA	Korea International Cooperation Agency
LG(A)	Local Government (Authority)
LGFA	Local Government Finance Act
LIFT	Livelihoods and Food Security Trust Fund
LPI	Land Policy Initiative
LUANAR	Lilongwe University of Agriculture and Natural Resources
MAFC	Ministry of Agriculture, Food Security and Cooperatives
MALF	Ministry of Agriculture, Livestock and Fisheries
MELA	Monitoring and Evaluation of Land Governance Africa
MDRI	Myanmar Development Research Institute

MoAIWD	Ministry of Agriculture, Irrigation and Water Development
MOALI	Ministry of Agriculture, Livestock and Irrigation
MOST	Malawi Oilseeds Sector Transformation
MoU	Memorandum of Understanding
Mozefo	Mozefo - Fórum Económico e Social de Moçambique
MSU	Michigan State University
M&E	Monitoring and Evaluation
NAIPs	National Agriculture Investment Plans
NAPAS	New Alliance Policy Acceleration Support
NEPAD	New Partnership for Africa's Development
NGO	Non-Governmental Organization
NLD	National League for Democracy
NRCA	Normalized Revealed Comparative Advantage
NSO	National statistics office
PE	Partial Equilibrium
PIM	Policy, Institutions and Markets
PMO-RALG	Prime Minister's Office Regional Administration and Local Government
PRePoSAM	Projet de Recherche sur la Politique de Sécurité Alimentaire
RAIP	Regional Agriculture Investment Plan
R&D	Research and Development
REC	Regional Economic Communities
ReNAPRI	Regional Network of Agricultural Policy Research Institutes
ReSAKSS	Regional Strategic Analysis and Knowledge Support System
RALS	Rural Agricultural Livelihood Survey
SADC	Southern African Development Community
SDG	Sustainable Development Goals
SEs	Section d'Enumération or in English enumeration areas
SNAPP	Science for Nature and People Partnership
SPAM	Spatial Allocation Model
SSA	Sub-Saharan Africa
SUA	Sokoine University of Agriculture
SWAT	Soil and Water Assessment Tool
UEMOA	Union Monétaire Ouest Africaine
UFL	University of Florida
UoF	University of Florida
UP	University of Pretoria
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
USG	United States Government
WA	West Africa
t	

WUR	Wageningen University and Research Centre; Netherlands
YAU	Yezin Agricultural University

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EXECUTIVE SUMMARY: KEY ACCOMPLISHMENTS

Under Components 1 and 2, FSP core support in this final year has focused on Mali and Zambia. Some residual activities were also supported in Myanmar through carry-over funds from previous year.

In Mali, the FSP team engaged in sustained efforts to strengthen local institutional capacity for policy analysis. MSU and IER conducted a series of studies on the Malian's fertilizer subsidy program, the top priority expressed by the Malian Ministry of Agriculture. Other policy topics covered by the team included pesticide, agricultural policy system, dairy processing sector, and trade barriers. Seven agricultural university students at IPR and Université de Ségou conducted field work and participated in training sessions on data organization and analysis over the summer. MSU graduate student, Ryan Vroegindewey, successfully defended his doctoral thesis entitled "Patterns of Participation in African Peri-urban Dairy Markets: Analyses of Consumers, Retailers, Processors, and Producers in Mali". In addition, Malian co-authors and MSU graduate student contributed to ten research papers, four policy briefs, and three peer-reviewed journal articles over the period of October 1 2018 to September 2019.

In Zambia, FSP continued work on land-related issues including the role of medium scale farmers in driving agricultural transformation as well as the effects of access to land and other income-generating opportunities on youth's likelihood of migrating. Work on input subsidy-related issues continued to be a key area of collaborative research and outreach, with FSP researchers and collaborators publishing work on the effects of Zambia's input subsidy program on sustainable agricultural intensification in a high impact, multidisciplinary journal. Several other collaborative studies between FSP researchers and IAPRI collaborators are en route to peer reviewed publication. Drawing on work from Zambia and elsewhere, FSP researcher T.S. Jayne delivered the opening keynote address at a session devoted to best practices for input subsidy programs at the African Green Revolution Forum (AGRF) in September 2019. The full-day event brought together senior members of Ministries of Finance and Agriculture from nine African countries, including Zambia. Extensive work in the climate smart agriculture and natural resource management areas was completed and presented at outreach events both in Lusaka and at the provincial level. And FSP researchers contributed to enhancing the quality of the 2019 Rural Agricultural Livelihoods Survey data and led numerous technical trainings to strengthen local policy analysis capacity in Zambia.

In **Tanzania**, with support from the FSP ASPIRES project, the Private Sector Development (PSD) and MIU teams collaborated to produce seven commodity value chain briefs for livestock and fisheries to provide evidence-based information to assist in decision making by MoLF senior leadership. Further, the Ministry of Livestock and Fisheries (MoLF) abolished 10 types of fees and charges in dairy and poultry, which was among the policy reforms under review in the blueprint for livestock sector.

Under Component 3, the synthesis work on regulatory policies (e.g., pesticides) has continued to receive much interest and attention from policy makers in the West Africa region. Researchers engaged in this work have succeeded in engaging interest and resources from a variety of stakeholders including major private sector groups, regional testing laboratories, key regulators (CILSS Institut du Sahel (INSAH), Comité Sahélian des Pesticides (CSP), Union Monétaire Ouest Africaine (UEMOA), Economic Community of West African States (ECOWAS), United States Agency for International Development (USAID) and United States Department of Agriculture's (USDA's) Foreign Agricultural

Service (FAS). Research outputs on the micro-nutrient case studies are in advanced stages of being submitted or published in peer reviewed journals. A chapter for a book on food policy analysis and methods featuring the Kaleidoscope model has been submitted. During this period, a year-long research effort on the impacts of the devolution of agriculture in Ghana was completed and the final report presented to key stakeholders.

A methodology has been developed by the C3 team for evaluating the effectiveness of development planning in terms of the alignment and linkages of (i) international, African and regional commitments and (ii) national transversal development imperatives, (iii) the quality of the National Agriculture Investment Plans (NAIPs) in attaining the Malabo and Sustainable Development Goals (SDG2) targets related to food security and nutrition, and (iv) assessing the gender equality components against commitments. This methodology has been integrated into the Regional Strategic Analysis and Knowledge Support System (ReSAKSS) NAIP support tools and forms part of the Comprehensive Africa Agriculture Development Programme (CAADP). The institutional architectures, indicators and policy changes in the second generation NAIPs are under analysis using the framework provided above.

Activities under Component C4a (i.e., upstream agrifood system transformation) have continued to revolve around six main global themes and policy engagement activities (fertilizer policy/sustainable agricultural intensification, land dynamics and land tenure/registration policies, mechanization, youth engagement in agrifood systems in an era of rapid food systems transformation, finance policies, and seed system policies). The work on sustainable intensification strategy, resilience, and fertilizer policy continued to engage African policy makers and researchers on: (i) options for more effective design and implementation of Input Subsidy Programs (ISPs) and market oriented fertilizer promotion programs, (ii) options for arresting land degradation challenges and promoting African farmers' use of sustainable land management practices, and (iii) options for promoting resilience and climate smart agriculture. C4a researchers are liaising extensively with pan-African organizations and national governments through the preparation of (African Development Bank) AFDB policy strategies, collaboration with Ministries of Agriculture and Lands on national plans and policy papers, and country studies examining progress in the design and implementation of land policies to protect land rights of individuals and local communities in selected pilot countries. Coverage of C4a land research has also featured prominently in mainstream media including the front page article in New York Times, two articles in The Economist on the rise of medium-scale farms in Africa, and two articles in a special issue of Foreign Affairs. These works provide evidence that C4a research has gained traction in country and regional strategies as well as international press.

In partnership with CGIAR's Research Program on Policy, Institutions and Markets (PIM), FSP's work on land tenure and land registration policy has also supported the AU- Land Policy Initiative (LPI) in Monitoring and Tracking Progress in implementation of the Africa Union (AU) Declaration on Land Issues and Challenges. C4a team members also helped develop an Africa-wide guideline (toolkit) for Monitoring and Evaluation of Land governance in Africa, which outlines key thematic areas, principles and indicators that form the basis for tracking finalized and validated Africa Land Policy Center (ALPC). Moreover, as part of the policy engagement activity under the FSP project, FSP-funded researchers have had substantial input into potential land policy reforms in Ethiopia.

Progress was made toward the completion of two books: one on Africa's Rural Transformation, (eds.

Jayne, Chamberlin, and Benfica) documenting Africa's recent progress in transforming its rural economies; the other being a book on agricultural mechanization, which includes the writing of the synthesis of common and collective messages across the chapters, a summary of mechanization growth in Francophone and Lusophone African countries, and main results of a field study conducted in Ghana. The international conference on South-South Knowledge Sharing on Agricultural Mechanization was held in Addis Ababa in October, by IFPRI, International Maize and Wheat Improvement Center (CIMMYT), and Ethiopian Agricultural Mechanization Forum, where researchers, government officials, private sector from Asia and African countries, and international Non-Governmental Organizations (NGOs) and donors came together and shared their experiences of mechanization sector growths in their respective countries. Work on empirical assessments of the demand for mechanization and its heterogeneity across locations in Nigeria and Ghana was initiated. Finally, under the joint funding with IFPRI's PIM and Ghana Strategy Support Program, rapid field assessment was conducted in Ghana in January-February to understand the experiences of the early phase of the second (Agricultural Mechanization Service Center) AMSEC program. Key research findings on market failures and knowledge failures uniquely associated with mechanization sector in Africa, as well as the impact of mechanization on crop diversification, with potential implication on dietary diversity, in Nigeria, have been published in peer-reviewed journals or publication outlets

Other major activities supported under C4a and have been concluded include: A) exploring the relationships between **agricultural transformation and youth employment** in Africa's economic transformation. B) the analysis of **finance policies** to determine how they relate to the policies in the food system and its transformation. This activity also promotes the development of finance policies, institutions and instruments that are sensitive to and can unlock the transformation of the food system. C) Research and engagement on **seed system policies** related to vegetatively propagated crops and farmers' willingness to pay for quality seeds on different crops.

Under the **Component C4b** (policy implications of downstream agrifood system transformation), FSP team has contributed to (a) documenting the rapid changes underway in agrifood systems of the African continent and (b) helping policy makers design programs and policies that promote rapid but equitable growth in the systems. In this reporting period, the C4b team has continued to target 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.

Leveraging Associate Award funds, the C4b Nigeria team has conducted surveys in Oyo state with a focus on the following nodes along the poultry-maize value chain: (a) Poultry producers, (b) Feed mills, (c) Maize wholesalers, (d) Maize farmers, and (d) Poultry retailers. A report on maize wholesalers was finalized, and a report on the nature of labor demand across the different nodes is underway alongside analysis of the various nodes. Additional work on Aflatoxins along the maize and poultry value chain was conducted with Nigerian partners from the Federal University of Agriculture.

Other activities in which C4b team contributed include: a) leadership to the International Fund for Agricultural Development (IFAD) Rural Development Report 2019, which draws heavily on both the diet change and employment work that has been done under C4b; b) leadership to the report released by the Alliance for a Green Revolution in Africa (AGRA), titled "The Africa Agriculture Status Report (AASR): The Hidden Middle: A Quiet Revolution in the Private Sector Driving Agricultural

Transformation." and c) engagement in Tanzania on oilseeds policy, and agroprocessing strategy. Finally, our country Chief of Party (COP) in Tanzania continued to engage with local private sector and policy makers on policy issues in the sunflower sector, as government became extremely focused on how to improve the contribution of the sunflower sector to agricultural growth and modernization, and to the growth of agribusiness, especially food processing.

Under Component 5, FSP team at IFPRI and the University of Pretoria continued to provide 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. Activities conducted in this reporting period under C5 include two sub-activities: a) Support to Global Food Security Strategy (GFSS) in target country transition strategy: IFPRI supported the development of a GFSS transition strategy that evaluates country progress towards an end state where they can transition out of GFSS target country status. FSP provided technical back-stopping in and data analysis for numerous discussions to select indicators to monitor target country progress and developed a tool to help visualize country progress in the form of a scorecard; b) Mapping policy change in food security and nutrition: The work documents policy changes, new policies passed with regards to food security, food security and nutrition or nutrition. A methodology developed for evaluating the effectiveness of development planning in terms of the alignment and linkages has been integrated into the ReSAKSS NAIP support tools and forms part of the CAADP Technical network support. Additionally, templates for the systematic analysis of the monitoring and evaluation frameworks, policy landscape and changes and institutional changes between the two generations of NAIPs was developed and the University of Pretoria (UP) team has identified the indicators relevant to food security and nutrition from global initiatives such as the SDGs and CAADP Results Framework. Reviews of 11 country NAIPs, with in-depth reviews of Malawi, Nigeria and Liberia were completed.

The management team at MSU, IFPRI, and UP has continued to serve as a liaison between USAID and the FSP consortium partners, and has played a coordination role across FSP work streams, especially between the country and global components. Follow-up surveys for the two qualitative Monitoring and Evaluation (M&E) indicators was initiated in Zambia and Tanzania, and analysis of the follow-up survey for these indicators was completed in Malawi. The buy-in activity on agriculture sector assessment in Venezuela was completed in the reporting period. Work in support of two other buy-ins continued. These include—a) the development of Capacity Development in Agricultural Innovation System (CDAIS) toolkit; and c) Literature reviews on GFSS learning agenda on market systems and policy systems. In this final year, several priority tasks and activities were identified, and cross-component teams were formed to work on these tasks. These other tasks include: a) End of project/lessons learned/synthesis document; b) Better communication of policy influence and people level impact; c) Final lessons/approaches on sustainable local policy research capacity; c) C4(a) and C4(b) joint findings/recommendations (implications of structural transformation from farm to fork); d) C4(a) land related research findings/recommendations/policy actions; e) Synthesizing policy findings and lessons on gender, nutrition, and other cross-cutting themes. Draft Reports from four of these Task groups were completed in February and shared with USAID. Major findings from these Task Groups were also presented at the Reflection Workshop organized by FSP in March. After going through several iterations of review and revisions, the final versions of three Synthesis Reports have been posted on the FSP website. Review and revisions of the last synthesis report on capacity strengthening is still undergoing and will be posted on the website by December.

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, we envision that improved policies will accelerate and deepen the FTF-wide Intermediate Results of increased agriculture productivity, improved market access, increased public and private investment, new rural farm and non-farm employment, and improved resilience.

FSP Approach

FSP considers the agrifood chain as a complex system of interactions between a variety of input dealers, farmers, traders, transporters, processors, retailers, and others that link farmers to consumers. FSP addresses transformations that impact the entire agrifood system. Collaboration with and between stakeholders in host countries is essential. Scientists and research organizations, policy-makers, private sector, food production groups, and media are involved with the food security policy process. The scale is local, national, regional or global.

The overall project is organized around three types of activities: policy-relevant agrifood system research, policy system analysis, and country level support for policy change. These topics interact and inform each other. They are articulated with major cross-cutting themes: climate change, gender, nutrition and youth employment.

FSP Organization and Target Geographies

FSP Activities are 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. Over the past 6 years country-specific activities in these regions have been supported through buy-ins and Associate Awards, which are implemented in close collaboration with global components. A list of ongoing and completed buy-ins and associate awards are included in Annex A.

Structure for this Report

This final year FSP annual report is organized in three major Sections. Section 1 includes description of activities by Components 1 to 5, following a similar structure as in the past Reports (and referred as Task 1). Section 2 includes a description of new tasks and priority activities that were identified specifically for implementation in the final workplan. These include:

Task 2: End of project/lessons learned/synthesis document

Task 3: Better communication of policy influence and people level impact

Task 4: Final lessons/approaches on sustainable local policy research capacity

Task 5: C4(a) and C4(b) joint findings/recommendations (implications of structural transformation from farm to fork)

Task 6: C4(a) land related research findings / recommendations / policy actions

Task 7: Synthesizing policy findings and lessons on gender, nutrition, and other cross-cutting themes

Section 3 gives a progress report on additional activities included in the amended workplan (submitted to USAID in July 2019 and then revised in October 2019) that extended the final year workplan from June 30 2019 to January 14, 2020.

SECTION 1: DETAILED ACTIVITIES AND ACHIEVEMENTS—TASK 1

COMPONENT C1/C2 WEST AFRICA

Introduction: FSP has continued to provide core funding to support the long-term program of policy research and capacity building in Mali (FSP Workplan Activity 5). This year was the final year of commitment of core funding to complement the activities planned under a five-year associate award from USAID/Mali. The Projet de Recherche sur les Politiques de Sécurité Alimentaire (PRePoSAM) includes a program of applied policy research, outreach and capacity building focusing on policy issues important to the Malian government and to USAID/Mali.

Activity 5. Support to national programs: Mali

Description: MSU team members (Haggblade, Thériault, Smale, Koné and Traoré) worked closely with several key local institutions – the Institut d'Economie Rurale (IER), Institut Polytechnique Rural (IPR), Université de Ségou, Cellule de Planification et de Statistiques du Secteur Développement Rural (CPS/SDR), and Observatoire des marchés agricoles (OMA) – on a program of collaborative policy research and capacity building.

Achievements: The FSP team has developed strong working relationships with key partner institutions in Mali where MSU's team has engaged in sustained efforts to strengthen local institutional capacity for policy analysis. Currently, MSU and IER are conducting joint research on the Mali's fertilizer subsidy program, the top priority expressed by the Malian Ministry of Agriculture. Given regular newspaper reports of inefficiencies and mismanagement in the subsidy program, our carefully tailored survey work has and will continue to provide empirical evidence over the coming year to policymakers anxious to reform this system. One of our long-term researchers, Amidou Assima, completed his MSc thesis at the University of Reading by examining the effects of fertilizers subsidies on the diets of irrigated rice farmers in the Niger Delta region. His results indicate that subsidized fertilizers have positive effects on the overall diversity of women's diets at the household level in the Niger Delta region. Longer term, our lead collaborator at IER will earn his PhD by preparing a thesis based on these analytical results.

Collaborators from OMA, IER, and CPS/SDR received a training on multi-market model to evaluate the consequences of trade barriers on urban food prices and calorie consumption of vulnerable groups. Training exercises with simple single market models utilized Excel, while the full multi-market model training utilized General Algebraic Modeling System (GAMS) optimization software.

In collaboration with OMA, the FSP team conducted a survey on pesticide across several markets in Mali. The survey aims to better understand the extent and availability of fraudulent pesticides in Mali. In addition, a workshop to discuss the human and environmental risks related to pesticide use with a group of experts was held in Bamako in June, 2019.

Seven agricultural university students from IPR and University of Ségou were mentored during the 2018/2019 academic year by FSP. They participated in writing and statistical workshops and conducted one month of primary field data collection this summer. All seven successfully defended their theses in October 2019.

MSU faculty and Malian scientists co-authored a series of professional publications over the past six months. Though the specific policy issues of concern will inevitably continue to evolve over time, these lasting investments in Malian human skills represent a durable contribution to improved local scientific capacity to inform ongoing policy debates over time.

Outputs:

Meetings:

- USAID/Mali Partnership Statement of the Feed the Future (FtF) Agriculture and Economic Growth Program (AEG)-Bamako, July 2019.
- Visit of the US Ambassador, Dennis B. Hankins, at the Université de Ségou, Ségou, September 2019.
- Mali risk assessment of pesticide use workshop, Bamako, June 2019.

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- Dissertation/Thesis:
- Ryan Vroegindewey defended his PhD dissertation successfully at Michigan State University. The title of his dissertation is: Patterns of Participation in African Peri-urban Dairy Markets: Analyses of Consumers, Retailers, Processors, and Producers in Mali.
- Mamadou Sikasso successfully completed an internal defense of his thesis at the University of Namur.
- Amidou Assima completed his MSc thesis at the University of Reading. The title of his thesis
 is: Effects of fertilizers subsidies on irrigated rice farmers: women's diet quality in the Niger
 Delta, Mali.

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Research Papers:

- Haggblade S., Koné, Y., Traoré, A., and Traoré, P. 2019. Réduction des marges commerciales des produits agricoles: Implications pour la sécurité alimentaire des groupes vulnérables au Mali. Feed the Future Innovation Lab for Food Security Policy, Research Policy Paper 129. East Lansing. Michigan State University.
- Vroegindewey, R., Richardson, R., Ortega, D., and Theriault, V. 2019. Consumer and Retailer Preferences for Local Dairy Products: Evidence from Stacked Choice Experiments in Urban Mali. Feed the Future Innovation Lab for Food Security Policy, Research Policy Paper 134. East Lansing. Michigan State University.
- Haggblade, S., M. Smale, A. Assima, N. Keita, A. Kergna, Y. Kone, V. Theriault and A. Traore. 2019. Overview and Results of a Farm Household Survey in two agro-ecological zones of Mali, 2017/18.2019. Feed the Future Innovation Lab for Food Security Policy, Research Policy Paper 140. East Lansing. Michigan State University.
- Kone, Y., V. Theriault, A. Kergna, and M. Smale. 2019 La Subvention des Engrais au Mali: Origines, Contexte et Evolution. Feed the Future Innovation Lab for Food Security Policy, Research Policy Paper 142. East Lansing, Michigan State University.
- Vroegindewey, R., Thériault, V., Richardson, R., Chung, K. 2019. What Drives Food Processor Use of Local Versus Imported Inputs? Evidence from the Malian Dairy Sector. Feed the Future Innovation Lab for Food Security Policy, Research Policy Paper 147. East Lansing: Michigan State University.
- Smale, M., V. Theriault, and R. Vroegindewey. 2019 Dietary Patterns in Mali: Implications for Nutrition. Feed the Future Innovation Lab for Food Security Policy, Research Policy Paper

148. East Lansing, Michigan State University.

Policy Briefs:

- Koné, Y., Kergna, A., Traoré, A., Keita, N., Haggblade, S., Thériault, V., and Smale, M. April 2019. Constats empiriques sur le programme pilote de subvention e-voucher au Mali, Feed the Future Innovation Lab for Food Security Policy, Bulletin Politique 83. East Lansing: Michigan State University.
- Haggblade S., Koné, Y., Traoré, A., and Traoré, P. April 2019. Impact des tracasseries routières sur les populations vulnérables au Mali. Feed the Future Innovation Lab for Food Security Policy, Bulletin Politique 87. East Lansing, Michigan State University.
- Kone, Y., A. Kergna, A. Traore, N.Keita, V. Theriault, M. Smale, S. Haggblade. 2019. Regard sur les origines de la subvention des engrais au Mali. Feed the Future Innovation Lab for Food Security Policy, Bulletin Politique 95. East Lansing, Michigan State University.

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- Peer-reviewed journal articles:
- Haggblade, S., A. Diarra, W. Jiang, A. Assima, N. Keita, A. Traore and P. Traore. Fraudulent pesticides in West Africa: a quality assessment of glyphosate products in Mali. International Journal of Pest Management (accepted).
- Sissoko, M., M. Smale, A. Castiaux, and V. Theriault. 2019. Adoption of new sorghum varieties in Mali through a participatory approach. Sustainability 11 (7): 4780; doi:10.3390/su11174780

Field work:

- Pesticide Inventory, June July 2019
- Data Analysis:
- Impacts of the fertilizer subsidies
- Pesticide quantity and quality

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Capacity building:

- Multi-market training.
- Research writing training.
- Statistical analysis with Excel training.
- Seven Malian undergraduate student theses completed with project support in 2019
- Our lead collaborator at IER, Alpha Kergna, is doing a PhD at the University of Thies in Senegal. He uses the farm household data collected jointly with MSU faculty under the Mali Associate award for his dissertation.
- Our project statistician, Amidou Assima, successfully completed a MSc program at the University of Reading. His used the Mali farm household data set for his Master thesis.
- Ryan Vroegindewey completed a PhD at MSU. His dissertation focused on dairy processing and consumer preferences for dairy products in Mali.

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Presentations:

 MSU faculty member, Steve Haggblade gave a presentation on "Fraudulent pesticides in West Africa: quality comparisons and policy implications" at a Croplife regional hub and regulatory meeting in Dakar, April 2019.

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- MSU's PhD candidate, Ryan Vroegindewey presented a poster on "How to improve the competitiveness of the Malian dairy sector" at the symposium entitled "Milk, driver of development", organized by ISRA, CIRAD and INRA in Dakar (Senegal), June 2019.
- MSU faculty member, Steve Haggblade gave a presentation on "Pesticides frauduleux en Afrique de l'Ouest: croissance des marches et faiblesse du suivi post-homologation" at a workshop organized by the US Department of Justice in Dakar, June 2019.
- MSU faculty member, Steve Haggblade gave a presentation on "Défis du contrôle des pesticides frauduleux au Mali et en Côte d'Ivoire" at a workshop organized by the US Department of Justice in Dakar, June 2019.
- MSU faculty member, Melinda Smale, led a session on "Farm Transformation in Sub-Saharan Africa: Input Use and Intrahousehold Consequences" at the Agricultural & Applied Economics Association annual meeting in Atlanta, July 2019.
- MSU faculty member, Veronique Theriault presented key findings on the effect of the fertilizer subsidy policy on the diet quality of Malian farm women at the Agricultural & Applied Economics Association annual meeting in Atlanta, July 2019.
- MSU graduate student, Ryan Vroegindewey presented key findings on consumer and retailer preferences for local dairy products in urban Mali at the Agricultural & Applied Economics Association annual meeting in Atlanta, July 2019.

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• Outcomes:

In addressing concerns about Mali's fertilizer subsidy system, MSU and IER collaborators have engaged continuously with key implementing and funding agencies to highlight ongoing problems in implementing fertilizer subsidy reforms. In addressing growing concerns about the potential dangers posed by illegal pesticides, MSU continues to collaborate with coalitions of stakeholders – farmer groups, honest private sector traders and regulators -- who share a common interest in reducing the prevalence of fraudulent farm inputs. In conducting gender analysis, MSU raises awareness and advocates for gender-sensitive policies. By bringing new empirical evidence on diet patterns and diet diversity, our findings contribute to inform the policy discussion on how to improve food and nutrition security.

Challenges and updates:

Security remains an ongoing challenge, limiting travel to and throughout Mali. The Government of Mali is confronted with two crises: 1) the continuing violence in the north of the country and 2) the growing violence in the center part of the country.

Status Report on Data Management Plan:

#	Type		Anticipated time frame for a scholarly output based on this dataset?	When will it be registered in DDL?	Has this already been registered to the DDL? (Y/N)
1	2009 Social Accounting Matrix	Gambia constructed from national accounts data and other existing data.		Aug-16	Yes
2	2009 Social Accounting Matrix	ounting national accounts data and		Aug-16	Yes
3	3 2009 Social Liberia constructed from national accounts data and other existing data.			Aug-16	Yes
4	4 2009 Social Accounting Matrix Sierra Leone constructed from national accounts data and other existing data.			Aug-16	Yes
5	5 Farm Household survey featuring household asset summaries and plot-level information on land allocation, Sudan cropping, input use, soil savanna of Mali, 2014/15		April 2016	December 2016	Yes
6	Inventory of processed dairy processed and cereal products produced foods, 2016 and sold in Mali		July 2017	January 2018	Yes
7	7 M&E Policy System Baseline Survey of Mali policy system and processes. Baseline Indices		July 2017	February 2018	Yes
8	Farm household survey in two agro- ecological	Household survey featuring asset summaries and plot-level information on land allocation, cropping, input use and outputs	February 2019	Submitted in June 2019 but rejected because it	Published on Havard Dataverse. Working to include it on

#	Dataset Type	Brief description	Anticipated time frame for a scholarly output based on this dataset?	registered in DDL?	Has this already been registered to the DDL? (Y/N)
	zones, 2017/18			is in French	DDL.
9	Women diet diversity	Survey on the diet diversity of rural women in two agro- ecological zones	June 2019	in June 2019 but rejected because it	Published on Havard Dataverse. Working to include it on DDL.
10	Consumer preferences for dairy	Survey of Malian urban consumers' preferences for dairy products	June 2019	in June 2019 but rejected because it	Published on Havard Dataverse. Working to include it on DDL.

COMPONENT C1/C2 ASIA

Introduction: FSP core support in Asia is focused on Myanmar. At the beginning of April 2016 a new government took office in Myanmar under the leadership of Aung Sang Suu Kyi, head of the National League for Democracy (NLD). Agricultural development was a top priority in the NLD election manifesto. Now in office, the government is seeking to facilitate rapid, smallholder-led agricultural growth for inclusive rural economic growth. The challenges are formidable after more than five decades of top-down socialist management of the economy, and almost three decades of international isolation. With the new government in place USAID Myanmar considers that the country has now entered a "transition" phase. All remaining sanctions against Myanmar were lifted effective October 7, 2016.

FSP core support to Myanmar in the first couple of years had focused on laying the foundation for evidence-based policy analysis through key pieces of empirical research on agricultural value chains and rural livelihoods and putting in place essential missing elements in policy architecture. Coinciding with the final two years of FSP core support (FY16-17), the focus had shifted to working closely with Ministry of Agriculture, Livestock and Irrigation (MOALI) Department of Planning, where a new Agricultural Policy Unit (APU) has been established in response to an FSP proposal developed by IFPRI and MSU. The APU serves as a critical entry point for introducing evidence-based policy analysis, prioritizing public investment, and to support MOALI's functional transition to a facilitator/enabler of the private sector.

A top priority for MOALI is to develop an improved irrigation strategy. Irrigation is critical to achieving increased smallholder productivity and diversification into high value enterprises, while at the same time adapting to climate change. Historically, large investments have been made in dams but smallholder access to irrigation water, and technical support for diversification and productivity gains, remains underdeveloped. Myanmar has been identified as one of the most vulnerable countries in the world to climate change and hence irrigation strategy is key to improved livelihood resilience. In addition, irrigation is a viable option in alleviating the vulnerability of crop production brought about by erratic rainfall during monsoon season. Rainfed crop production in the central dry zone is subject to greater risk of precipitation variability. Through partial core funding in FY 17, Activity 4 studied the potential of irrigation development in Myanmar. Results showed that given land suitability, economic profitability, abundance of water resources and market potential for irrigated crop products, irrigation can expand the potential area for crop production to as much as 3.1 million hectares during monsoon while this ranges between 0.5 million and 1.3 million hectares during the dry season. Furthermore, irrigation development encourages crop diversification, a useful strategy to improve farmer's income. Analysis of the results suggested that irrigation will ensure production of pulses, oil crops and other important vegetables. Complementary investments are needed to enhance access to improved varieties, extension, and financial services.

Following activities were completed in this reporting period through residual carry-forward funds from FY 16. No funds from FY 17 or FY 18 were allocated towards any activities in Myanmar.

Activity 4

Description: Research study on "Strategic Planning for Irrigation Development in Myanmar" 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. This activity will be led by Mark Rosegrant from IFPRI.

Achievements:

- A draft technical report illustrating the analytical results and interpretation of the irrigation potential in Myanmar was completed in March 2019 and is under review
- Policy Note based on the technical report is under preparation

Outputs:

Data Analysis:

- Ex-ante suitability analysis for small-scale irrigation scheme: Completed
- High resolution 2010 crop distribution maps for Myanmar: Completed
- Hydrological and crop simulation model development: Completed
- A national-scale hydrological and crop simulation model which covers major agricultural area of Myanmar was set-up. The development of the model was based on codes of the Soil and Water Assessment Tool (SWAT). The model is used to provide spatial temporal estimates (including under future climate) for the following variables to inform the analysis:
- Abundance of water resources available for irrigation development;
- Irrigation water demand of crop plants; and
- Attainable yields of irrigated crops
- The model serves as main predictive modeling tool to support our strategic irrigation planning analysis.

Outcomes:

- Promotion and recognition on the usefulness of compiled data and other information collected by government agencies.
- Enhanced interaction among development partners and with government agencies
- Better understanding on the current situation of the agriculture sector in Myanmar

Challenges:

• Lack of information or unable to secure information on the planned irrigation dams. This information is important in the second step of hydrological-economic modeling analysis. Currently, this type of information is still not available/accessible. We will continue to make effort to collect these data.

Activity 6

Description: Capacity strengthening for new Agricultural Policy Unit in Ministry of Agriculture, Livestock and Irrigation.

Outputs:

Nothing to report in this reporting period.

Activity 7

Description: Assessing Trade Comparative Advantage among Myanmar's Neighboring Countries: Challenges and Opportunities for Myanmar's Agricultural Exports. (Key researcher: Kevin Chen, IFPRI)

Output:

A Working Paper based on the comparative advantage analysis has been completed and published as an IFPRI Discussion Paper 1139 and FSP Research Paper (forthcoming). This paper provides a better understanding of Myanmar's agricultural export performance against its competitors in different regions and determines the policy actions for improving Myanmar's export performance. The Normalized Revealed Comparative Advantage (NRCA) index is computed to compare the agricultural competitiveness between Myanmar and its competitors from 2007 to 2016. The results show that: 1) Myanmar's agricultural export sector enjoys comparative advantage in the global market, however, it is not competitive when compared with its major competitors; 2) Myanmar reveals high level of NRCAs in black gram & pigeon peas, natural rubber, sesame seeds, rice, and frozen fish, while has a low NRCAs in crustacean, dried fruits; and suffers a loss of NRCAs in bananas, fish fillet, maize, nuts, and watermelon. Three major policy implications are drawn, including diversifying Myanmar's export portfolio, strengthening export promotion and development, and attracting foreign direct investment to upgrade the cross-border value chain.

Status Report on Data Management Plan:\a

#	Dataset Type	Brief description	Anticipated time frame for a scholarly output to be completed based on this dataset?	When will it be registered in DDL?	Has this already been registered to the DDL? (Y/N)
1	Myanmar Agri- Aquaculture Survey (MAAS)	Household Data Set	June 2017	April 2019	Yes
2	Rural Economy and Agriculture in the Dry Zone (READZS)	Household Data Set	May 2018	April 2019	Yes
3	Rural Economy and Agriculture Dry Zone	Supplemental Community Survey		April 2019	Yes
4	Dry Zone Seed Demand and Varietal Adoption Survey	Household Data Set	May 2019	July 2019	Yes
5	Shan State Agriculture and Rural Economy Survey	Household Data Set	April 2018	May 2019	Yes

#	Dataset Type	Brief description	Anticipated time frame for a scholarly output to be completed based on this dataset?	When will it be registered in DDL?	Has this already been registered to the DDL? (Y/N)
6	Shan Supplemental	Community Survey		May 2019	Yes
7	Mon State Rural Livelihoods Survey	Household Data Set	March 2017	April 2019	Yes
8	Yangon Mechanization	Cluster Survey		Sept 2019	Yes (nonpublic status)
9	Rural Economy and Agricultural Agriculture Dry Zone Machinery Off-Farm Surveys Suppliers			Sept 2019	Yes (nonpublic status)
10	10 Rural Economy and Agricultural Agriculture Dry Zone Machinery Off-Farm Surveys Outsourcing Service Providers			Sept 2019	Yes (nonpublic status)
11	Rural Economy and Agriculture Dry Zone Off-Farm Surveys	ture Dry Zone		Sept 2019	Yes (nonpublic status)
12	Rural Economy and Agriculture Dry Zone Off-Farm Surveys	Zone oilseed traders		Sept 2019	Yes (nonpublic status)
13	Farmer willingness to pay for quality seeds	quality seed	November 2019	December 2019	No
14	Farmer demand for quality seed and varietal adoption	RRC communities		Sept 2019	Yes (nonpublic status)
15	Shan Agriculture and Rural Economy Off- Farm Surveys:	Maize Traders		Sept 2019	Yes
16	Shan Agriculture and Rural Economy Off- Farm Surveys:	Agricultural Input Suppliers		Sept 2019	Yes

#	Dataset Type	Brief description	Anticipated time frame for a scholarly output to be completed based on this dataset?	When will it be registered in DDL?	Has this already been registered to the DDL? (Y/N)
17	Shan Agriculture and Rural Economy Off- Farm Surveys:	Agricultural Machinery		Sept 2019	Yes (nonpublic status)
18	Livestock Value Chain Survey:	Pig and Poultry Farmers		Dec 2019	No
19	Livestock Value Chain Survey:	Feed Distributors			Study not implemented
20	Livestock Value Chain Survey:	Wholesalers/Ret ailers			Study not implemented

[\]a This table includes all the datasets generated by the Myanmar country program. Only a sub-set of these were partially funded with core support. A majority of these datasets were collected under the Burma Associate Award.

COMPONENT C1/C2 EASTERN AND SOUTHERN AFRICA – MALAWI

The activities of FSP in Malawi since FY2015 were primarily carried out using funding through an Associate Award from USAID/Malawi for the New Alliance Policy Acceleration Support: Malawi (NAPAS:Malawi) project. The NAPAS:Malawi project ended on 27 February 2019 during this reporting period. Under the project, the FSP partners supported the government of Malawi as it worked to implement the policy reform agenda to which it committed in late-2013 under the New Alliance Country Cooperation Framework for Malawi. Overall, only limited core resources from the global FSP project have been used in FY 2019 to support FSP Components 1 and 2 activities in Malawi.

NAPAS:Malawi activities that focused on technical support for policy formulation during reporting period included:

- NAPAS staff were involved with the development of a new Agricultural Extension and Advisory Services Strategy under the leadership of the Department of Agricultural Extension Services (DAES) of the Ministry of Agriculture, Irrigation and Water Development (MoAIWD). A validation workshop was held on the draft Strategy in November 2018 that involved NAPAS participation.
- Also in November 2018, NAPAS was involved in preparing the draft National Fertilizer Policy
 that was submitted by MoAIWD for review by the Office of the President and Cabinet. The
 formulation of the fertilizer policy is an effort led by the Department of Agricultural Research
 Services (DARS) with whom NAPAS has been working since 2015. Consultations on the
 Policy co-organized by NAPAS and DARS have involved over 600 stakeholders since 2015.
 The review of the Policy by Cabinet is one of the last steps in the formulation process, but is
 still pending.
- In parallel, the drafting of a Fertilizer Bill that is aligned with the content of the draft National Fertilizer Policy began during the reporting period. NAPAS and DARS staff conducted a 'write' shop on the draft Bill over three days in late January 2019.
 - Starting in 2016, NAPAS has worked in support of DAES to develop a Farmer
 Organization Development Strategy. During the reporting period, NAPAS staff with
 DAES further refined the draft Strategy in readiness for its submission to MoAIWD
 senior management for review and eventual endorsement.
 - o The development of the Agriculture Sector Food and Nutrition Strategy (ASFNS) has involved the engagement of DAES, the USAID-funded Strengthening Agricultural and Nutrition Extension in Malawi (SANE) project, the Department of Nutrition and HIV/AIDS in the Ministry of Health, and NAPAS. This activity began in 2017. During the reporting period, the draft strategy with a costing of all of its activities was finalized. A final technical validation of the Strategy is to be conducted, after which it will be submitted to MoAIWD senior management for review and endorsement.
 - o MoAIWD requested NAPAS to review the Special Crops Act and the Agriculture General Purposes Act, two of the main agricultural laws of Malawi, to determine how they might be modified to better suit the agricultural development objectives of the country. This review was done by IFPRI staff during calendar year 2018. Following two

- validation workshops, a report on the review was published as an IFPRI Discussion Paper in December.
- O The report on the review of the legislation examines contract farming in some detail. However, stakeholders at the second validation workshop asked for further investigation of contract farming issues to better inform development of contract farming legislation. As a result, the NAPAS team conducted a study to inform development of contract farming legislation. Key informant interviews and focus group discussions were conducted in the tobacco, tea, coffee, cotton, macadamia, and sugar industries in December 2018 and January 2019. However, it is unclear how MoAIWD will use the information collected in this exercise, as the drafting of any new agricultural legislation will take place after the end of the NAPAS project.
- In early 2018, the Department of Crop Development of MoAIWD requested technical support from the NAPAS team to assist in development of a Horticulture Policy and Strategy. A sequence of drafts of the Policy were developed between October 2018 and February 2019 through consultative workshops. This initial draft of the Policy was to have been reviewed internally by MoAIWD senior management before regional stakeholder consultations will be held on its contents across the country later in 2019.

The policy communication activities of NAPAS: Malawi between October 2018 and the end of the project in February 2019 included:

- Producing a second NAPAS project newsletter in October 2018. This covered some of the important activities that were done by the project since April 2018.
- NAPAS was requested by USAID/Malawi to provide technical support towards dissemination
 of the African Growth and Opportunity Act (AGOA) Malawi Strategy to increase Malawian
 exports to the USA under the AGOA program. Three regional workshops were held in late
 October and early November 2018. As part of the workshop program, the NAPAS team
 presented the results of the value chain studies on macadamia, tea and mangoes, all of which
 are among the AGOA targeted crops.

No specific dedicated capacity strengthening activities were conducted under NAPAS: Malawi during the reporting period.

Status Report on Data Management Plan:

	Dataset Type	Brief description	Anticipated time frame for a scholarly output to be completed based on this dataset?	When will it be registered in DDL?	Has this already been registered to the DDL? (Y/N)
1	agriculture and food	Focus of the survey is on the quality of these policy processes in Malawi.	 FSP Working Paper on the analysis of baseline survey published January 2016. Dataset made available 	Registered on USAID DDL in March 2019, now	Yes

	Dataset Type	Brief description	Anticipated time frame for a scholarly output to be completed based on this dataset?	When will it be registered in DDL?	Has this already been registered to the DDL? (Y/N)
	processes baseline survey		online March 2019 – https://doi.org/10.7910 /DVN/GH5KOG	under review (4/19)	
2	2017/18 Malawi agriculture and food security policy processes endline survey	Resurvey of subset of respondents from several stakeholder groups that participated in the 2015 baseline survey on the same topic. Focus of the survey is on the quality of these policy processes in Malawi.	• FSP Working Paper on the results published August 2018. Dataset made available online March 2019 – https://doi.org/10.7910/D VN/9PQCET	Registered on USAID DDL in March 2019, now under review (4/19)	Yes
3	Commodity Balance Sheets in Malawi	Historical commodity data on supply, demand, and trade in markets for maize and soybean in Malawi.		October 2018	Yes

COMPONENT C1/C2 EASTERN AND SOUTHERN AFRICA – TANZANIA

Introduction: 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 Guiding Investments in Sustainable Agricultural Intensification in Africa (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 Government of Tanzania (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. In April 2016, the USAID/Tanzania mission confirmed that they will fund a new buy-in to FSP (\$5 million over 36 months beginning 1 May 2016) to continue and expand ongoing FSP and MSU work in Tanzania in policy research and outreach, capacity building, and policy advisory and coordination activities in collaboration with the Ministry of Agriculture, Livestock and Fisheries (MALF) and Sokoine University of Agriculture (SUA). The goal of the program is to accelerate the adoption in Tanzania of more effective policies and programs to drive broad-based agricultural sector growth, improved household food security and nutrition, and reduced poverty.

Since FY 2017 (Year 4 of FSP core project) all Tanzania country activities were funded and reported under Agricultural Sector Policy and Institutional Reform Strengthening (ASPIRES) (Tanzania mission buy-in project).

Key Activities and Outcomes to Date (with initial core support and continuing support through ASPIRES)

- Concrete legislative reform in the Local Government Finance Act (LGFA);
- Reform was achieved during 2017 by inclusion of provisions in the Finance Bill (July, 2017) to lower and harmonize the cess on crops while requiring movement to e-payment of the tax. No further legislative reforms have been pursued since this time.
- Concrete reform in the facilitating legislation or regulations governing crop and livestock boards;
- Creation of a Market Intelligence Unit (MIU) within Ministry of Agriculture, and integration of improved market analysis into policy decision making. The MIU is staffed by ASPIRES staff and staff from the Ministry of Agriculture.
- Improved knowledge base (potentially leading to changed decisions) in the areas of (a) land and inputs policy, and (b) enabling environment and programmatic support to small- and medium enterprises in the mid- and downstream of the agrifood system
- This research has continued to inform the ongoing land policy review process in Tanzania.

The work focuses on medium-scale farms and enterprises (the missing middle), effects of land access on youth decisions to migrate, land conflicts cause and effects on investment on land, and spillovers between medium- and small-scale farms. The outcome of this work is increased evidence base aimed at informing policy debates on land allocations mechanism, improved understanding of the changing land sizes and implications on agricultural productivity and commercialization.

- ASPIRES' efforts under policy coordination has been mainly through the Policy Analysis Group (PAG). In this reporting period, key activities included:
 - o Hosting the 4th AAPC in Dodoma themed "Integrating Food and Nutrition Security into Economic Transformation and Industrialization".
 - O Drafted agricultural fiscal policy recommendations and presented them in various high level policy dialogues.
 - o Held a seminar with members of Parliament in Dodoma.
- Under capacity building, ASPIRES trained key staff from MoA, SUA, PO-RALG and TFNC
 on a variety of issues, and conducted an initial round of quick assessment across 16 LGAs in
 6 agro-ecological zones.
- ASPIRES, MSU and SUA conducted collaborative policy research to improve the understanding of agricultural transformation in Tanzania in research topics including land access, food system transformation and determinants of agricultural sector transformation.
- Specifically, in FY 2019:
- With support from the FSP ASPIRES project, the MIU accelerated its activities in the
 monitoring of trends in domestic market prices for key agricultural commodities in Tanzania
 and in the neighboring countries to contribute towards evidence based decision making by
 policy makers on marketing, prices, stocks management and imports and exports.
- Project team also supported the MIU to conduct rapid market surveys and provide key recommendations to guide the Ministry's decision on the beans and onion value chains.
- It built the capacity of MIU staff by coaching and mentoring through producing market bulletins and assessing local Government fiscal policy reforms.
- With support from the FSP ASPIRES project, the Private Sector Development (PSD) and MIU teams collaborated to produce seven commodity value chain briefs for livestock and fisheries to provide evidence-based information to assist in decision making by MoLF senior leadership.
- Further, the Ministry of Livestock and Fisheries (MoLF) abolished **10 fees and charges** in dairy and poultry, which was among the policy reforms under review in the blueprint for livestock sector.
- Under nutrition policy, FSP ASPIRES project served as a technical committee member by orienting task team members on the roles, requirements and reporting templates of the National Multi-Sectoral Nutrition Action Plan (NMNAP) mid-term review.
- ASPIRES conducted a short-term training course to enhance the analytical skills of six MIU staff. Further, a total of 15 enumerators received training in preparation to conduct a farm-level horticultural survey of 170 farmers across seven regions in Tanzania.
- ASPIRES also organized a workshop on Agricultural Transformation in Horticulture to share the initial research findings with key stakeholders and highlighted farm sizes and cropping patterns; degree of investment and technology use and value-addition and processing.

Status Report on Data Management Plan

#	Dataset Type	Brief description	Anticipated time frame for a scholarly output to be completed based on this dataset?	When will it be registered in DDL?	Has this already been registered to the DDL? (Y/N)
1	Commodity Balance Sheets	Mozambique: Maize and Rice		Apr-19	Yes
2	Commodity Balance Sheets	Tanzania: Maize, Rice and Wheat		Apr-19	Yes
3	Commodity Balance Sheets	Zambia: Maize and Soybeans		Apr-19	Yes
4	Quality of Agriculture and Food Security Policy Processes, Stakeholder Survey-Baseline	Tanzania, 2016		Jun-18	Yes
5	Quality of Agriculture and Food Security Policy Processes, Stakeholder Survey-Follow-up	Tanzania, 2019	December 19	Jan-20	No

COMPONENT C1/C2 EASTERN AND SOUTHERN AFRICA – ZAMBIA

Introduction: Resources for FSP activities in Zambia under this component come from FSP core funding and a USAID/Zambia buy-in. This funding enables continued capacity building and technical support for policy system strengthening and agricultural policy research to Zambia following the end of the third phase of the Food Security Research Project (FSRP III). FSRP III created Zambia's first think tank dedicated to agricultural policy research and outreach, the Indaba Agricultural Policy Research Institute (IAPRI), and has supported its institutional capacity development over the period 2012-2017. In Year 5, FSP activities in Zambia were carried out in support of IAPRI's research, outreach and capacity building activities, and to support sustainable improvements in policy systems for agriculture. Major activities implemented in Year 5 were:

- 1. Grain and oilseeds market development for smallholders to inform policy discussions and investment prioritization;
- 2. Analysis of land commodification and alienation to inform dialogue on Zambia's draft Land Policy;
- 3. Feed the Future midline indicator generation and analysis; and
- 4. Technical training to IAPRI researchers on modeling agricultural technology adoption, an overview of and introduction to impact evaluation methods, and a two-day writing workshop.

1.

Of these, Activities 1 to 3 are completed. FSP Core-funded capacity building activities under Activity 4 will be continue through April 2019 through technical trainings for IAPRI researchers arranged in coordination with IAPRI management. Buy-in-funded activities under Activities 2 and 4 will continue through the end of the 2019 calendar year. Additional policy-oriented activities have been identified to inform and guide the Zambian government's efforts to promote Climate Smart Agriculture (CSA) and will be carried out through the end of FSP core and the Zambia Buy-In.

In the following sections, we describe outputs and achievements for the period April 1, 2019-September 30, 2019 for the following activities as well as other Zambia FSP Buy-In funded activities:

- Activity 2.1 Analysis of land commodification and alienation to inform Zambia's draft Land Policy (cross-listed as Task 1, Activity 1.1 – Informing and guiding the Land Policy Bill in Zambia)
- Task 1 (Final Push towards Policy Influence)
 - Task 1, Activity 1.2 Analysis of Zambian smallholders' policy preferences using bestworst scaling
 - Task 1, Activity 1.3 Synthesis review of strategies to guide the Zambian government's efforts to promote climate-smart agriculture, resilience, and sustainable forest management
 - Task 1, Activity 1.4 Technical training to IAPRI researchers on impact evaluation methods

Activity 2.1: Analysis of land commodification and alienation to inform Zambia's draft Land Policy/Task 1, Activity 1.1 – informing and guiding the Land Policy Bill in Zambia (Leads: Muyanga, Jayne, Machina)

Description: 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 is carried out by researchers from MSU, IAPRI, and the University of Zambia. MSU and IFPRI are also coordinating and sharing information in IFPRI's implementation of a land policy assessment for the Land Policy Initiative (LPI)¹ in Zambia.

Achievements:

Under the land theme, the medium-scale farms data collected in 2017 has been analyzed and a report prepared. Further analysis is still ongoing aimed at helping the Zambian government understand the extent to which medium-scale farms are acquiring land in rural Zambia and competing for land with smallholder farmers. The various dimensions of rapidly changing landholding dynamics are envisioned to feed into ongoing deliberations about appropriate land policies. Also under the land theme, a stream of work exploring the role of access to land on youth migration decisions in Zambia was undertaken. A few studies have examined the role of land access on rural young people's decision to either stay in agriculture or migrate to urban centers in search of non-farm employment opportunities. One of the studies focused on assessing the impact of various drivers of migration on the decisions made by youth and young people to migrate, with a particular emphasis on the impacts of land access, inheritance patterns, business and wage opportunities, and meteorological factors in migration decision. The analysis was carried out using the Rural Agricultural Livelihood Survey (RALS) data, the Famine Early Warning Systems Network Land Data Assimilation System (FLDAS) and Tropical Application of Meteorology using Satellite Data and Ground Based Observations (TAMSAT) datasets.

Joint with C4a, a report was completed that shows the evidence of profound farm-level transformation in parts of Sub-Saharan Africa, identifies the key sources of dynamism in the sector, and proposes an updated typology of farms that reflects the evolving nature of African agriculture.

Meetings and Working Papers:

- Are Medium-Scale Farms Driving Agricultural Transformation in Africa? Presentation at the Global FSP Innovation Lab Researchers Meeting and Closeout Conference, March 5 2019, Washington DC, USA.
- Are Medium-Scale Farms Driving Agricultural Transformation in Africa? Presentation at the APRA Annual Research Review and Planning Workshop, University of Ghana, Legon, and the Institute of Statistical, Social and Economic Research (ISSER), Ghana, 4 December 2018
- The Changing Farm Structure in Africa: Causes, Consequences and Policy Implications. Keynote speech at the 5th Annual Regional Network of Agricultural Policy Research Institutes (ReNAPRI Stakeholder Conference, November 28, 2018, Zanzibar, Tanzania
- The Changing Farm Structure in Africa: Causes, Consequences and Policy Implications. Presentation at International Center for Tropical Agriculture (CIAT) -Kenya Nairobi, November 23rd, 2018.
- The Looming Youth Employment Challenge in sub-Saharan Africa. Public Lecture at the South Eastern Kenya University, Kitui, Kenya, November 21, 2018
- Are Medium-Scale Farms Driving Agricultural Transformation in Africa? Presentation at the

¹ The Land Policy Initiative is a joint program of the tripartite consortium consisting of the African Union Commission (AUC), the African Development Bank (AfDB), and United Nations Economic Commission for Africa (ECA). Its purpose is to enable the use of land to lend impetus to the process of African development.

- Indaba Agricultural Policy Research Institute [IAPRI] Brown Bag, November 16, 2018, Lusaka, Zambia
- Land and Opportunity Access: An Analysis of Migration Drivers for Youth and Young Adults in Rural Zambia. Megan O. Bellinger, Nicole M. Mason, Milu Muyanga, David Mather, and Henry Machina
- Are Medium-Scale Farms Driving Agricultural Transformation in Sub-Saharan Africa? T. S. Jayne, Milu Muyanga, Ayala Wineman, Hosaena Ghebru, Caleb Stevens, Mercedes Stickler, Antony Chapoto, Ward Anseeuw, and David Nyange

Task 1, Activity 1.2 - Zambian smallholders' agricultural policy preferences – using best-worst scaling (Lead: Mason)

Description:

Do smallholder farmers in sub-Saharan Africa (SSA) prefer government programs that provide private goods such as subsidized fertilizers and seeds or government investments in public goods such as rural roads, agricultural extension services, or agricultural research and development (R&D)? The conventional wisdom among African policymakers is that smallholders prefer input subsidies, yet there is a dearth of empirical evidence to support this belief. Whether smallholder farmers really do prefer input subsidy programs (ISPs) over other types of government programs and investments in the agricultural sector has become a particularly relevant question over the last 15 years with the re-emergence of ISPs in many SSA countries, including Zambia. in this paper, we use a method known as best-worst scaling to elicit Zambian smallholders' preferences for expanding ISPs (either by increasing the number of beneficiaries or by increasing the quantity of inputs per beneficiary) versus increasing FRA activities (either by offering a higher price for farmers' maize or by buying larger quantities of maize from farmers) versus six other policy options; namely, (i) improving rural roads and bridges, (ii) raising the number of extension agents, (iii) developing better crop varieties and crop management practices (as a proxy for crop R&D), (iv) developing better livestock and fish breeds and management practices (as a proxy for livestock and fisheries R&D), (v) improving access to irrigation, and (vi) improving access to credit). Respondents also completed a second set of bestworst choice tasks in which they were asked to select the most and least preferred (best and worst) ways to reduce spending in the agricultural sector (e.g., by scaling down ISPs versus the other programs and investment mentioned above).

Achievements: Mason and Kuteya completed the analysis for the main study and results were presented at a brownbag seminar at IAPRI. Analysis of the phone-based and stakeholder survey is in progress. Mason led an intensive one-on-one training in best-worst scaling data analysis for Kuteya in May 2019. The results of this study will be presented to stakeholders for feedback at an outreach workshop in November 2019. The study will be finalized in the final quarter of the Zambia FSP Buy-In.

Outputs:

Meetings:

 N. Mason, D. Resnick, V. Caputo, and A. Kuteya. "What farmers want: Mapping Zambian smallholders' agricultural policy preferences". Paper presented at the track session on "Recent developments in using choice experiments to elicit producer and consumer preferences in Africa." Agricultural & Applied Economics Association annual meeting. Washington, DC, Aug. 7, 2018.

- Outreach on this activity will be done jointly with outreach on the findings of the FSP Zambia agricultural and food policy processes surveys in November 2019.
- N. Mason, A. Kuteya, V. Caputo, and D. Resnick. "What farmers want: Mapping Zambian smallholders' agricultural policy preferences." Brownbag seminar at the Indaba Agricultural Policy Research Institute. Lusaka, Zambia. May 7, 2019.

Capacity Building:

• This work is in collaboration with Auckland Kuteya of IAPRI (as well as Vincenzina Caputo (MSU) and Danielle Resnick (IFPRI)). Kuteya was heavily involved in the design of the policy choice sets and is being trained in how to implement best-worst scaling and analyze the associated data. This method is likely to be one that IAPRI uses again in future research.

Related Outputs:

- One of the key items included in the policy preferences study is understanding smallholder farmers' (and others') preferences for increasing versus reducing spending on maize purchase activities by FRA. In related work, Mason and collaborators have submitted and received an invitation to revise and resubmit a journal manuscript on effects of the FRA's maize purchase activities on smallholder farmers' incomes and poverty in Zambia.
 - O W. Fung, S. Liverpool-Tasie, N. Mason, and R. Uwaifo-Oyelere (no senior authorship assigned). "Direct and indirect effects of crop purchase programs on smallholder welfare: Evidence from Zambia." Revisions requested at Agricultural Economics.
- Also related to the broad topic of public expenditures to promote agricultural productivity growth as a way of stimulating structural transformation, MSU/FSP Research Associate Jason Snyder is leading, in collaboration with Jayne, Mason, and IAPRI researcher Paul Samboko a study on agricultural productivity growth and structural transformation. A brownbag presentation was given on this work:
 - O J. Snyder, T.S. Jayne, N. Mason, and P. Samboko. "Agricultural productivity and rural household incomes: Micro-level evidence from Zambia." Invited seminar at the Indaba Agricultural Policy Research Institute. Lusaka, Zambia. Apr. 5, 2019.

Task 1, Activity 1.3 - Synthesis review of strategies to guide the Zambian government's efforts to promote climate-smart agriculture, resilience and sustainable forest management (Leads: Ngoma, Angelsen, Jayne and Chapoto)

Description:

It is widely accepted that there is an urgent need to identify strategies to make agri-food systems more resilient to the effects of rapidly changing climate conditions. African farmers and agri-food systems are particularly vulnerable to climate-related shocks due to the region's reliance on rain-fed agricultural production systems, and the low incomes, assets and coping abilities of a large share of the region's population. Various climate-smart agricultural practices have been promoted for decades as means to increase productivity and build the resilience of rain-fed farming systems to climate change. However, the uptake remains low and the evidence base on understanding why remains thin. Not only does the low uptake of climate-smart agriculture threaten food security, it causes forest loss through extensification, which in turn has implications for rainfall variability and can lead into a self-induced vicious circle of poverty. This activity therefore has been set up to provide empirical guidance on policies and investments to improve the climate resilience of Zambian agriculture and on the need

to reconcile agricultural and forestry policy to maximize synergies and avoid policy collisions. Part of the efforts in this activity aim to inform policy makers on the extent, causes and consequences of agricultural transformation on smallholder agriculture.

Achievements: FSP researchers continued to engage with various stakeholders and finalized some research outputs during the period under review. Droughts which affected the southern and western parts of Zambia during the 2018/2019 farming season brought to the fore the urgent need to better understand the impacts of climate change on water availability and agriculture, and how to build climate resilience among smallholder farmers. FSP researchers in association with IAPRI participated in various outreach events where research outputs on the impacts of climate change on water resources were presented to policy makers, farmers and other stakeholders in Zambia. At an international level, FSP researchers participated and made a presentation in a plenary session on agricultural transformation at the 6th African Conference of Agricultural Economists (ACAE). The specific outputs are listed below:

Outputs:

Meetings:

- Ngoma (working with Angelsen and Hailu from NMBU and Kabwe) designed framed field experiments to test ex-ante the effects of command and control, community forest management and payments for environmental services type instruments for forest management in across four villages in two districts of Zambia. A working paper titled 'Pay, Talk or 'Whip' to Conserve Forests: Framed Field Experiments in Zambia' was presented at the inaugural Sustainability and Development Conference held at the University of Michigan, Ann Arbor, MI, in November 2018. a manuscript based on this work was being revised in readiness for resubmission to World Development during the reporting period.
- Ngoma lead a dissemination workshop on 'Recent Research Outputs on Managing Forests for Sustainable Development and Climate-Smart Agriculture in Zambia. Two main presentations were made at this meeting: 'Managing forests for sustainable development in Zambia: drivers, processes and policies', and 'Incentivizing climate smart adoption with insurance and green subsidies: Do risk aversion and delayed benefits matter?' These presentations were based on the research applying framed field experiments reported in the bullet above, and the first bullet point under research papers below, and some earlier work valuing non-timber forest products in Zambia conducted by IAPRI.
- Ngoma attended a regional workshop organized by IFPRI under the 'Southern Africa Towards Inclusive Economic Development (SA-TIED) program work stream on Climate and Energy'. The meeting was held in Pretoria, 4-5 February 2019. As a result of this meeting, there might be follow up assessing the impacts of climate change on agriculture, water and energy in Zambia.
- Ngoma also attended the FSP end of project meeting held in Washington DC, 5-7 March, 2019.
- Ngoma (working with Jayne and Chamberlin from CIMMYT) participated and made a presentation in a plenary session titled "New Landscapes and Challenges Confronting Africa's Rapidly Transforming Food Systems" at the 6th African Conference of Agricultural Economists (ACAE) held in Abuja from 23 26 September 2019. This special plenary session was organized to discuss causes and consequences of the rapidly transforming agricultural and rural sectors in Africa. The plenary examined how these new mega-trends are shaping "new landscapes" in Africa and to anticipate the emerging and new policy challenges that the

- region will be facing in the near future. Ngoma presented a paper titled 'Do Changes in Farm Structures Retard or Promote Growth in Rural Employment and Incomes? Evidence from Zambia' and participated in follow-up panel discussions.
- Mulenga led various presentations under this activity at the USAID Integrated Land and Resources Governance Research Symposium held from 25 – 27 September in Lusaka, Zambia:
 - O Does Customary Land Administration System Encourage Sustainable Forestry Management? A Look at Woodfuel in Zambia. Brian P. Mulenga, Chewe Nkonde, Hambulo Ngoma, and Mulako Kabisa, Presented at the Integrated Land Resource Governance Research Symposium, Lusaka, Zambia, September 26, 2019.
 - O Pay, Talk or 'Whip' to Conserve Forests: A Framed Field Experiment. Hambulo Ngoma, Amare Teklay Hailu, Stephen Kabwe and Arild Angelsen, Presented at the Integrated Land Resource Governance Research Symposium, Lusaka, Zambia, September 26, 2019.
- FSP/IAPRI research on the impacts of climate change were presented at two provincial outreach meetings organized by IAPRI in Southern and Eastern Provinces.
 - Mulenga presented on the 'Impacts of Climate Change on Agriculture and Water Resources Availability: Implications for Smallholder Farming' at the Southern Province Youth Symposium, held in Livingstone, Zambia on September 16, 2019.
 - O Zulu (on behalf of Mulenga) presented on the 'Impacts of Climate Change on Agriculture and Water Resources Availability: Implications for Smallholder Farming' at a Workshop for Developing an Action Plan for Agriculture Development in Eastern Province, Chipata, Zambia, on September 27, 2019.

Research Papers:

- Ngoma (working with Mason, Hangoma from UNZA and Samboko) designed framed field experiments to assess how time and risk preferences affect farmers' decisions to adopt CSAs and to test whether bundling CSAs with insurance and a 'green' subsidy would nudge farmers to adopt CSA. This activity sheds light on the role (if any) of behavioral factors in the adoption of CSAs and on how best the adoption of CSA (which is national policy) may be increased, sustainably. A working paper was published during the period:
- Ngoma, H., Mason, N.M., Samboko, P., Hangoma, P., 2018. Switching up Climate-Smart Agriculture adoption: Do 'green' subsidies, insurance, risk aversion and impatience matter? IAPRI Working Paper 146. Indaba Agricultural Policy Research Institute, available here http://www.iapri.org.zm/images/WorkingPapers/wp146 for pdf final v2 clean.pdf.
- A policy brief has been drafted and is being finalized by the authors.
- A manuscript based on this work is under review in the Journal of Development Studies.
- As part of a larger network doing research at the intersection of food production and forest conservation, the FSP team contributed a chapter in a book published by the Center for International Forestry Research (CIFOR), a member of the CGIAR centers. The book Transforming REDD+: Lessons and new directions reviews lessons learnt over the last ten years of implementing REDD+. REDD+ is a pan tropical initiative to reduce deforestation. The book also looks ahead and offers new directions for REDD+. This includes, among other things, stronger linkages between intensification and forest conservation. The book available here https://www.cifor.org/library/7045/ was launched at UNFCCC COP 24 in December 2018, in Poland. The full reference for the book chapter is:

- Ngoma, H., Angelsen, A., Carter, S., Roman-Cuesta, R.M., 2018. Climate-smart agriculture: will higher yields lead to lower deforestation? In: Angelsen, A., Martius, C., De Sy, V., Duchelle, A.E., Larson, A.M., Pham, T.T. (Eds.), Transforming REDD+: Lessons and new directions. Center for International Forestry Research (CIFOR), Bogor, Indonesia. Available here https://www.cifor.org/library/7074/
- Ngoma led research aimed at informing the Zambian government on on-going and incipient smallholder irrigation scheme developments in country. The aims of this work were twofold. First, it sought to establish the extent of irrigation uptake by smallholders for field crops and horticulture produce and to test the influence of access to credit and access to water sources on uptake. A second aim was to provide an ex-ante assessment of the impacts of current and projected climate change on water availability in Zambia's main water basins and to draw implications for irrigation development. One of the two outputs from this research was published as journal article and the other was submitted for review during the period under review as listed below:
- Ngoma, H., Hamududu, B. H., Hangoma, P., Samboko, P., Hichaambwa, M., and Kabaghe,
 C. (2017). Irrigation Development for Climate Resilience in Zambia: The Known Knowns
 and Known Unknowns. (Under review in International Journal of Agricultural Sustainability)
- Hamududu, B.H., Ngoma, H., 2019. Impacts of Climate Change on Water Resources Availability in Zambia: Implications for Irrigation Development. Environment, Development and Sustainability, 1-22, https://link.springer.com/article/10.1007/s10668-019-00320-9.

Other outputs related to this stream of work:

- Y. Kusunose, N. Mason, and S. Tembo. "Dis-investing from crop inputs as a poverty trap mechanism: Evidence from Zambia." Revisions requested at the *Journal of African Economies*, October 2018.
- Ngoma, H., Angelsen, A., 2018. Can conservation agriculture save tropical forests? The case of minimum tillage in Zambia. Forest Policy and Economics 97, 153-162. https://doi.org/10.1016/j.forpol.2018.10.001
- Ngoma led the second wave of revisions and resubmission of an article 'Pay, Talk or 'Whip' to Conserve Forests: Framed Field Experiments in Zambia' to *World Development* during the reporting period. It was also published as FSP Research Paper 145. https://www.canr.msu.edu/fsp/publications/research-papers/rp%20145.pdf
- Ngoma, H., Angelsen, A., Jayne, T. S., & Chapoto, A. (2019). Is Conservation Agriculture Climate-Smart, or Can It Be? A Synthesis from Sub-Saharan Africa. Retrieved from https://www.canr.msu.edu/resources/is-conservation-agriculture-climate-smart-or-can-it-be-a-synthesis-from-sub-saharan-africa-. A manuscript from this output was submitted and is under review in Agricultural Systems.
- Ngoma and Mulenga in collaboration with Snyder (MSU) and Banda (IAPRI) completed a draft working paper titled 'Poverty and Weather Shocks: A Panel data analysis of Structural and Stochastic poverty in Zambia'. A working paper version was undergoing formal external reviews at the end of the reporting period.
- Ngoma (working with Pelletier from Cornell, and Subakanya and Mulenga) initiated preparatory works for a paper titled 'Can climate-smart agriculture reduce deforestation: evidence from Zambia?'. This paper will aim to achieve two goals. First, the paper will combine district-level household survey data and spatial forest cover data to estimate the contribution of agricultural land expansion to deforestation in Zambia. Second, the paper will use the new

- RALS 2019 datasets to assess the impacts of CSA on cropland expansion in Zambia.
- Ngoma and Mason (working with Pelletier, Barrett, and Jagnani from Cornell) completed a draft manuscript for journal submission on 'Does the use of modern agricultural inputs by smallholder farmers reduce deforestation: Evidence from Zambia'. This work was presented by Pelletier at the following conference:
- J. Pelletier, N. Mason, H. Ngoma, M. Jagnani, and C. Barrett. "Does the use of modern agricultural inputs by smallholder farmers reduce deforestation? Evidence for Zambia." Selected paper presented at the 5th annual Forests and Livelihoods: Assessment, Research, and Engagement (FLARE) meeting. University of Michigan. Ann Arbor, MI. Aug. 23, 2019.
- Mulenga (working with Ngoma and Kabisa) initiated working on a paper titled, 'Greening the Charcoal Value Chains in Zambia: Prospects, Opportunities and Challenges.'
- Ngoma and Mason (with Samboko of IAPRI and Hangoma of UNZA) are revising their study on "Switching up climate-smart agriculture adoption: Do 'green' subsidies, insurance, risk aversion, and impatience matter?".

Capacity building:

This work is collaborative research between FSP researchers, other IAPRI researchers, and researchers at the University of Zambia and universities outside of Zambia. These rich collaborations strengthen the analytical and writing skills as well as subject matter knowledge of everyone involved, building capacity for improved agricultural and food policy-relevant research on issues critical for Zambia and developing countries more broadly.

Task 1, Activity 1.4 - Technical training to IAPRI researchers on impact evaluation methods (Leads: Mason and Ngoma)

Description: MSU provides on-going technical support and periodic technical trainings to IAPRI and engages in on-going collaborative research to enhance IAPRI researchers' analytical skills. This section reports on the collaborative research and technical trainings conducted during the reporting period.

Numerous on-going collaborative research projects between MSU faculty (Jayne, Mason, and Muyanga) and IAPRI researchers continue to progress. Examples include:

- Muyanga and Jayne are working with Machina (IAPRI) and Nkonde (UZA) on Activity 2.1/Task 1, Activity 1.1
- Mason is working with Kuteya (IAPRI) and others on Task 1, Activity 1.2
- Jayne is working with Ngoma (IAPRI) and others on Task 1, Activity 1.3
- Mason is working with Kuteya (IAPRI) and Ngoma (IAPRI) on an impact evaluation of the Farmer Input Support Program (FISP) e-voucher program
- Mason is working with Ngoma (IAPRI), Hangoma (UNZA), and Samboko (IAPRI) on a framed field experiment to evaluate smallholder farmers' behavioral responses to different incentives to adopt conservation farming
- Mason with Mofya-Mukuka (IAPRI) and two other MSU colleagues (Maredia and Sauer) had a paper accepted for publication by Food Security. C. Sauer, N. Mason, M. Maredia, and R. Mofya-Mukuka. "Does adopting legume-based cropping practices improve the food security of small-scale farm households? Panel survey evidence from Zambia." Published in Food

- Security, December 2018.
- Mason is working with Ngoma (IAPRI), Hangoma (UNZA), and Samboko (IAPRI) on a framed field experiment to evaluate smallholder farmers' behavioral responses to different incentives to adopt conservation farming

Technical trainings:

- "Basic data transformation in Stata", technical training facilitated by Jason Snyder (MSU/FSP Post-Doctoral Research Associate) on 3 April 2019 in Lusaka. 13 participants (4 females and 9 males; all participants were IAPRI researchers).
- "Creating lag structures of lagged explanatory variables", technical training facilitated by Jason Snyder (MSU/FSP Post-Doctoral Research Associate) on 4 April 2019 in Lusaka. 11 participants (3 females and 8 males; all participants were IAPRI researchers).
- "How to graph multiple response variables using the *mrgraph* command in Stata", technical training facilitated by Ngoma on 6 December 2018 in Lusaka. 10 participants (4 females and 6 males; all participants were IAPRI researchers).
- "Analyzing multiple treatment", technical training facilitated by Ngoma on 29 March 2019 in Lusaka. 12 participants (4 females and 8 males; all participants were IAPRI researchers).
- Geographic Information Systems (GIS) trainings:
 - At the request of IAPRI, FSP organized a set of GIS trainings for IAPRI researchers. This consisted of two components:
- A group training for IAPRI researchers entitled "Intro to Geographic Information Systems: Applications for Research". Technical training facilitated by MSU graduate student Megan Bellinger on 5 March 2019 in Lusaka. 8 participants (4 females and 4 males; all participants were IAPRI researchers).
- Intensive interactions by Megan Bellinger over four days (March 4-7, 2019) with two IAPRI researchers selected by Research Director Antony Chapoto for more in-depth GIS training: Mr. Alefa Banda and Ms. Mulako Kabisa. Through this more individualized training, Bellinger trained Banda and Kabisa on how to create various types of maps in GIS using IAPRI data.
- Muyanga and Snyder from MSU participated in and provided technical support during the RALS 2019 training of master trainers in May 2019.
- 4 MSU graduate students participated in the RALS 2019 training of master trainers and served
 as data quality controllers during the RALS 2019 field survey data collection phase (May-July
 2019).
- FSP-supported Margaret Beaver worked closely with IAPRI IT & Data Manager Mwamba Chisimba to improve the coding of the RALS 2019 survey instrument for CAPI (computer assisted personal interviewing) as well as the data cleaning syntax for the collected data. (August 2019-present)
- Ngoma and Jayne worked with Henry Musanje to recalculate the weights for the Crop Forecast Surveys of 2011/12 through 2018/19
- Snyder led a technical training for IAPRI researchers on April 4, 2019 on 'Creating Lag Structures of Lagged Explanatory Variables'. A total of 11 IAPRI researchers, participated in the training, of which 3 were female and 8 male.
- Snyder led a technical training for IAPRI researchers on April 4, 2019 on 'Creating Lag Structures of Lagged Explanatory Variables'. A total of 11 IAPRI researchers, participated in the training, of which 3 were female and 8 male.

- Mulenga provided technical training to IAPRI researchers on September 30, 2019 on 'Basic Data Transformation in Stata.' A total of 13 IAPRI researchers, participated in the training, of which 4 were female and 9 male.
- Ngoma provided technical training to IAPRI researchers on September 30, 2019 on 'Agricultural Risk Analysis'. A total of 10 IAPRI researchers (4 Females, 6 Males), participated in the training.
- The 'Agricultural Risk Analysis' training at IAPRI built on skills acquired by Ngoma during his Zambia FSP Buy-In funded participation in a short course at Wageningen University School of Social Sciences on agricultural risk analysis from August 26-30, 2019. The course introduced participants to theories concerning risk analysis and risk coping strategies, and dealt with both conceptual and methodological issues. The training enabled Ngoma (and IAPRI researchers more broadly) to i) better understand theories underlying risk and risk management decision making, ii) model risk, iii) critically assess econometric analyses with regard to adoption of risk management tools, and iv) model whole-farm risk management decisions. The course provided strategic capacity that is needed to bolster IAPRI's move to strengthen research in climate change and natural resources management, where risk analysis and management is central. Ngoma's participation in the course and the subsequent training for IAPRI researchers strengthened IAPRI's capacity to inform policy on how best Zambian farmers can manage the various climate and agricultural risks they face and will provide an opportunity for IAPRI to expand on-going work on risk preferences and technology adoption, vulnerability assessment and risk management. A blend of experimental and econometric approaches offered in the course broadened the methods toolbox available within IAPRI.
- Samboko (IAPRI) started his graduate training in agricultural, food, and resource economics at MSU. He was admitted to the master's program with the intention of transferring to the PhD program upon successful completion of his first year master's coursework. This long-term training will enhance Zambian agricultural policy analysis capacity
- Kabwe (IAPRI) started as a visiting scholar at MSU for the fall 2019 semester where he is working with FSP researcher Maredia and other MSU and IAPRI collaborators on a study on "Adoption of yellow/orange crops in Eastern Zambia". He is also auditing one course, AFRE 841, "Analysis of Food System Organization", taught by Prof. Thomas Reardon. In addition, Kabwe is participating in departmental seminars and activities, and interacting with MSU faculty and graduate students. These experiences will enhance Mr. Kabwe's skillset and effectiveness at IAPRI.
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- Technical trainings planned for the final quarter of the Zambia FSP Buy-In:
- A training on randomized controlled trials (RCTs) for IAPRI, ZIPAR, and UNZA researchers on October 17, 2019, facilitated by IDinsight, and organized by MSU and IAPRI
- A technical training to be led by Ngoma on agricultural risk management, also drawing on his short course experience at Wageningen

Outcomes:

- Enhanced analytical and technical skills (including GIS skills) among IAPRI research staff
- Enhanced local policy analysis capacity in Zambia.

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Additional activity: Analysis of the impacts of Zambia's shift an electronic voucher ("e-voucher") approach for its Farmer Input Support Program (Leads: Mason, Kuteya, and Ngoma)

Description: FISP is one of the Zambian government's flagship agricultural sector programs. Beginning in 2015/16, Zambia started to transition its FISP from a traditional approach whereby subsidized fertilizer and seed were distributed to targeted beneficiaries through their cooperatives, to an e-voucher approach. Under the FISP e-voucher, targeted beneficiaries redeem prepaid Visa cards at private sector agrodealers' shops for the subsidized agricultural inputs or equipment of their choice. This impact evaluation seeks to understand how Zambia's shift from the traditional FISP to the FISP e-voucher has affected various outcomes among smallholder farmers, including their access to inputs, their productivity, and their level of crop diversification (all key goals of the FISP e-voucher). After its initial pilot season in 2015/16, the e-voucher pilot was expanded to more districts in 2016/17, and rolled out nationwide in 2017/18.

Mason, Jayne, and Ngoma are also involved in several other studies related to the Zambia FISP and input subsidy programs in SSA.

Achievements related to the FISP e-voucher study:

- Mason, Kuteya, and Ngoma worked with Tossou and Baylis from the University of Illinois Urbana-Champaign to harmonize the outcome variables considered in the two groups' analyses, which are being integrated into a single study.
- Jayne was invited by the African Development Bank, the Bill and Melinda Gates Foundation and the Alliance for a Green Revolution in Africa to deliver the opening keynote for a session devoted to best practices for input subsidy programs, drawing on insights from Zambia and elsewhere, at the African Green Revolution Forum (AGRF) in Accra, Ghana, September 2, 2019. The full-day event brought together senior members of Ministries of Finance and Agriculture from 9 African countries, including Zambia.

Outputs:

- The e-voucher study is being finalized and results will be presented at a November 2019 outreach event in Lusaka.
- T.S. Jayne, H. Ngoma, W. Burke, J. Ariga, S. Liverpool-Tasie, N. Mason, E. Crawford, J. Ricker-Gilbert, the Indaba Agricultural Policy Research Institute, and the Tegemeo Institute of Agricultural Policy and Development. "Input subsidy programs in Africa: What is the way forward?" Invited presentation at the Leadership for Agriculture Platform meeting. Accra, Ghana. Sep. 2, 2019.
- Mason, Jayne, and Ngoma are also involved in several other studies related to the Zambia FISP and input subsidy programs in SSA.

Additional Capacity Building/collaborative research related to the Zambia FISP and ISPs and other government subsidy programs in SSA are:

- Ngoma worked with Henry Machina and Auckland Kuteya to revise and resubmit a manuscript on the gendered impacts of access to FISP on maize productivity and submitted. The paper is under second review for possible publication in *Development Review Policy*.
- Mason, in collaboration with IAPRI researcher Olipa Zulu-Mbata (now with the World Food Programme in Zambia) and two MSU graduate students, wrote a co-authored paper on the effects of FISP on farmers' use of soil fertility management practices that can improve maize yield response to inorganic fertilizer and contribute to sustainable agricultural intensification.

This paper was published in *World Development*, a top multidisciplinary journal, during the reporting period. The citation is:

- S. Morgan, N. Mason, N.K. Levine, and O. Zulu-Mbata. 2019. "Dis-incentivizing sustainable intensification? The case of Zambia's maize-fertilizer subsidy program." *World Development* 122: 54-69.
- Mason, in collaboration with IAPRI researcher Solomon Tembo (now an independent consultant), were invited by the journal *Food Security* to revise and resubmit a paper they had submitted on the effects of the FISP on Zambian smallholders' incomes and poverty.
- Mason, in collaboration with Tembo and Kusunose of the University of Kentucky resubmitted a paper for second round review for possible publication in the *Journal of African Economies* on "Dis-investing from crop inputs as a poverty trap mechanism: Evidence from Zambia."
- Mason and co-authors resubmitted a paper for second round review for possible publication in *Agricultural Economics* on "Do crop purchase programs improve smallholder welfare? The case of Zambia's Food Reserve Agency."

Additional Activity: Understanding agriculture and food security policy processes in Zambia (Lead: Ngoma)

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Description: Following a successful baseline survey on agriculture and food policy processes in Zambia that was conducted in December 2017-February 2018, FSP embarked on a follow-up endline survey during the reporting period under review. The purpose of the endline survey is to measure changes between baseline and endline in various aspects of the agricultural and food policy processes in Zambia, for example, stakeholder consultations. The endline survey instrument was distributed to over 100 respondents selected from the IAPRI stakeholder database and responses were received from about 63 respondents at the close of the survey within the reporting period. Data were cleaned, analyzed and a draft report that compares changes in regulatory policy environment for food and agricultural policies in Zambia was finalized, pending internal reviews within the reporting period.

Achievements:

A draft report that compares changes in regulatory policy environment for food and agricultural policies in Zambia was finalized, pending internal reviews within the reporting period.

Outputs:

• Draft report completed pending internal review. This work will be presented at an outreach stakeholder workshop in November 2019.

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Additional activity: Maize conundrum: securing Zambia's food security through market based solutions in the 2019/20 marketing season (Lead: Mulenga)

Description: There is a growing concern in Zambia that the country will run out of maize before the new crop from the 2019/2020 agricultural season rolls in. This concern is mainly precipitated by the reduced harvest attributed to droughts that the country experienced this past production season and the resultant rising mealie meal prices in some parts of the country. This anxiety is largely directed towards the southern and western regions of the country, which experienced severe drought conditions, leading to localized supply deficits. Unfortunately, speculation continues to play out in the media without facts and figures.

Achievements:

The policy advisory note was completed during the reporting period. The purpose of this policy advisory note was to address the following: 1) the concern of whether Zambia will run out of maize before the next harvest; 2) unpack some of the major reasons influencing mealie meal prices; and 3) guide decision-making on unlocking domestic maize supplies in the immediate and medium-term. Therefore, the note has helped provide facts on Zambia's food security situation in the 2019/2020 marketing season. The note has helped calm down speculations of whether the country will run out of maize before the next harvest comes online. Various stakeholders, including donors and Government have since used information from the note to inform food security interventions.

Outputs:

• Policy advisory note completed during the reporting period. The note is available on: http://www.iapri.org.zm/images/PressRelease/MaizeConundrumPress.pdf.

Other IAPRI-FSP collaborative research in progress and associated outputs:

- J. Snyder, T.S. Jayne, N. Mason, and P. Samboko. "Agricultural productivity and rural household incomes: Micro-level evidence from Zambia."
 - Working paper completed: FSP Research Paper No. 151: https://www.canr.msu.edu/resources/agricultural-productivity-and-rural-household-incomes-micro-level-evidence-from-zambia
 - o Under review at the American Journal of Agricultural Economics.
 - o Presented at the Agricultural & Applied Economics Association's annual meeting. Atlanta, GA. Jul. 22, 2019.
 - Presented at the African Association of Agricultural Economists conference. Abuja, Nigeria. Sep. 24, 2019.
 - o Will be presented at November 2019 outreach event in Lusaka
- A. Melkani, N. Mason, B. Chisanga, and D. Mather. "Market participation and choice of marketing channel under liquidity constraints: Evidence from the Zambian maize market." In progress.
- Presented at the Graduate Student Organization Brown Bag Seminar Series, Department of Agricultural, Food, and Resource Economics, Michigan State University. East Lansing, MI. Sep. 24, 2019.
- Presented at the Agricultural & Applied Economics Association's annual meeting. Atlanta, GA. Jul. 22, 2019.
- J. Snyder, T.S. Jayne, J. Chamberlain, N. Mason, and P. Samboko. "Agricultural Productivity and Non-farm Labor Participation among Rural Farm Households: Micro-level Evidence from Zambia." In progress.

Status Report on Data Management Plan

#	Dataset type	Brief description	Anticipated time	When will	Has this
#	Dataset type	biter description	frame for a scholarly output to be completed based on this dataset?	it be registered in DDL?	already been registered to the DDL?
1	Quality of Agriculture and Food Security Policy Processes: Stakeholder Survey in Zambia, 2016	The baseline survey on agriculture and food policy processes in Zambia based on responses from 23 stakeholders was completed and the data analyzed.	Q1-2017	June 2018	yes, subject to confirmation from DDL
2	Trader Survey Data	Large-scale Trader Survey in Zambia	June 2018	April 2019	yes, subject to confirmation from DDL
3	Emergent farmer survey – conducted by IAPRI	Survey of medium to large scale farmers in six districts of Zambia	Q3-2018	April 2019	yes, subject to confirmation from DDL
4	Quality of Agriculture and Food Security Policy Processes	Stakeholder Survey, Zambia, 2019	November 2019	December 2019	No
5	Policy preferences survey	Rural residents in Zambia	November 2019	December 2019	No
6	Policy preferences survey	Stakeholders in Zambia	November 2019	December 2019	No

COMPONENT 3: GLOBAL COLLABORATIVE RESEARCH ON POLICY PROCESS AND CAPACITY

Introduction: Component 3 addresses fundamental questions of how to achieve policy change. To do so, the C3 team has focused on four major activities. Activity 1, the major focus effort in years 1 and 2 of FSP, involved deriving and refining a conceptual framework (Kaleidoscope Model) to generate testable and operational hypotheses about key factors influencing policy change. Activity 2, the key focus in years 2 and 3, involved conducting 6 in-depth case studies of policy change (fertilizer policy in Ghana, Malawi and Tanzania and micro-nutrient policies Malawi, South Africa and Zambia) to test the rigor of the Kaleidoscope Model across different policy domains and disparate institutional, political, and economic settings. Since Year 4, the team has devoted a majority of its time to two new activities. Activity 3 focuses more broadly on efforts to reform food security policy systems by analyzing 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 incentives, stakeholder motivations and policy outcomes. Activity 4 involves policy engagement applying a range of tools in a variety of settings including international policy forums, national stakeholder workshops, CAADP-Malabo Declaration follow-up processes and implementation of regional input policies in West Africa. Drawing on findings that cut across all activities, the team has developed a series of tools for policy process analysis, training and policy engagement.

Activity 1. Conceptual Framework

Outputs:

Presentations:

- Suresh Babu, Kaleidoscope Model of Policy Change: Framework and examples, Presented at the Food Policy Analysis Workshop, organized by the Ministry of Food Dhaka, February, 2019
- Suresh Babu, Analysis of Policy Process for Food Policy Change, Presented at the Workshop on Agricultural Strategy Development, November 2018, Thimpu, Bhutan

Activity 2. Case Studies of Policy Change

• 1 gendering nutrition policy study (Malawi)

Outputs:

Capacity building:

• Elizabeth Mkandawire completed her PhD September 2018 and will graduate April 2019.

Activity 3: Changes in Policy Architecture: Origins and Impact

Description: This work examines efforts to reform policy systems by analyzing how different experiments with institutional reforms have emerged and how reform of policy institutions has altered incentives, stakeholder motivations and policy outcomes.

Achievements:

• In FY18 a yearlong research effort on the impacts of the devolution of agriculture in Ghana was completed and the final report presented to key stakeholders in Accra, including the

Ministry of Food and Agriculture and the Local Government Services Secretariat. The report incorporated interviews with 80 District Directors of Agriculture across ten of Ghana's region, surveys with 960 rural households, and an analysis of the composite budgets of the country's 216 Metropolitan, Municipal, and District Assemblies. The report and presentation were also accompanied by a policy brief and blog to facilitate greater dissemination of the research results.

• No additional activities to report in this reporting period.

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Final Push towards Policy Influence (Task 1)

Activity 1.1 Training workshop: (Lead: Sheryl, Nic and Suresh)

Description: Strengthened policy, regulatory & financing frameworks to move from analysis to changing perceptions, strengthening alignment, leveraging change and influencing policy implementation capacity through National Agriculture Investment Plans (NAIPs) and Regional Agriculture Investment Plans (RAIPs) in each of the East, Southern and West Africa regions in respect of all key international, African and regional food security and nutrition -related obligations and commitments as regards Senior policy, budget and implementation Government officials by means of focused regional training workshop of five days for stakeholder from all three regions.

This activity builds on both earlier C3 Activity 4 training of journalists and C3 mapping of

- food security and nutrition-related international, African and regional obligations and commitments,
- the analysis and evaluation of 2014+ Malabo-compliant second generation NAIPs and
- the collection and analysis of country-specific FSN-related domestic policy, regulatory, implementation, institutional and financial frameworks.

This work will result in the capacitation of senior policy, budget and implementation. Government officials in order to provide information on, and empower them as regards the execution of their respective mandates in respect of, the international, African and regional FSN frameworks, and the in-country responses thereto.

Achievements:

The research informing this activity under C5 and Task 1.5 has been completed and published in several FSP Research Papers.

- Side Events for building capacity and sharing the findings were held at:
 - o IFPRI- Food and Agricultural Organization of the United Nations (FAO) Accelerating Hunger and Malnutrition conference in Bangkok in 28 30 November 2018.
 - o ReSAKSS Annual Conference, Addis Ababa, October 2018.
- Other opportunities are being explored with USAID Regional office for Southern Africa, ReSAKSS and FAO and others to piggyback on strategic opportunities for disseminating the lessons learnt from the NAIP appraisal and in-country support of policy reform.

Activity 1.2 Continuation of the Malawi NAIP work: (Lead: Nic Olivier, Elizabeth and Leonard Msuka overseen by Sheryl Hendriks)

Description: Mapping policy change in food security and nutrition. This activity will build on an earlier assessment of Malawi's forthcoming National Agricultural Investment Plan and contribute to the on-going work under C3.

Achievements:

No additional activities to report in this reporting period.

Activity 1.3 Completion of C3-Activity 4, West Africa Regional Pesticide Policy Engagement 1. (Lead: Steve H., Amadou Diarra)

Description: This work continues policy engagement begun under C3 Activity 4 with presentation of FSP results at a series of regulatory and private sector workshops in the region. Key partners in this dialogue include the following key institutions:

- Comité permanent Inter-Etats de Lutte contre la Sécheresse dans le Sahel (CILSS) Institut du Sahel (INSAH)
- Comité Sahélien des Pesticides (CSP)
- Croplife (private sector trade association of major pesticide producers and distributors)
- Union Monétaire Ouest Africaine (UEMOA)
- Economic Community for West African States (ECOWAS)

Achievements: Engagement remains on track for FSP activity leaders Steven Haggblade and Amadou Diarra to engage with policy stakeholders at three specific events: the May 22 CSP meeting in Bamako, the World Bank/ICABR meeting on June 14 in Washington, DC and the USAID brainstorming meeting on June 14 in Washington, DC.

Outputs:

Team Meetings:

- October 10, 24, November 5,19, December 10, January 11,17,24 February 7,14,21,28, March 14,21,28.
- Outreach events with policy stakeholders:
- Comité Sahélien des Pesticides (CSP), 43rd meeting, November 19-21, 2018 (Haggblade and Diarra follow-up discussions on pesticide quality and regulatory finance)
- Croplife regional hub and regulatory meeting, April 2-3, 2019, Dakar, Senegal (Haggblade
- Presentations:
- Fraudulent pesticides in West Africa: quality comparisons and policy implications." Steven Haggblade. Presented to the Croplife Annual Regional Hub and Regulatory Workshop meeting, Dakar, April 2, 2019.
- Research Papers:
- Quality comparison of fraudulent and registered glyphosate products sold in Mali. Haggblade, Diarra, Jiang, Assima, Keita, Traoré and Traoré. FSP Innovation Lab Research Paper 125. January 2019. East Lansing, MI: Michigan State University.
- Quality comparison of fraudulent and registered pesticides in Mali. Haggblade, Diarra, Jiang, Assima, Keita, Traoré and Traoré. FSP Innovation Lab Policy Research Brief 76. February 2019. East Lansing, MI: Michigan State University.

Outcomes:

Pesticide markets have grown rapidly in West Africa over the past decade and a half, far faster than regulatory monitoring capacity. As a result, fraudulent pesticides (unregistered and counterfeit) now account for roughly one-third of pesticides sold throughout the region. Laboratory testing of glyphosate, the most widely sold pesticide in the region, indicates that fraudulent products contain 8-10% less active ingredient than registered products. Farmers can protect themselves by purchasing only pesticides duly registered by the Comité Sahélien des Pesticides (CSP). Effective monitoring by regulators will require significant investments in quality regional testing laboratories.

Activity 1.4 Development of a website that introduces the model in a succinct way and showcases the KM tools interactively (in collaboration and support from FSP Communications team—see Task 3). (Lead: Sheryl, Elizabeth, Suresh, Danielle)

Description: This would be a nice go-to site for materials for any training events that wouldn't require participants to trawl through multiple documents on the FSP website to find resources.

The demand for this work comes from the national policy systems and the development partners in the developing countries who are in need of practical tools for analyzing the policy process. These tools are also needed for the faculty members in developing countries to introduce policy process curriculum in their courses.

This activity was delayed due to finalization and acceptance of the KM paper by World Development and budget processes. It will be completed in 2019.

Activity 1.5. Finalization of the assessment of the linkages and coherence between the 2014 Malabo compliant second generation NAIPs and other country-specific policy, regulatory, implementation, institutional and financial frameworks. (Lead: Nic and Sheryl with Nico, Elmarie, Anel, Minette and Avelani)

Description: This activity will build on earlier C3 mapping of food security and nutrition-related international, African and regional obligations and commitments, the analysis and evaluation of 2014+ Malabo-compliant second generation NAIPs and the collection and analysis of country-specific FSN-related domestic policy, regulatory, implementation, institutional and financial frameworks.

This work will result in formulating concrete implementable proposals for aligning other key country-specific FSN-related domestic policy, regulatory, implementation, institutional and financial frameworks with both the international, African and regional FSN frameworks, and the country specific 2014+ Malabo-compliant second generation NAIPs.

Achievements:

No additional activities to report in this reporting period.

Activity 1.6 A rapid assessment of the level of resilience built into 2014+ second generation national agriculture and food security investment plans (NAIPs). (Lead: Suresh, Sheryl and Nic)

Description: This activity will build on earlier C3 mapping of food security and nutrition policies and programs and the FTF policy matrixes carried out for countries. The work will use a resilience assessment tool to identify gaps in national investment plans.

The team has been capturing the resilience elements of the NAIPs and policies under the activities conducted for Task 1.5, C3 Activity 4, C5 Activity 4 and 5, including coverage in the monitoring and evaluation frameworks, policies and strategies implemented by countries, a content search of these policies and strategies as well as the NAIPs.

This work will be the focus of 2019 as agreed in the work plan, but we have been working in advance to prepare for this work.

Status Report on Data Management Plan

No datasets are anticipated to be generated from the proposed activities.

COMPONENT 4: ENGAGEMENT ON GLOBAL POLICY DEBATES ON FOOD SECURITY

COMPONENT 4a: UPSTREAM AGRIFOOD SYSTEM TRANSFORMATION

Introduction

Activities under C4a have revolved around five main global research themes and policy engagement activities initiated in Years 1 to 3 (fertilizer policy, sustainable agricultural intensification, land dynamics and land tenure/registration policies, mechanization, youth engagement in agrifood systems in an era of rapid food systems transformation, finance, and seed systems). In Year 4, the first two themes were merged to address the role of fertilizer policy as part of broader sustainable intensification strategies, but little additional work was done on this topic in Year 5 as it was not prioritized in Year 5 funding allocations. Two new activities were initiated in 2017 (on the role of agricultural financial markets, led by UP; and seed systems policy, led by MSU). Therefore, C4a activities in Years 5 and 6 have featured five main activities:

- Activity #2: The Role of Land Policy in Structural Transformation
- Activity #3: Mechanization in Agricultural Transformation: South-South Learning and Knowledge Exchange
- Activity #4: Exploring the Relationships between Agricultural Transformation and Youth Employment in Africa's Economic Transformation
- Activity #5: Agricultural financial markets intermediation to unlock food system transformation
- Activity #6: Seed system policy

Activity #2: The Role of Land Policy in Structural Transformation (Leads: Jayne, Hosaena)

Achievements:

The main activities undertaken by C4a between October 2018 and March 2019 were to finish up Activity 2 work on land dynamics and land policies, including work on the Task 6 Land report and outreach.

Sub-Activity #2.1: Understanding land dynamics and impacts of land policy (Lead: Jayne and Muyanga)

Outputs from this Activity:

Presentations

- The Intersection of Youth Access to Land, Migration and Employment Opportunities: Evidence from Sub-Saharan Africa. F. Kwame Yeboah, T. S. Jayne, Milu Muyanga, Jordan Chamberlin, Paper presented at the Sustainability and Development Conference, University of Michigan, Ann Arbor, MI, November 9-11, 2018
- The Changing Face of Agriculture in Tanzania: Indicators of Transformation, Ayala Wineman, T. S. Jayne, Emma Isinika Modamba, and Holger Kray, Nov. 11, 2018 | Sustainability and Development Conference.
- SciDev.Net Interview of Thom Jayne on "Tech Alone Won't Raise Farm Yields", African Green Revolution Forum, Kigali, Rwanda, 5 September 2018. Article released October 31,

- 2018. https://scidev.net/sub-saharan-africa/innovation/news/tech-raise-farm-yields.html
- Do medium- and large-scale farms generate income spillovers for rural households? The case of Tanzania. Jordan Chamberlin and T. S. Jayne, PIM / IFPRI Webinar, November 6, 2018, research jointly funded under PIM /IFPRI and the Food Security Policy Innovation Lab East Lansing, Michigan
- Are Medium-Scale Farms Driving Agricultural Transformation in Africa? T. S. Jayne, Milu Muyanga, Kwame Yeboah, Ayala Wineman, Antony Chapoto, Divan Vanderwesthuisen. Presentation at PIM Workshop, IFPRI, Washington, DC, 12 November 2018.
- Changing Farm Structure in Africa: Causes, Consequences and Policy Implications. Milu Muyanga, T. S. Jayne, Kwame Yeboah, Ayala Wineman, Antony Chapoto, Divan Vanderwesthuisen. Presentation at the 5th Annual ReNAPRI Stakeholder Conference, November 28, 2018, Zanzibar, Tanzania.
- The Changing Face of Agriculture in Tanzania: Indicators of Transformation. Ayala Wineman, T. S. Jayne, H. Kray, Emma Isinika. Presentation at the 5th Annual Agricultural Policy Conference (AAPC), Theme: Prioritizing Agriculture in the Industrialization Agenda for Tanzania.
- Drivers of agri-food systems transformation. Thom Jayne, presentation at Food Security Innovation Lab Reflection Workshop, March 5-6, 2019, Washington, DC
- Changing Farm Structure and Rural Transformation in Africa. C4a team: T. S. Jayne, Milu Muyanga, Hosaena Ghebru, Mercedes Stickler, Caleb Stevens, Ward Anseeuw, Ayala Wineman, Kwame Yeboah, Antony Chapoto, Divan Van der Westhuisen, Presentation at Food Security Innovation Lab Reflection Workshop, March 5-6, 2019, Washington, DC
- Revisiting the Farm Size-Productivity Relationship Based on a Relatively Wide Range of Farm Sizes: Evidence from Kenya. T. S. Jayne and M. Muyanga, Presentation at World Bank Land and Poverty Conference, Washington, DC, March 27, 2019.
- Let's Not Take the Farm out of Agrifood Systems, T. S. Jayne. Seminar at USAID/RRB, March 26, 2019, Washington, DC.
- Changing Farm, Structure and Rural Transformation in Africa. C4a team: T. S. Jayne, Milu Muyanga, Hosaena Ghebru, Mercedes Stickler, Caleb Stevens, Ward Anseeuw, Ayala Wineman, Kwame Yeboah, Antony Chapoto, Divan Van der Westhuisen. Presentation at World Bank Land and Poverty Conference, March 26, 2019, Washington, DC.
- Unmistakable Signs of Agri-food Systems Transformation in Africa. T.S. Jayne and Holger Kray, Ending Global Hunger Colloquium, Purdue University, 11 April 2019.

Policy briefs and research papers

- Task 6 report, in progress, to be completed by June 15, 2019
- Task 6 Policy Brief, to be completed by June 18, 2019

Journal Articles

- Jayne, T. S., Muyanga, M., Wineman, A., Ghebru, H., Stevens, C., Stickler, M., Chapoto, A., Anseeuw, W., van der Westhuizen, D., & Nyange, D. (2019). Are medium-scale farms driving agricultural transformation in sub-Saharan Africa? *Agricultural Economics*, in press. DOI: 10.1111/agec.12535
- Muyanga, M. and T. S. Jayne (2019). Revisiting the Farm Size-Productivity Relationship Based on a Relatively Wide Range of Farm Sizes: Evidence from Kenya. *American Journal of*

- Agricultural Economics, published March 25, 2019. https://academic.oup.com/ajae/advance-article/doi/10.1093/ajae/aaz003/5420108
- Jayne, T. S., Snapp, S., F. Place, and N. Sitko (2019). Sustainable agricultural intensification in an era of rural transformation in Africa. *Global Food Security*, 20 (2019), 105–113.

Blogs:

- https://pim.cgiar.org/2018/12/18/medium-scale-farms-are-on-the-rise-in-africa-why-thisis-good-news/
- https://www.cnbcafrica.com/uncategorized/2018/12/18/the-rapid-rise-of-medium-scale-farms-are-good-for-the-african-continent-heres-why/#cxrecs_s
- http://www.globaldev.blog/blog/agricultural-transformation-africa-opportunities-and-challenges

Outcomes:

Our FSP/C4a research findings are slowly but steadily diffusing out to numerous public, private and civil society groups in Africa. We feel that we are slowing shaping the nature of the discussions on African investor farmers in Africa, including the World Bank's programming in Tanzania. Generally, some examples of already realized outcomes include:

- Informal discussions and formal presentations engaging African policy makers from the region.
- Emerging understanding among researchers (both African and international), leaders of Pan-African organizations, and policy makers of the potential role of input subsidy programs to contribute to climate smart objectives resulting from C4a research and outreach activities. Our research is stressing the need for much greater production and utilization of organic matter in ISPs, based on emerging consensus that low organic matter is an increasingly major impediment to productivity growth and crop response to inorganic fertilizers.
- Specific policy engagement activities involving the RENAPRI network; RENAPRI researchers are now addressing and integrating these findings in their own research and outreach work, particularly in Zambia, Tanzania, Malawi, and Kenya.
- C4a researchers are liaising extensively with Pan-African organizations and national governments through collaboration on country studies examining progress in the design and implementation of land policies to protect land rights of individuals and local communities in selected pilot countries.
- Some FSP countries are asking for guidance about the appropriate role of medium-scale investor farms, what crops they are growing and selling, and whether they are contributing to agricultural transformation. For example, our C4a work has resulted in the Tanzania government and development partners requesting ASPIRES assistance in producing a paper focusing on medium-scale farms in Tanzania with a view to including the findings in upcoming Tanzanian policy discussions and national plans. FSP has produced a draft paper in response to these requests that will be finalized in late July 2018. Initial results were presented at the 4th Annual Agricultural Policy Conference in mid-February 2018 and a combined team of World Bank and ASPIRES' researchers toured medium-scale farms to get a better understanding of their characteristics and potential.
- Under this activity, C4a researchers are working together with USAID/land policy researchers to integrate their findings into a synthesis report on the causes and consequences of changing farmland distribution patterns in Africa
- C4a researchers are also examining cross-country evidence on the relationship between farm

scale and farm productivity based on a much wider range of farm sizes than is typically examined in Africa, which is particularly relevant given the recent rise of medium- and large-scale farms.

Achievements:

- Meetings between MSU, IFPRI and USAID land policy researchers working on Activity 2 to plan next steps in integrating work on land dynamics/changing farm size distributions and land tenure policies.
- Finalized a Guideline/Toolkit for Monitoring and Evaluation of Land governance in Africa" for presentation at a round-table discussion of the 2017 2nd bi-annual Conference on land Policy in Africa (CLPA), November 14 17, 2017, Addis Ababa, Ethiopia [guideline under review by Africa Land Policy Center (ALPC) for final endorsement]
- Organized/present at inception workshop for "Monitoring and Evaluation of Land governance in Africa" in Tanzania
- Organized/present at inception workshop for "Monitoring and Evaluation of Land governance in Africa" in Malawi
- Organized a session (together with LPI, the World Bank, UN-Habitat and ILC) on "Land Governance Monitoring in Africa – The Monitoring and Evaluation of Land Governance in Africa (MELA) Initiative, AU Agenda 2063 and SDGs" as part of 2017 2nd bi-annual CLPA, November 14 – 17, 2017, Addis Ababa, Ethiopia

Capacity building:

- 1-day training on the definition, measurement and reporting on selected indicators/proxies for MELA in Tanzania to member of MELA national task force involving representatives from Min. of Lands M&E, Min, of Ag M&E, National statistics office (NSO), Ministry of Planning, Ministry of Justice, and other stakeholders, October 3, 2017, Dar Es Salam, Tanzania
- 1-day training workshop on the definition, measurement and reporting on selected indicators/proxies for MELA in Malawi to member of MELA national task force involving representatives from Min. of Lands M&E, Min, of Ag M&E, NSO, Ministry of Planning, Ministry of Justice, and other stakeholders, October 6, 2017, Lilongwe, Malawi.
- 1-day training workshop on the definition, measurement and reporting on selected indicators/proxies for MELA in Madagascar to member of MELA national task force involving representatives from Min. of Lands M&E, Min. of Ag M&E, NSO, Ministry of Planning, Ministry of Justice, and other stakeholders, October 9, 2017, Antananarivo, Madagascar
- 1-day training on the methodology for MELA; functionality of the MELA database platform (open source web-based platform); MELA data collection/compilation and reporting to MELA project country coordinators and government representatives from 8 African countries (Tanzania, Madagascar, Malawi, Ethiopia, Zambia, Cote de'Ivoire, DRC and Rwanda) as a side event (master class) to the 2nd bi-annual CLPA, November 14th, 2017, Addis Ababa, Ethiopia.

Sub-Activity #2.2: Land Tenure and Land Registration Policy: (Lead: Hosaena Ghebru)

Description:

• Support the AU-LPI in Monitoring and Tracking Progress in Implementation of the AU Declaration on Land Issues and Challenges, and Understanding drivers of tenure security and

impacts of land policy

Achievements:

No additional activities to report in this reporting period.

Outputs

Publications:

- "Perceived tenure (in)security in the era of rural transformation: a gender-disaggregated analysis from Mozambique" Presentation at the 20th Annual World Bank conference on Land and Poverty: Catalyzing Innovation, March 25 29, 2019, Washington DC, USA.
- "Land access and youth spatial and occupational mobility in Africa: the case of Nigeria" Submitted for presentation at the 20th Annual World Bank conference on Land and Poverty: Catalyzing Innovation, March 25 29, 2019, Washington DC, USA.
- "The gender-disaggregated impacts of Second-Level Land Certification (SLLC) program in Ethiopia: empirical evidence using panel data" Submitted for presentation at the 20th Annual World Bank conference on Land and Poverty: Catalyzing Innovation, March 25 29, 2019, Washington DC, USA.
- "Land Access and Perceived Tenure Security in the Era of Social, Economic and Environmental Dynamics/ Transformation in Africa (cross-country analysis)" Submitted for presentation at the 20th Annual World Bank conference on Land and Poverty: Catalyzing Innovation, March 25 29, 2019, Washington DC, USA.

Outcomes:

Empirical evidences from Mozambique and Nigeria have resulted in informing:

- the implementation (and targeting in scale-up phases) process of the Nigerian Systematic Land Tenure Regularization (SLTR) process to be a parcel-based titling instead of issuing a title at a household level (avoiding the usual practice of issuing titles in the name of the male heads);
- the new Africa-wide guideline/framework for Monitoring and Evaluation of Land governance in Africa (MELA) to include a proxy or indicator (now endorsed/validated by 10 member states of the AUC) "IND 44: Proportion of women with knowledge of land laws and procedures" as one way for tracking progress in enhancing good land governance at a country as well as continental level.

Activity 3: Mechanization in Agricultural Transformation: South-South Learning and Knowledge Exchange (Lead: Takeshima).

Description: Under this activity, we have continued research on various African and Asian countries, and outreach activities in Nigeria.

Achievements:

• Progress has been made toward the completion of the book on agricultural mechanization, which showcases the experiences in 8 Asian countries, and 5 African countries, as part of South-South knowledge exchanges. Book manuscript has been completed and submitted to IFPRI's Publication Review Committee (PRC). Internal reviewers consider that the manuscript makes significant contributions to the agricultural mechanization literature, and agreed that the manuscript is worth moving forward, upon addressing some of their

- comments. The revisions addressing these internal reviewers' comments are completed and the manuscript has been resubmitted. Once the PRC considers revisions satisfactory, the manuscript will be sent out to external reviewers for further review.
- Progress has also been made on empirical assessments of the demand for mechanization and its heterogeneity across locations in Ghana, Kenya, and Nigeria.
- A draft paper has been completed investigating the linkages between plant breeding, agroecological diversity, and adoptions (at both extensive and intensive margins) of agricultural machinery including tractors in Ghana, under the joint funding with IFPRI-led Policy, Institutions and Markets (PIM), and Syngenta Foundation.
- Similarly, research investigating the impacts of mechanical technologies (draft animal or tractors) on the economies of scope has been completed and published as working papers (Takeshima et al. 2018; Hatzenbuehler et al. 2018) under the joint funding with IFPRI's Nigeria Strategy Support Program which is also under the FSP-Core project, and currently being reviewed by a journal. The analyses provide insights into how mechanization can spread in Africa where production environments are diverse and farmers often need to retain farming system diversity (in terms of cropping system, diversifications between farming and non-farming activities) rather than specializing into fewer crops or economic activities.
- As is described below, various outreach activities have also been conducted, especially in Nigeria, where key findings of agricultural mechanization were communicated to various stakeholders.

Meetings:

- Dr. Audu Ogbeh, Honorable Minister of Agriculture & Rural Development of Nigeria, Dr. Aishetu Ndayako Mohammend (Head of Project Coordinating Units, FMARD), Dr. Andrew Kwasari (FMARD), Mr. Irede K. Ajala (Special Technical Advisor to the Honorable Minister on Investment Promotion & Agribusiness), February 1, 2019.
- Briefed the research findings on mechanization in Nigeria in 2016-2018, including the studies on tractor owners in Benue state; briefly discussed the issues potentially arising in the forthcoming Nigeria-Brazil agreement on tractors
- Engr. Abdullahi Abubakar (Deputy Director of Engineering & Mechanization Division, FMARD, Nigeria); Briefed the research findings on mechanization from 2018 and continued discussions on the mechanization sector issues in Nigeria – January 15, 2019
- Engr. Sunday Obasi (Officer, Chief Agric Superintendent, Horticulture Division, FMARD, Nigeria); Mrs. Zainah Towobola (Director Nutrition & Food Safety Division, FMARD, Nigeria); Dr. Fatima K. Aliyu (Deputy Director of Cereals and Food Crops Division, FMARD, Nigeria); Briefed the research findings on agricultural inputs including mechanization in 2016-2018 and continued discussions January 15 16, 2019
- Dr. Madugu Shuaibu A., Managing Director (Agricultural Research Council of Nigeria); Briefed the research findings on seed varieties, irrigation and mechanization in 2016-2018 and continued discussions on these inputs in Nigeria and incorporation into research January 16, 2019.
- Dr. Ibrahim Garba Musa (Permanent Secretary, Niger State Ministry of Agriculture and Rural Development); briefed the research findings on mechanization in 2016-2018, discussed their implications on these agricultural inputs in Niger state in Nigeria January 21, 2019
- Engr. Thomas Unongo (Director, Agric. Services, Benue State Ministry of Agriculture, Nigeria); Briefed the research findings on mechanization in 2016-2018, including the key messages from tractor owner survey in Benue in 2018, and discussed their implications in

- Benue state January 22, 2019
- Dr. Abdulkadir A. Kassim (Permanent Secretary, Kaduna State Ministry of Agriculture and Forestry), Dr. Samuel Dogo (Director, Veterinary Services, Kaduna State Ministry of Agriculture and Forestry), Engineer Abdullahi Aliyu Musa (Director Agricultural Mechanization); Briefed the research findings on mechanization in 2016-2018, including the key messages from tractor seller survey in Kaduna state in 2018, and discussed their implications on these agricultural inputs in Kaduna state, Nigeria – January 24, 2019

Outputs:

Presentations:

- "South-South learning for mechanization in Africa: smallholders, supply side issues, and policy-engagements" at Food Security Policy: Toward Inclusive and Sustainable Food System Transformation: Reflection Workshop, Washington DC, and March 5, 2019.
- "Recent research findings on seed varieties, irrigation, and agricultural mechanization in Nigeria" presented at various locations (Abuja, Kaduna, Makurdi, and Minna) in Nigeria, January 2019.
- "Overview of agricultural modernization in ASEAN region" presented at the Policy Forum on Agricultural Transformation and Market Integration in the ASEAN Region: Responding to Food Security and Inclusiveness Concerns, Phnom Penh, Cambodia, December 13, 2018.
- "Agricultural mechanization growth in Asian developing countries: Patterns and implications" presented at the Expert Meeting for the Development of an Agricultural Transformation Framework for APO Member Countries, Asian Productivity Organization. Tokyo, Japan, October 29, 2018.

Research Papers / Briefs:

- Diao X, H Takeshima & X Zhang. A New Paradigm of Agricultural Mechanization Development: How Much Can Africa Learn from Asia? IFPRI. Under revision.
- Takeshima H & Y Liu. (2019). Determinants of agricultural machinery adoption intensities in Ghana. IFPRI Discussion Paper, forthcoming.
- Hatzenbuehler P, H Takeshima, H Edeh & A Lawal. (2018). Cost and policy determinants of features of tractor markets in Nigeria. IFPRI NSSP Working Paper 55.
- Synopsis: Cost and policy determinants of features of tractor markets in Nigeria: Case studies of tractor sellers in Kaduna state and tractor owners in Benue state. IFPRI NSSP Policy Note 50
- Takeshima H, P Hatzenbuehler, H Edeh. (2018c). Effects of agricultural mechanization on economies of scope in crop production in Nigeria. IFPRI NSSP Working Paper 53.
- Synopsis: Effects of agricultural mechanization on economies of scope in crop production in Nigeria. IFPRI NSSP Policy Note 48.

Capacity building:

• Under the joint funding with IFPRI's Nigeria Strategy Support Program, a series of research seminars were held in Nigeria in January 2019. Seminars at two of the locations (Niger state and Benue state) were intended more for academic researchers and students (in Niger state, seminar itself was held at a college), where research methodologies were discussed and relevant materials were shared with participating students.

Outcomes:

An important meeting was held with aforementioned various government officials in Nigeria, 49

including the Minister of Agriculture & Rural Development (formerly, as the meeting took place before the election in February), as well as high-ranking aides, where important messages were communicated including the linkages between mechanization adoption and plant-breeding systems, and the lessons from Ghana on its recent program with Brazil's More Food International Program where Brazilian tractors were provided to Ghana at concessional loans, combined with various capacity-enhancing components (e.g., training on machine use, maintenance and repairs, demonstrations of multi-functionality of tractors with the use of complementary machines like shellers, mini-harvesters, among others). Similarly, the lessons from this recent arrangement in Ghana, compiled from earlier work under FSP conducted in 2018, were also shared.

Activity #5: Agricultural financial markets intermediation to unlock food system transformation. (Lead: Makhura, UP.)

Description: The purpose of the activity is to promote development of finance policies, institutions and instruments that are sensitive to and can unlock the transformation of the food system. The activity has two sub-activities.

Analysis of finance policies to determine how they relate to the policies in the food system and its transformation in Southern Africa with particular reference to Malawi. The emerging issues were to be tested with stakeholders or existing work.

Engagement activities with formal and informal financial sector in Malawi to facilitate design of financing policy solutions to support the transformation of the food system and engagement in global issues on financing the food system.

Achievements:

- Prepared a review on the existing literature on finance policy in Malawi and other related issues guiding financing policies to support the food system.
- Commented on the Concept note on Agricultural Finance Lacuna in Malawi. Facilitated by the New Alliance for Food Security and Nutrition in Malawi for Commercial Agriculture Support Services.
- Findings and recommendations of the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security (HLPE) Report presented at the 45th Committee on World Food Security (CFS45) Plenary during the World Food Week in Rome, 15-19 October 2018. The presentation was conducted together with the HLPE Coordinator, Dr Nathanael Pingault; and HLPE Steering Committee Chair, Dr Patrick Caron. The session was chaired by the Chairperson of Committee on World Food Security (CFS Chair), Mario Arvelo.
- Provided feedback on the Malawi Cooperative Bank Inception Report by the consultants determining the feasibility of establishing an agricultural financial institution to provide finances to farmers.
- Analysis of 75 policy documents on finance and food systems in Malawi for review and analysis.
- Attended Agricultural Transformation Summit in BICC, Lilongwe. December, 4 2018.
- Engagements with the stakeholders (in government and private sector). A formal interaction

to be held to discuss alternative options for financial intermediation in the food system.

Outputs:

Meetings:

- High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security (HLPE) Meeting with Committee on World Food Security (CFS) and HLPE Secretariat. 18 October 2018. Rome
- Engagement with Martin Morut Isyagi, CEO of Press Agriculture and later with Mr. Mhango, CEO of Press Trust in Malawi. December, 5 2018. This was to determine the appropriateness of the emerging financing policies to support agricultural production led by Press Agriculture.

Presentations:

- Multi-stakeholder Partnerships to Finance and Improve Food Security and Nutrition in the Framework of the 2030 Agenda. Report launched presented at the 45th Committee on World Food Security (CFS45) Plenary during the World Food Week in Rome, 15-19 October 2018.
- Multi-stakeholder Partnerships to Finance and Improve Food Security and Nutrition in the Framework of the 2030 Agenda. Presentation at the Panel on Food Security during Agricultural Economics Association of South Africa (AEASA) Conference. Stellenbosch. South Africa. 25-28 September 2018
- Multi-stakeholder Partnerships to Finance and Improve Food Security and Nutrition in the Framework of the 2030 Agenda. Presentation to Collaborative Masters in Applied and Agricultural Economics (CMAAE) group of the African Economic Research Consortium (AERC). University of Pretoria. 12 October 2018

Research Papers

- HLPE. 2018. Multi-stakeholder Partnerships to Finance and Improve Food Security and Nutrition in the Framework of the 2030 Agenda. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome.
- Makhura, MN, Adegbigte, OO, Hendriks, SL, Mkandawire, E, Olivier, N, Nankuni, F and Nyondo, CJ. 2018. Sensitivity and interrelation of financing policies to food system policies in Malawi. A draft FSP Working paper
- Moraka N Makhura, Olayinka O Adegbite, Elizabeth Mkandawire, Nic JJ Olivier, Flora J Nankhuni, Christone J Nyondo & Sheryl Hendriks. 2019. Mapping Policy Responses to Food Systems Transformation in Malawi. Feed the Future Innovation Lab for Food Security Policy Research Brief 77. East Lansing: Michigan State University.
- Moraka N Makhura, Olayinka O Adegbite, Elizabeth Mkandawire, Nic Olivier, Flora Nankhuni, Christone Nyondo & Sheryl Hendriks, Are Financing Policies Sensitive to Food Systems Transformation in Malawi? Feed the Future Innovation Lab for Food Security Policy Research Brief 78. East Lansing: Michigan State University.

Outcomes

- Feasibility study of establishing an agricultural financial institution to provide finances to farmers (Malawi Cooperative Bank).
- Development of Strategic Plan for Commercial Agriculture Support Services (CASS): 2018-2023.

Activity #6: Seed system policy. (Lead: Maredia.)

Description: Continued collaborative work with the CGIAR Policy, Institutions and Markets (PIM) program (cluster 1.2) on seed system and policies for vegetatively propagated crops. The focus of this joint work is focused on three countries and two crops—Kenya (potato), Nigeria (Cassava), and Vietnam (potato and cassava). The focus is on filling knowledge gaps on quality assurance system and related policy/regulatory issues such as seed certification, cross-border seed trade, seed relief (post-disaster), and integrating seed policies in national action plans for climate-resilient agriculture.

Since last year, the work on seed demand and farmer's "willingness to pay" for improved seed was extended on pulse crops in the Dry Zone Region of Myanmar.

Achievements in the reporting period:

- A writeshop to discuss the results of the seed demand study for the dry zone region was held in Myanmar in November in collaboration with IFPRI and ISSD. An outline of the research report based on the farmer survey was developed and major results discussed for formulating the next steps. The report based on this study is anticipated by the end of 2019.
- Analysis of the farmer WTP for quality seed for green gram and chickpea was completed as part of thesis research by the Myanmar grad student at MSU. Thesis submitted to MSU graduate school in November 2019.
- Analysis of the farmer WTP for quality potato seed in Kenya was completed as part of thesis research by a grad student at MSU. Thesis submitted to MSU graduate school in November 2019.
- A draft paper on "Policy Options for Advancing Seed Systems for Vegetatively Propagated Crops in Vietnam" was completed in collaboration with researchers from IFPRI, CIP and CIAT. It is currently under review in *Food Policy*
- Maredia participated in the Side Event organized by Self Help Africa at the Committee on World Food Security (CFS) meeting in Rome in October 2019. She gave a presentation on "Closing the Hunger Gap through Improved Seed Access: The Role of Seed Policies" (joint with D. Spielman, IFPRI).

Status Report on Data Management Plan

#	Dataset	Brief description	Anticipated	When will	Has this
	Type		time frame	it be	already
			for a	registered	been
			scholarly	in DDL?	registered to
			output to be		the DDL?
			completed		(Y/N)
			based on this		
			dataset?		
1	Farm	Socio economic farm data -	Completed	1st quarter	Yes
	household	Malawi/2014, including	August 2016	2018	(Registered in
	survey	medium-scale farms	(journal article		2016)
	-		in Land)		·
2	Farm	Socio economic farm data -	Apr-17 –	1st quarter	Yes
	household	Mozambique/2016,	slowed down	2018	(Registered in
	survey	including medium-scale	due to data		2018)
		farms	quality issues,		

#	Dataset Type	Brief description	Anticipated time frame for a scholarly output to be completed based on this dataset?	When will it be registered in DDL?	Has this already been registered to the DDL? (Y/N)
			no analysis undertaken yet		
3	Farm household survey	Socio economic farm data - Senegal/2016, including medium-scale farms	Jul-17	3rd quarter 2018	Yes (Registered in 2018)
4	Survey of Medium- scale farms in 8 districts of Tanzania	Survey of all medium-and large-scale farms in eight (8) in rural Tanzania (completed in August 2016). This involves interviews with village headmen who provide information on households controlling 10 hectares and above, their landholding sizes and the area under crop, and GPS coordinates of the villages	1st Quarter/2019	1st quarter 2018	Yes (Registered in 2018)
5	Farmer survey data	Survey of 1,200 farm households in rural Tanzania. Collect household demographic data, agricultural practices, incomes, soil samples, and household location GPS coordinates (completed June 2017)	1st Quarter/2019	3rd quarter 2018	Yes (Registered in 2018)

COMPONENT 4b: DOWNSTREAM AGRIFOOD SYSTEM TRANSFORMATION AND IMPLICATIONS FOR LINKAGES TO THE UPSTREAM

The purpose of work under this component is to (a) document the 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. Six key messages are emerging from this research. These are:

- 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. 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.
- 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.
- 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.
- 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.
- 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, proemployment policies in this area will favor gender equity.

Activity 1: Final Push towards Policy Influence (Task 1)

The C4b team has targeted four sets of stakeholders (host country governments, bilateral and multilateral 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.

At national level, the C4b team has worked hand-in-hand with country programs to mainstream these messages and begin achieving concrete policy impact. The C4b 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. At regional level, 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. At global level, 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).

In this final year, our focus has been on completing major activities continuing from the previous year, and outreach activities to give a final push towards policy influence. These included:

- Activity 1.1. Major contributions to: a) IFAD Rural Development Report 2019. (Lead: Tschirley, Reardon (Jayne also)), and b) the 2019 report released by the Alliance for a Green Revolution in Africa (AGRA), titled, "The Africa Agriculture Status Report (AASR): The Hidden Middle: A Quiet Revolution in the Private Sector Driving Agricultural Transformation." This report was released in September at the African Green Revolution Forum (AGRF) in Accra, Ghana to an audience of over 2,000 delegates from across the continent. This was lead by Tom Reardon with major contributions from several C4b team members (see the list of chapters included in this report in Annex F under peer reviewed publications).
- Activity 1.2. Agrilinks outreach in September or October, 2018. (Lead: Tschirley, Reardon (Jayne also)). This activity was postponed.
- Activity 1.3. Engagement in Tanzania on 1) oilseeds policy, and 2) agroprocessing strategy. (Lead: Nyange, Tschirley, Olabisi.)

Activity 2: Poultry sector analysis and outreach in Nigeria (Lead: Liverpool-Tasie)

Achievements:

The C4b team, in addition to writing the Task 5 paper, worked on data analysis and writing on data from Nigeria and Tanzania. Some of these analytical work has been published and some are still at various stages of finalizing the analysis and writing. The team is also expecting several journal articles to be accepted over the next 3 months.

Published papers:

- Choko, Schmitt Olabisi, Onyeneke, Nwawulu Chiemela, Liverpool-Tasie and Rivers III. 2019. Community-Scale Climate Adaptation: Evidence from Ebonyi State, Nigeria. FSP Policy Research Brief 81. East Lansing: Michigan State University.
- Lenis Saweda O. Liverpool-Tasie, Awa Sanou and Justice A. Tambo, 2018. Climate Change Adaptation among Poultry Farmers: Evidence from Nigeria. Feed the Future Innovation Lab for Food Security Policy Research Paper 114. East Lansing: Michigan State University
- Liverpool-Tasie, Turna, Ademola, Obadina, Wu, 2018. The Occurrence of Aflatoxin and Fumonisin Along the Maize Value Chain in Nigeria. Feed the Future Innovation Lab for Food Security Policy Research Paper 113. East Lansing, Michigan State University.
- Ebiloma, Olatunji, Matthias, Nmadu, Olorunsanya, Baba, Jirgi, Tsado, Liverpool-Tasie, and Reardon, 2018. The Rapid Transformation of the Fish Value Chain in Nigeria. FSP Research Paper 112. East Lansing, MSU.
- Oluwatoyin Ademola, Lenis Saweda O. Liverpool-Tasie, Adewale Obadina, Nikita Saha Turna, Felicia Wu, 2018. The Effect of Processing Practices On Mycotoxin Reduction in Maize Based Products: Evidence from Lactic Acid Fermentation in Southwest Nigeria. Feed the Future Innovation Lab for Food Security Policy Research Paper 109. East Lansing: Michigan State University.

Forthcoming papers/briefs:

Tentative titles of these working papers/briefs that are in the pipeline and to be completed by December 2019 are:

- Sauer, C., D. Tschirley, T. Reardon. Processed food expenditure by rural and urban households in Tanzania: policy implications. Full Report/Policy Brief.
- Alphonse, R., V. Caputo. Consumption preferences for fortified processed foods in Tanzania: policy implications. Policy Brief.
- Sauer, C., D. Tschirley, T. Reardon. Do the poor pay more for food in Tanzania: policy implications. Full Report/Policy Brief.
- Waized, B., Sauer, C., T. Reardon. Maize meal prices and preferences based on consumption and retail surveys in Tanzania: policy implications. Policy Brief.

Update on Data Management Plan

#	Dataset Type	Brief description	Anticipated time frame for a scholarly output to be completed based on this dataset?	When will it be registered in DDL?	Has this already been registered to the DDL? (Y/N)
1	C4b and ASPIRES Seed Value Chain/Local Market Data	Retail survey in 3 cities in Tanzania documenting market share of different types of retail outlets, and rates of change of market share across major food groups in Tanzania. Retail	March 2018	March 2019	Submitted, awaiting response from DDL in order to upload data

#	Dataset Type	Brief description	Anticipated time frame for a scholarly output to be completed based on this dataset?	When will it be registered in DDL?	Has this already been registered to the DDL? (Y/N)
		outlets (Supermarket chains, independents, traditional shops, market vendors and street vendors).			
2	C4b and ASPIRES Seed Value Chain/Local Market Data	Survey of processors of maize meal and mixed meal products in three cities in Tanzania to examine recent changes in the structure of this important sector.	March 2018	March 2019	Submitted, awaiting response from DDL in order to upload data
3	C4b and ASPIRES	Surveys of processors, wholesalers, and retailers of foods in selected urban areas and connected rural areas of central Tanzania, to understand the penetration of processed foods into rural areas		December 2019	No
4	C4B and Nigeria AA	Stacked surveys of traders and processors in the maize and poultry value chains of Nigeria, combined with testing of food samples for aflatoxin contamination		December 2019	No

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.

Activity #1: Supporting the BFS Policy Unit with research evidence and analysis (Lead: IFPRI)

#1a: Supporting the GFSS Target Country transition strategy (Lead: IFPRI)

IFPRI was approached by USAID BFS in early November 2016 to assist them and their other interagency partners in developing indicators and a tool to select focus countries for the new United States Government (USG) Global Food Security Strategy (GFSS). IFPRI supported the country selection process by, providing technical back-stopping in and data analysis for numerous discussions to select indicators and generated an Excel-based tool that aggregated indicator data to rank countries by the GFSS selection criteria.

Early in FY 2018, USAID again approached IFPRI for additional support in the development of a FTF Target Country Graduation Policy and Review Process. The Policy and Review Process is to monitor and evaluate country progress towards an end state where they can graduate out of Feed the Future target country status.

In support of the Feed the Future Target Country Graduation Policy and Review Process, IFPRI provided support in selecting indicators (to be measured annually) to assess target country readiness to graduate and developed an Excel-based tool to collect and aggregate data, and visualize country progress in the form of a scorecard.

No additional activities to report in this reporting period.

#1b: Analysis of annual Mission reporting on policy matrix progress (Lead: IFPRI)

Each FTF country has a policy matrix jointly developed by missions and their country partners that lays out a prioritized agenda of policy actions that are to be accomplished between the period 2013 and 2017. Each year FTF countries report on: the status of various policy actions (complete, on target, behind schedule, on hold), the successes and barriers in achieving progress and policy change, those partners / stakeholders involved with various policy changes, and other status updates. Working with members of the policy team, FSP cleaned and analyzed the reporting data and prepared a summary report synthesizing progress on the policy matrices. The report was prepared in June and July 2018 and reviewed by BFS staff and finalized in August 2018.

No additional activities to report in this reporting period.

Activity #4: Mapping policy change in food security and nutrition (Lead: University of Pretoria (Hendriks and Olivier))

Description: This activity builds on an earlier C3 mapping of food security and nutrition policies and programs globally (78) countries and the FTF policy matrixes carried out for countries. The work documents the policy changes, new policies passed with regard to food security, food security and

nutrition or nutrition. The work began with identification of the food security and nutrition policy and documenting the changes in policies, programs and orientation with regard to food systems, nutrition-sensitive programs and direct nutrition interventions covering under-nutrition, micronutrient deficiencies and overweight and obesity.

The institutional architecture for the coordination of the NAIPs is being assessed against a framework developed for this purpose. Innovations with regard to policies, programs and institutions will be highlighted as well as trends.

The monitoring and evaluation frameworks of the NAIPs are being assessed against the SDG indicators, Agenda 2063 indicators and the CAADP Results Framework.

Achievements:

A methodology has been developed for evaluating the effectiveness of development planning in terms of the alignment and linkages of (i) international, African and regional commitments and (ii) national transversal development imperatives (including, but not limited to, the country-specific constitution, vision, medium term growth and development strategy, and cross-cutting intergovernmental, financial and development legislation), (iii) the quality of the NAIPs in attaining the Malabo and SDG2 targets related to food security and nutrition and (iv) assessing the gender equality components against commitments.

The methodology has been integrated into the ReSAKSS NAIP support tools and forms part of the CAADP Technical network support. The monitoring and evaluation frameworks of 11 countries with final or draft NAIPs has been conducted. A working paper is has been published and was presented at the IFPRI-FAO conference in Bangkok in November 2018. The working paper and brief was sent to ECOWAS, the AU, ReSAKSS, FAO and the countries for distribution and engagement.

Elizabeth Mkandawire submitted her thesis entitled Interpretations of gender and implications for policy: A case study of Malawi's Nutrition policymaking process, the final copy was accepted at the University of Pretoria in September 2018. The second paper 'A gender assessment of Malawi's National Nutrition Policy and Strategic Plan 2007–2012' has been published in Development Policy Review and the first paper 'A qualitative analysis of the conceptualization of men's involvement in maternal and child health in rural Central Malawi' has been published in BMC Pregnancy and Childbirth.

The full database of approximately 500 food security and nutrition related documents (conventions, treaties, agreements at the international, African and regional level and domestic policies, strategies, legislation and plans for Malawi) collated under component C3 Activity 4 and Task 1.5 have been submitted to ReSAKSS for loading onto the ReSAKSS website.

Documentation on the agriculture and food security policy context in each of the 20 priority countries and Malawi has been collected as well as the first generation NAIP documents, reviews and assessments. We have developed a template for systematic analysis of policy and institutional changes between the two generations of NAIPs and have identified the indicators relevant to food security and nutrition from the SDGs, CAADP results Framework and Biennial Review. This has been posted on the web and distributed to ECOWAS countries.

The Malawi NAIP was reviewed and a brief sent to the country. The Liberia NAIP was also reviewed and sent to the country CAADP team. This analysis brings together work carried out in C3. We were able to use the tool to convince the Liberian delegation that their draft NAIP 2 is too unfocussed and ambitious. They will be reporting back on the feedback to the country team and are considering going back to the original NAIP to refine this to align with Malabo rather than starting from scratch. The Theory of Change tool showed that Liberia's NAIP 2 draft had five components, one of which was food security and nutrition. This component has over 35 programs. We presented a comparison of Togo (a better example and focused) vs Liberia (all over the place and unfocused) as illustrations at the workshop. A review of the Nigeria NAIP was also conducted and shared with the Nigeria CAADP focal person.

We were also able to convince the countries that they have to include food security indicators to manage and mitigate these risks as the CAADP results framework only includes nutrition indicators. They agreed that this is necessary and will revise the indicators for food security and nutrition to align with the Malabo commitments, the Biennial Review Report outcomes and indicators we provided that could be useful for measuring and monitoring and setting targets for this element of the NAIPs. We have shared the C5 activity tool with the countries.

The policy landscape for 11 countries with final and draft NAIPs available have been developed and the analysis is underway to establish trends in agriculture, food security, food and nutrition security and nutrition policy changes and events. The drivers of these trends are being investigated.

No additional activities to report in this reporting period.

Outputs:

Policy Briefs:

 Moraka N Makhura, Olayinka O Adegbite, Elizabeth Mkandawire, Nic JJ Olivier, Flora J Nankhuni, Christone J Nyondo & Sheryl Hendriks. 2019. Mapping Policy Responses to Food Systems Transformation in Malawi. Feed the Future Innovation Lab for Food Security Policy Research Brief 77. East Lansing: Michigan State University.

Presentations:

• Sheryl Hendriks, Moraka Makhura, Nic Olivier, Nokuthula Vilakazi and Nosipho Mabuza (2018). Integrating and alignment of policy commitments: Lessons from an assessment of country NAIPs. Presentation at a seminar hosted by the Collaborative Masters in Agricultural and Applied Economics at the University of Pretoria, 12 October 2018.

Outcomes

- Recommendations from the Malawi and Liberia policy briefs have been taken up in the final NAIPs.
- Recommendations from the Liberia NAIP analysis were taken up

Activity # 5: Updating of the FTF Institutional Architecture Assessments (IAAs) with recent food security policy changes. (Lead: University of Pretoria: Hendriks, Makhura and Olivier)

Description: This activity builds on earlier C3 mapping of food security and nutrition policies and programs and the FTF policy matrixes carried out for countries. The work updates the IAAs with the information from C5 A2 from 2017 and 2018 and the extensive body of data collected through C3 A4.

Achievements:

- The institutional arrangements for 11 countries with final or draft NAIPs have been assessed. An analytical framework and model for the design of integrated institutional systems for the coordination and cooperation on food security and nutrition activities in countries has been elaborated, using the UN Committee on World Food Security's High Level Panel of Experts on Food Security and Nutrition's recent report on Multi-Stakeholder Partnerships to Finance and Improve Food Security and Nutrition in the Framework of the 2030 Agenda. Our colleague and team member, Dr Makhura, was the lead person for the HLPE report. The work under the FSP extends and elaborates on this report and applies a framework for NAIP coordination arrangements.
- A draft report was presented during a side event at the Addis Ababa Annual Conference IFPRI-Bangkok conference in October 2018.
- The revised report was presented during a side event at the Bangkok IFPRI-FAO Conference in November 2018.
- A stocktaking of the policy environment for food security and nutrition has been conducted for 11 countries with final or draft NAIPs. A working paper was presented at the IFPRI-FAO conference in Bangkok in November 2018. The working paper and brief have been sent to ECOWAS, the AU, ReSAKKS and the countries for distribution and engagement.
- A conceptual paper is being drafted setting out the shift in policy and discourse on food security, nutrition, sustainable development, emergency/disaster resilience, mutual accountability, multi-stakeholder partnerships and coordination. The paper will document the growing understanding that the notion of food security and nutrition is linked to various other domains beyond agriculture. This paper will form the basis for engagement and recommendations for improving the USAID policy guide and the country matrixes to improve food security policy, programming, coordination and cooperation as well as implementation and monitoring and evaluation (see Component 5 Activity 5).
- The existing policy matrixes have been assessed and it was found that very few have nutrition as a focus area. None has food security as a policy area. The analysis conducted under C5 Activity 4 has examined the institutional architecture for 10 NAIPs and assesses the adequacy of these against the NAIP institutional architectures contained in the CAADP Implementation Guide, the Biennial Review and the international agreements of the Paris Declaration, Accra Agenda and the Bussan Partnership Agreement as well as the SDG approaches found in amongst others Rio 1994, Rio 20+ and the SDGs and the recently launched HLPE report on multi-stakeholder partnerships for food security and nutrition.

Outputs:

Meetings:

- Discussions with Malawi NAIP coordinator and the Civil Society (NGO) coordinator following presentations in Addis Ababa and Bangkok
- Also participated in Agricultural Transformation Summit in Malawi and contributed to consideration of institutional arrangements during transformation.
- Discussion with Press Agriculture and Press Trust in Malawi on creating partnerships with public sector, private sector and civil society in reviving Press Agriculture farming operations.

Presentations

• Hendriks SL, Makhura MN, Olivier NJJ, Mkandawire E and Olivier NJJ. (2018). Overview of

- the insights, lessons leant and innovations with regard to NAIP indicator sets related to CAADP commitments, mutual accountability and investment in agriculture. Presented at a side event at the ReSAKKS Annual Conference, Addis Ababa in October 2018
- Hendriks SL, Makhura MN, Olivier NJJ, Mkandawire E and Olivier NJJ. (2018). Are the NAIP II institutional architectures fit for the purpose of achieving SDG 2 in Africa? Presented at a side event at the Bangkok IFPRI-FAO Conference in November 2018

Capacity Building:

- The work on this activity was integrated into the Collaborative Masters in Agricultural and Applied Economics module on Food Security and Nutrition Analysis and the module on Agriculture and Rural Development
- The work is being incorporated into University of Pretoria New Institutional Economics (NIE) and Agriculture and Rural Development modules in 2019 and beyond.

Policy Briefs and Working Papers:

- Nic J.J. Olivier, Sheryl L. Hendriks, Elizabeth Mkandawire, 2019. A Review of the Alignment of the Republic of Uganda's Draft Agriculture Sector Strategic Plan with the Malabo Commitments with Regard to Food Security and Nutrition, Food Security Policy Research Brief 88, East Lansing: Michigan State University. PRB 88:
- Moraka N Makhura, Sheryl L Hendriks, Nic JJ Olivier, Elizabeth Mkandawire, Nokuthula Vilakazi, Nico JJ Olivier and Nosipho Mabuza. (2018). Are the NAIP II institutional architectures fit for purpose for achieving SDG 2 in Africa? Draft FSP Research Working Paper.(115)
- Sheryl L Hendriks, Nic JJ Olivier, Elizabeth Mkandawire, Nosipho Mabuza, and Moraka N Makhura. (2018) Creating the Necessary Policy Context for Progress on the Malabo Declaration: A Review of Food Security and Nutrition Policy Changes in 11 Africa Countries. Feed the Future Innovation Lab for Food Security Policy Research Paper 122. East Lansing, Michigan State University.

Policy engagement:

Draft Policy Brief and ISP4D model with delegates from countries reviewed.

Activity # 6: A rapid assessment of the level of resilience built into 2014+ second generation national agriculture and food security investment plans (NAIPs)with specific reference to Myanmar and the 2018 Malawi NAIP 2

This activity builds on earlier C3 mapping of food security and nutrition policies and programs and the FTF policy matrixes carried out for various countries. The work uses a resilience assessment tool to identify gaps in national investment plans.

This is currently work in progress. The participating authors are the process of finalising their inputs in respect of the agreed upon Table of Contents, which consists of 1. Introduction; 2. Aim; 3. Definitions (Climate change, Disaster management, Emergency, Resilience, Sustainability, etc); 4. Brief overview of the global, African and SADC context; 5. Brief overview of the policy loop; 6. From disaster management and emergency relief to resilience: brief overview of the evolution of Malawi's constitutional, policy, statutory, strategic, implementation and M&E frameworks; 7. Relationship between climate change and resilience: a Malawian perspective; 8. Overview and analysis of the 2016 National Resilience Plan and the draft National Resilience Strategy; 9. Extent of incorporation of resilience and food security components in various Malawi policy and statutory

instruments; 10. Evaluation of alignment between (a) the 2016 National Resilience Plan and the draft National Resilience Strategy, and (b) the Malawi transversal framework as set out in 9 above; 11. Key findings; and 12. Focussed recommendations.

The expected outputs are:

- A resilience framework toolkit.
- An assessment framework for evaluating NAIPs in this area
- Reports for Myanmar and Malawi with regard to resilience related to food security and nutrition planning, policies, programs, early warning and responses for food security and nutrition.

The expected outcomes are:

- Assessment of the level of resilience of national food security systems for better planning and programming
- Formulation of implementable proposals to effect the integration of, and coherence between:
- African and sub-regional resilience frameworks
- Country-specific domestic resilience-related policy, regulatory, implementation, institutional and financial frameworks, and
- Country-specific 2014+ Malabo-compliant second generation NAIPs.

The potential impact of this activity is:

• Stronger plans, contingencies and systems for more resilient and pro-active food security and nutrition systems

Research into FSN policy reform in Malawi culminated in the finalisation of a lengthy report and a policy research paper. This activity built on the earlier C3/A4 mapping of international, African and SADC food security and nutrition obligations and commitments as well as of the Malawi domestic FSN framework.

Desktop research was supplemented by one-on-one discussions with expert officials and participation in workshops and conferences. The aim of the research was to determine the extent to which Malawi's current constitutional, policy, legal and administrative FSN framework (including, amongst others, the Malawi's National Agriculture Investment Plan II (NAIP2), the Malawi Growth and Development Strategy III (2017 – 2023) and the 2018 Malawi National Planning Commission) had succeeded in domesticating the FSN-related obligations and commitments entrenched in key international (global) regional (African) and sub-regional (SADC) instruments. It also aimed at identifying gaps and formulating implementable recommendations that that might be considered by the Malawi Government in order to increase the probability that Malawi would be in a position to deliver fully and timeously on its (a) commitments made in respect of both the 2014 AU Malabo Declarations and the UN Sustainable Development Goals (SDGs), and (b) other key FSN-related international, regional and sub-regional obligations and commitments.

The research results indicated that key aspects of the Malawi domestic FSN framework (the Malawi Constitution, the policy, legislative programme and institutional frameworks, as well as of three specific focus areas (gender, children, and health)) did not provide evidence of adherence to the sequential nature of the policy loop. In several instances, annual implementation (work) plans were not preceded by sectoral policies, sectoral legislation and/or medium-term sectoral implementation strategies. In addition, binding constitutional provisions were not, or not fully, embodied in the

current Malawi constituent elements of the policy loop. Furthermore, detailed provisions relating to both an overarching M&E framework (structure and systems) and concomitant customised subsector M&E frameworks (structure and systems), were often lacking.

The analysis also indicated that there was a plethora of, amongst others, policies, statutory instruments, medium-term strategies, annual implementation (work) plans, institutions and M&E indicator sets. These were often unconnected, incoherent and contradictory, and to a large extent uncoordinated - and consequently ineffective. As regards compliance with, and domestication of, FSN-related obligations created by global (international), African (regional) and SADC (sub-regional) conventions, treaties and protocols, the vast majority of instruments referred to in the research paper did not give evidence of such alignment.

There was also a significant lack of coherence at both the intra-departmental and the inter-departmental levels as regards the policy elements discussed (medium-term growth and development strategy; sectoral policies; sectoral legislation; medium-term sectoral strategies; annual implementation (work) plans, and M&E structures and systems (including indicators)). From a coordination perspective, evidence of across-the-board effective intra-departmental and inter-departmental coordination mechanisms was not been found.

A number of detailed findings and concomitant recommendations were formulated. In addition, a key role in respect of food security and nutrition has been identified for the recently established Malawi National Planning Commission (NPC). Within this context, it is recommended that the NPC should, as a matter of urgency:

- provide guidance and oversight as regards compulsory compliance by all government departments with the policy loop;
- compel all government entities to ensure both the domestication of, and compliance with, FSN-related global, African and SADC obligations and commitments; and
- Take the responsibility to initiate and manage the rationalization of all Malawi FSN instruments and institutions, and replace same with an overarching FSN framework.

Outputs:

Policy Briefs:

- Olivier NJJ, Mkandawire E, Gouws F, Olivier NJJ, Van der Schyff E and Gildenhuys E. (2018). Full Report: Food Security and Nutrition in Malawi: Policy Reform within the Context of Supra-national Frameworks and Recent Domestic Developments. Feed the Future Innovation Lab for Food Security Policy Working Paper #xx. Michigan State University, University of Pretoria and IFPRI
- Olivier NJJ, Mkandawire E, Gouws F, Olivier NJJ, Van der Schyff E and Gildenhuys E. (2018). Research Paper: Food Security and Nutrition in Malawi: Policy Reform within the Context of Supra-national Frameworks and Recent Domestic Developments. Feed the Future Innovation Lab for Food Security Policy Brief #xx. Michigan State University, University of Pretoria and IFPRI

MANAGEMENT SUPPORT FOR COORDINATION, COMMUNICATION, COMPLIANCE AND IMPACT

This Food Security Policy Innovation Lab is led by a management team at MSU (M. Maredia, S. Longabaugh, and O. Tasie), IFPRI (X. Diao and I. Matias) and UP (S. Hendricks and E. Mkandawire) that serves as a liaison between USAID and the FSP Consortium partners. This team provides support to the FSP Innovation Lab through coordination, communication, compliance and facilitating capacity building and policy change drawing from the wealth of research outputs produced by the FSP Component teams C1 to C5. At each partner institution, the management team is supported by the business office staff that have key responsibilities in the contractual and financial management of the FSP Leader award, Mission buy-ins, and Associate Awards.

Follow up on Internal/External Review Recommendations

Description: Most of the recommendation from the external evaluation are being addressed in the Component workplans described in previous sections and priority tasks identified in Section 2. In addition, we have sought to respond to the following three specific recommendations as part of the management task.

EQ 2.1: Encourage USAID Missions and AfricaLEAD to facilitate their partner government colleagues from other countries to participate in Tanzania to participate in 2018 Annual Agricultural Policy Conference and meet with Policy Analysis Group.

Status: For the past two years, M. Maredia has followed up with the ASPIRES team and our AOR to identify appropriate partner government colleagues to participate in the AAPC held in February 2018 and February 2019. Contacts were made and invitations sent to USAID missions in the region to inform them about this conference. However, no external partner colleagues were able to attend the AAPCs this past two years.

EQ 4.1: Undertake one-time stakeholder demand assessment or survey into the routine FSP IL and Mission-funded AA and Buy-in M&E processes, but with the specific limited focus on final workplan stakeholder surveys or focus group by country and by C3, C4(a) and C4(b) to be designed and implemented in coordination with FSP communications team.

Status: As approved by USAID (in amended workplan), follow up on this recommendation was dropped from the workplan.

EQ 3.1: Strengthen coordination among the several global research components and programs.

In response to this recommendation (3.1), we will strive to identify and support synergies between global components and country policy reform activities, by increasing both the quantity and quality of interaction between country programs and global component teams. Some resources are set aside to support a project-wide meeting/conference to bring together team members across Components, consortium partners, country teams, and USAID to share project accomplishments, information about ongoing complementary activities, discuss lessons learned, and draw implications/guidance for future investments on policy research to facilitate the successful implementation of the new Global Food Security Strategy of the U.S. government.

Status: The Innovation Lab for Food Security Policy Reflection Workshop was held on March 5-6, 2019 in Washington, D.C. that brought together global research teams and leads from each country programs and from all three consortium member institutes (Michigan State University, IFPRI, and University of Pretoria). This event was organized in partnership with the USAID Bureau for Food Security (BFS) and served as a platform for FSP researchers to share their work and insights from the past five years.

<u>Presentations</u> and discussions at the workshop focused on rural and agrifood system transformation, including agricultural land policies and land use transformation, gender and nutrition sensitive policies to promote inclusive agri-food system transformation, institutional architecture for policy processes, and capacity development for policy research and influence. Major insights and findings shared during the two-day event include:

- 1. The documentation of the **rapid transformation of agri-food systems** occurring across the developing world, which is generating a rapidly changing mix of risks and rewards for farmers, entrepreneurs, consumers, and policy makers. Smallholder farmers and small- and medium enterprises need to learn new skills and behaviors if they are to prosper, consumers need new knowledge and understanding to make choices that result in safe and healthy diets, and policy makers need to decide how to deal with big new challenges even as old ones continue to demand their attention.
- 2. The **changing landscape in many African countries**, with the rise in medium-scale farms (cultivating 5-100 ha). On the positive side, these medium-scale farms are pulling in major new private investment in value chains that improve market access conditions for nearby smallholders. However, there are warning signs as well. The rising acquisition of land by outside investors is reducing the stock of land under customary tenure that will be accessible to current and future generations of local people. To the extent that traditional authorities are selling off land to outside investors based on willingness to pay criteria, it is raising the price of land, making it more difficult for rural young people to acquire land, and raising the likelihood that they will exit farming and/or migrate out of the area.
- 3. The policy challenges associated with diet transformation occurring across the developing world. On the one hand, undernutrition is falling, but on the other hand, over-nutrition (overweight and obesity) is rising rapidly. In many developing countries, this transition is happening in a policy vacuum, and there is an urgent need to learn from regulatory approaches in other parts of the world to 'bend the curve' onto a more favorable trajectory. Some promising early actions highlighted include maternal and child health programs, regulatory and fiscal actions to limit access to unhealthy foods, unconventional educational efforts centered on oral hygiene, and supply-side efforts to increase food industry motivation, capacity and responsiveness to emerging public health concerns. In addition, the importance of taking 'whole community' approach, using multiple information channels, developing gender-blind nutrition policies that recognize the vital role of men in maternal and child nutrition, were some of the policy recommendations discussed at the workshop.
- 4. The **need for effective policy responses** to the rapidly transforming rural landscape, agri-food system, and diet transformation. FSP researchers have demonstrated that policy impact requires a deep understanding of the underlying policy processes at the regional, country, and subnational levels. It also requires diverse modes of engagement with government actors, local research institutes, civil society, and donors, to generate discussions, mobilize coalitions for reforms, and monitor changes in policy design modalities. Where there are large data gaps, it requires

- investing in primary research that generates new data and evidence to inform government decisions.
- 5. The multi-pronged approaches needed for policy research capacity development. Some approaches taken by FSP include, networking with universities to build the human capital that will enable future policy research, partnering with local research institutes and think tanks, and customized training and capacity strengthening efforts with a range of stakeholders, such as journalists, research analysts, and policy analysts. The range of institutional approaches and models are all useful and play their evidence generating roles in the policy system depending on the political context of the developing countries. However, rigorous research and independent evidence generation is possible only in the model that operates outside the government structures and is funded independently by outside sources.

2. Compliance with Open Data Management Plan

Description: The management team has continued to track and monitor the progress of the data management plan, and is reflected in individual component reports and in Annex H. To date, 71 out of 84 datasets have been registered in the DDL and are at varying stages of review and approval by USAID. Of the remaining 13 datasets, 3 were registered but did not meet the language requirements (as they were in French) and thus we are trying to find a solution that that issue, 7 are still waiting for a scholarly output and will be registered by December, and 3 are currently undergoing data documentation and organization to register in coming weeks.

3. Grant Management, Reporting, and Monitoring and Evaluation

Description: The management team has continued to play a major role in providing support to the FSP program in terms of:

- Managing institutional sub-contracts and consultancy contracts (including reviewing workplans, budgets, invoicing, meeting Institutional Review Board requirements)
- Submitting required USAID reports: bi-monthly, semi-annual, and financial reports, accruals, etc.
- Submitting published outputs to USAID's Development Experience Clearinghouse (DEC) system
- Collecting, maintaining and submitting to FTFMS system project M&E data
- Providing support to Associate Awards and mission buy-ins in the development of the M&E plan, data collection templates, and conducting the baseline / midline /endline surveys for the qualitative indicators

Achievement:

With the loss of the FSP communications manager in November, communication activities on the web site and social media has declined in this reporting period. However, through student support FSP has continued its effort to keep the website updated with new postings of research papers and news stories. We have also developed a couple of outcome stories and short videos to communicate our work on a variety of topics. More details are provided under Task 3 report.

On M&E front, the Management office coordinated the submission of the Narrative reports and indicator reports to FTFMS in November 2018. Data analysis for the follow-up survey for the two qualitative indicators in Malawi was completed and the report was shared with the stakeholders. A similar follow-up survey for the two qualitative indicators was completed in Zambia and Tanzania and data analysis/report writing is underway.

Three new buy-ins were awarded to FSP—two in late September 2017 and one in August 2018. These include: a) agriculture sector assessment in Venezuela; b) the development of CDAIS toolkit; and 3) literature reviews on GFSS learning agenda related to market systems and policy systems. The first two are led by IFPRI with support from selected researchers from MSU. Here are the progress reports of each of these recently awarded buy-ins to FSP IL.

Progress report on Venezuela Buy-in

During this reporting period, IFPRI and MSU in collaboration with their partners in Venezuela have achieved the following in their work on the Venezuela buy-in:

- 1. The final report (Pathways Report) was presented to USAID on November 2018. It benefitted from two meetings with colleagues from USAID and other US agencies, another meeting organized by USAID with other groups working on Venezuela, and a separate meeting that took place at IFPRI with staff from the IADB, the World Bank and the IMF to discuss drafts of the Assessment and Pathways reports.
- 2. The final draft of the Pathways report included different possible actions by USAID and other international organizations under three scenarios, focusing on helping the people of Venezuela as well as democracy in that country:
 - Scenario 1: Current government continues same macro and microeconomic policies. Three proposals to alleviate suffering (and weaken the use of food as a tool of political control) and to do preparatory work on land and agro-industrial firms.
 - Scenario 2: Changes in some agri-food policies within current overall policy regime. Three strategies to improve food security in the short term are proposed under this scenario.
 - Scenario 3: Changes in the overall policy regime under four groups of topics. Group 1: food security/poverty safety net plus "big bang" approach to prices and markets (3 proposals/programs). Group 2: agricultural and agro-industrial programs (4 proposals/programs). Group 3: cross-cutting, general topics (3 proposals/programs). Group 4: medium-term development program
- 3. Colleagues from USAID received the reports (including the previous Assessment) and indicated that they did not have further comments, but that they were considering further steps regarding how to help the people and democratic institutions in Venezuela.
- 4. Because of the expectations of possible improvement in the political conditions in Venezuela, the IMF, the World Bank and the Inter-American Development Bank requested to IFPRI staff access to the work done, to help them prepare a potential program for the first year of a new government. USAID allowed the IFPRI/MSU team to share the documents. A further paper was prepared for the IMF and multilateral banks with a more focused program and estimated costs for that hypothetical transition period.
- 5. The MSU/IFPRI team has maintained different conversations and contacts with the Venezuelan group of experts that helped with the two main reports as well as members of the Guaido Administration in DC, to explore possible ways to help improve food security, the economy and democratic governance in Venezuela."
- 6. Thanks to this effort, the MSU/IFPRI team has established connections with over 25 active agricultural companies (small, medium and large), over 10 grassroots organizations, four major universities (three of them with active departments of agriculture). In addition, MSU/IFPRI has established an active communication channel with the national agro-processing organization, the national retail association, the national association of cargo and logistics companies and the most influential and representative federations of agricultural associations in the country. Updated

- information is constantly exchanged with these expanded network of key informants which we hope will continue to inform USAID, USDA, other bilateral as well as multilateral partners supporting Venezuela's planning for socio-economic recovery.
- 7. All the deliverables of this Buy-in project were completed in the second quarter of FY 19. A follow-on Associate Award was awarded to FSP in summer 2019 to extend the work in Venezuela.

Progress report on CDAIS Buy-in

The CDAIS Toolkit development work continued with (1) completion of the country/topic case studies, (2) further refinement of the draft "Practitioners' Guidebook," and (3) preparation of guidebook website interface. The country/topic case studies were conducted in-country in late August and early September with the Livestock Systems Innovation Lab in Ethiopia and the Fish Innovation Lab in Nigeria, and were highlighted by broad and thoughtful participation of a wide range of principal partners and stakeholders. This was followed by refinement of the draft guidebook's content during an intensive two-day meeting among USAID, MSU, IFPRI, Wageningen UR, and University of Florida in Washington, DC on September 19-20. Significant progress was made during this meeting towards finalizing the processes, tools, and resources that can help organizations internalize the processes, tools, and resources that can be used to integrate capacity development activities into long-term efforts to strengthen agricultural innovation systems. Further, and in conjunction with this meeting, the team prepared its first version of the CDAIS guidebook in a web-based format, and is continuing to work on the website's content, design, and functionality. The guidebook will be tested with experts in the field and shared with a wider USAID audience for comment throughout October and November. The CDAIS Toolkit development work is on track to deliver and disseminate its final products by November 30, 2019.

Progress report on Literature Reviews Buy-in

Two literature reviews are being conducted by FSP researchers--one on GFSS Policy System (led by IFPRI), and the other on market systems (led by MSU). The scopes of work for these two literature reviews were finalized in the second quarter of FY 19. First draft of the market systems review was submitted in October, and a draft of the policy systems review will be submitted by early November.

Update on Data Management Plan

#	Dataset Type	Brief description	Anticipated time frame for a scholarly output to be completed based on this dataset?	When will it be registered in DDL?	Has this already been registered to the DDL? (Y/N)
1	Quality of Agriculture and Food Security Policy Processes	Stakeholder Survey, Nigeria, 2016	October 2017	June 2018	Yes
2	Quality of Agriculture and Food Security Policy Processes	Stakeholder Survey, Nigeria, 2018	November 2019	December 2019	No
3	Quality of Agriculture and	Stakeholder Survey,	November 2019	December 2019	No

#	Dataset Type	Brief description	Anticipated time frame for a scholarly output to be completed based on this dataset?	When will it be registered in DDL?	Has this already been registered to the DDL? (Y/N)
	Food Security Policy Processes	Senegal, 2018			
4	Policy preferences	Survey of Rural residents in Nigeria	November 2019	December 2019	No
5	Policy preferences	Survey of stakeholders in Nigeria	November 2019	December 2019	No

SECTION 2. OTHER PRIORITY TASKS AND ACTIVITIES FOR THE FINAL YEAR

TASK 2: FSP SYNTHESIS DOCUMENT ABOUT LESSONS LEARNED

Description: This work summarizes key achievements and lessons learned during five years of FSP research, policy engagement and capacity building.

Achievements: The team completed this synthesis paper, as well as an accompanying policy research brief, in March 2019. The findings were presented during the March 5-7, 2019 FSP Reflection Workshop held at USAID in Washington, DC.

Outputs:

Presentations:

• A presentation of the paper's main findings was given in March 2019 and is available at: https://www.canr.msu.edu/fsp/reflection19/Resnick synthesis%20(1).pdf

Research Papers:

 Advancing research, policy and capacity for food system transformation: synthesis of achievements from the Feed the Future Innovation Lab for Food Security Policy. Final Draft. Available at: https://www.canr.msu.edu/resources/synthesis report 1

Policy Briefs:

 A policy brief was prepared in March 2019. https://www.canr.msu.edu/fsp/reflection19/FSP%20Policy%20Brief%20Synthesis%20Report%201.pdf

Outcomes: This synthesis work will serve to distill key lessons learned from the body of FSP research, policy engagement and capacity building efforts over the past five years. These lessons, in turn, aim to help make future policy engagement efforts more productive and effective.

TASK 3: BETTER COMMUNICATION OF POLICY INFLUENCE AND PEOPLE LEVEL IMPACT

FSP's communication targets four categories of audiences: USAID community, in-country policy makers and stakeholders, peer scientists, and the general audience. The communication covers corefunded activities as well as in-country AA and Buy-In projects

To better communicate FSP's research findings, we've explored and implemented several ways of telling our stories using a variety of media and dissemination channels (e.g., videos, infographic, blogs, tweets).

The table below summarizes the activity outcomes per targeted audiences.

	USAID/	In-country	Peer	General
ACTIVITY	Feed the	policy makers	scientists	audience
	Future	and stakeholders		
2 blogs + 1 webinar	$\sqrt{}$			
26 presentations at in-country and	USAID			
world-wide conferences and workshops	missions			
10 videos	$\sqrt{}$			$\sqrt{}$
20 Featured stories/news articles		$\sqrt{}$		
1 in-country brochures		$\sqrt{}$		
Twitter account	$\sqrt{}$	$\sqrt{}$		
Web site		$\sqrt{}$		
20 FSP Policy Research Briefs		$\sqrt{}$		
32 FSP Research Papers		$\sqrt{}$		
24 Peer-reviewed articles				
3 of 4 FSP Synthesis Reports				
2 of 4 FSP Synthesis Reports Policy				$\sqrt{}$
Briefs				

ACHIEVEMENTS:

Traffic + Impressions

- Website: Slower traffic than usual on the website, but not surprising due to holiday season.
 - o Top Country Pages: Tanzania, Myanmar, and Nigeria.
- Twitter
 - O Steady increase in followers (1478 total)
 - o 120K impressions and engagement rate of 1.1%.

POSTINGS + WEB MAINTENANCE

- Documents, presentations, and blogs/news posted to the FSP website:
 - o 28 new blogs and news stories
 - o 32 new research papers
 - o 26 new presentations

o Complete rework of 12 FSP Policy Briefs to reorder and fix broken links

• Posting to external sites:

- o 2 new reports to the DEC
- o 8 backlogged publications to DEC
- o All research papers will be published to the DEC
- o All research papers will be published to AgEcon Search

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• New pages on the site:

- o Creation and editing of 10 new people profiles for the Nigerian Visiting Scholars page
- o Creation, editing, and collaboration of new page for the AACP Tanzania 2019
- o Creation of the FSP Synthesis Report Page

EVENT COMMUNICATIONS

- Preparation for FSP Reflection meeting including:
 - o Design of event graphic for printed and digital materials
 - o Creation of web page and draft of formatted informational flyer

STORIES

• 9 news stories were written highlighting FSP team members, research, impacts, grant awards, and or presentations.

VIDEOS

- The first video on the integrated framework for gender analysis has been completed and shared on YouTube (124 views). The script for the next five videos has been completed and the storyboards for these episodes are being developed.
- In addition, 10 other short videos were posted on the FSP website

TASK 4: FINAL LESSONS/APPROACHES ON SUSTAINABLE LOCAL POLICY RESEARCH CAPACITY

Description: The proposed report on lessons on sustainable local policy research and analytical capacity strengthening aims to document the approaches and best practices used by various components of FSP-IL in the last five years in building local research and analytical capacity for sustainable impact on food and nutrition security. It will also identify the lessons from the implementation of the capacity strengthening activities under FSP-IL. The team will review the capacity strengthening activities of the FSP components and develop a set of strategies that were found useful for developing local capacities under FSP. The document will also describe a capacity assessment tool and a capacity tracking tool to be used by local policy research institutions in their effort to build local policy research and analytical capacity.

Status update:

Meeting and Paper: Task 4 team prepared a draft paper summarizing the experiences of the team members in building policy analysis capacity. Three presentation were made during the reflections workshop. A policy brief was also prepared and circulated.

- Thom Jayne, Capacity Strengthening lessons for policy analysis capacity in Africa, USAID Reflections Workshop. March 2019
- Suresh Babu, Capacity Strengthening lessons for Policy analysis capacity in Asia, USAID Reflections Workshop, March 2019
- Sheryl Hendriks, Capacity strengthening for national Agricultural Investment plans, USAID Reflections Workshop, March 2019
- Suresh Babu, Thom Jayne, Sheryl Hendriks, Elizabeth Mkandawire, Duncan Boughton, and Ferdi Meyer 2019 Food Security Policy Lessons and Implications for Successful Policy Analysis Capacity Strengthening Policy Brief.

The paper has undergone several iterations of review and revisions. The paper was enriched by several case studies of African institutions in which policy capacity is a key element. It is currently under review by USAID. We expect to have a final version of this report posted on FSP website by December.

TASK 5: C4A AND C4B JOINT FINDINGS/RECOMMENDATIONS ON IMPLICATIONS OF STRUCTURAL TRANSFORMATION FROM FARM TO FORK

Introduction

This work will bring together existing findings under C4a and C4b, along with new quantitative and qualitative (scenario-based) analysis, to generate a forward-looking assessment of agrifood system transformation in Africa. It will highlight the factors that will influence the nature of this transformation and its impact on smallholder farmers, micro- and small entrepreneurs, the majority of consumers that remain below the international poverty line, and on the level and distribution of employment in- and out of the agrifood system. Focusing on selected large and rapidly transforming value chains, it will generate recommendations for policy, public and private investments that are differentiated by the stage of transformation of each chain.

The main elements of the work include:

- Synthesis of what is known about key aspects of change in east and southern Africa, drawing on data and analysis from all countries that C4a and C4b have worked on, with an eye to drawing out general patterns of change across the region. Specific aspects summarized are:
 - The causes and consequences of change in the structure of farming, including the rise of medium-scale farms, and its implication for the competitiveness of smallholder farmers in future;
 - o The ways in which youth access to land, youth migration, and youth employment decisions interact, with implications for land and agricultural policy.
 - A summary of what is known about changing diets on the continent based on analysis of household survey data. In keeping with previous work, these changes will be assessed from both a commodity perspective and a processing content perspective;
 - O The details of the transformation in the midstream and downstream (wholesalers, processors, and retailers) of the selected value chains (maize and maize meal, soybean and sunflower seed, oil and cake). A key focus here will be on the role that micro-, small-, and medium-size firms have played relative to large firms and imports.
- Trends in agricultural growth, consumption and import dependence. This will be examined both by commodity and by the processing classification that C4b has used in much of its work and will draw from ongoing C4a work on the relationship between agricultural growth rates and trends in import dependence.
- New quantitative analysis and scenario building will focus on three countries (Zambia, Tanzania and Malawi) and three commodities (maize, soybeans and sunflower). All three countries have survey analysis results for diet change and farm structure change; Tanzania has detailed data on change in the midstream of maize and sunflower sectors; change at this level in Zambia and Malawi will be based a range of sources including some surveys and key informant interviews. Longitudinal balance sheet data and other data will be used to examine shifts in area planted, yields, production, consumption, trade flow and prices that have occurred in the three selected commodity markets over the past decade in the three countries. This analysis will serve as an exogenous check on the implications of the analysis in #1 and will begin to illuminate how the systems have responded to the demand side changes;

- Formal scenario building will be undertaken for the future evolution of the selected value chains. This exercise will develop a narrative around a combination of plausible future scenarios w.r.t. the evolution of and the key drivers that will influence the transformation of these markets. The focus will be on the types of policies and the types and level of programmatic investments that will be made,
- This information will be brought together in a partial equilibrium modeling framework to quantitatively project the evolution of area planted, prices, and trade flows for the selected commodities and countries.
- Implications of the work for the challenges and opportunities likely to predominate over the
 next 10-15 years, and of the policies and programs that will be needed to maximize benefit for
 system participants, will be summarized.

Roles and responsibilities

- Item 1 (diet change): Tschirley and Reardon
- Item 2 (midstream change): Tom Reardon, David Tschirley, Saweda Liverpool-Tasie, and Bart Minten for Tanzania, Ethiopia, and Nigeria. Ferdi Meyer and ReNAPRI colleagues for Zambia and Malawi
- Item 3a (balance sheets) and item 3d (PE modeling): Ferdi Meyer with colleagues from selected centers of ReNAPRI.
- Item 3b.i (farm level changes): Thom Jayne and colleagues
- Item 3b.ii: This will come from Item 2
- Item 3b.iii (scenario building) and item 4 (overall write-up): Analysts from all three institutions and both C4a and C4b.

Status update:

the Task 5 team drew on over 70 research publications and presentations, including over 20 produced fully or partially with FSP funding, to generate a synthesis of the upstream-, midstream-, and downstream findings from work carried out under C4A and C4b.

Drawing on over 70 research publications and presentations, including over 20 produced fully or partially with FSP funding, during October 2018 to March 2019, Task 5 team prepared a synthesis report of two work streams (upstream and midstream/downstream) of research organized around transforming agrifood systems in Africa. The upstream work (C4a) focused on issues of structural change and transformation at farm level, the changing farm structure, and moved downstream into selected assessments of the impacts of these changes on the trading sector and on employment opportunities beyond the farm. The midstream/downstream work (C4b) started downstream with a focus on diet change in Africa and Asia, moved upstream into implications for and empirical documentation of agribusiness small and medium enterprise (SME) growth. Though starting at different points, these two teams converged over the course of FSP on a highly complementary and largely consistent "story" about the promises and challenges facing farms in different scales, small entrepreneurs, and consumers in this rapidly changing environment. The synthesis report tells that story, and lays out a policy and programmatic agenda, including needed new research, based on what we have learned.

This synthesis report provides a conceptual framework for thinking about the stages of agrifood

system transformation linked to broader economic and structural transformation, reviewed and synthesized evidence on patterns of change at all three levels with a strong focus on Africa, and outlined policy responses to assist smallholder farmers, small entrepreneurs, and consumers in transitioning agrifood systems. The report included case studies of sunflower in Tanzania, and oilseeds more broadly in Zambia and Malawi, based on partial equilibrium analysis, that highlighted policy tradeoffs and requirements to maintain growth in emerging sectors. More open and efficient regional trade emerged as a crucial facilitating factor.

After going through a couple of iterations of review and revisions, the report was finalized in October and posted on FSP website as Synthesis Report III.

Outputs:

- Presentations of the paper's main findings were given in March 2019 and is available at: https://www.canr.msu.edu/fsp/reflection19/Session%20details%20Day%201%20Theme%202 updated.pdf
- Synthesis Report III: Rural and Agrifood Systems in Transforming Economies in Africa and Asia
- Policy Brief on Synthesis Report III: Rural and Agrifood Systems in Transforming Economies in Africa and Asia

TASK 6: LAND RELATED RESEARCH FINDINGS / RECOMMENDATIONS / POLICY ACTIONS

Description: In this final year, the C4a team plans to develop a synthesis report with integrated set of mutually informing findings and recommendation between the MSU/UP and IFPRI land policy research teams. This will be an important outcome, especially in light of the very specific policy implications of some of the IFPRI work on alternative tools/policies to ensure secure land tenure and the bigger picture, important trend findings of MSU on key changes in farm structure/size of holding that may be emerging from insecure tenure and failure of current tenure regimes. The team will focus on completing following activities in 2018.

Status update:

Activity 1: Complete Synthesis Report of IFPRI and MSU/UP work on land under FSP – integrating IFPRI, MSU, and E3 land work (initial draft written but needs to be finished) (Q3-2018)

Status: complete draft produced, received comments from USAID and external reviewers in late April. Paper was revised and formatted as Synthesis Report II and posted on FSP website in September 2019.

Output:

Synthesis Report II: The Changing Face of African Farmland in an Era of Rural Transformation. https://www.canr.msu.edu/resources/synthesis_report_2

Activity 2: Complete FSP Research Policy Brief after completion of synthesis report above (Q3-2018)

Status: To be completed after Activity 1, anticipated November 30, 2019.

Activity 3: FSP/MSU C4a to participate in African Development Bank-led initiative on ENABLE Youth, to guide AFDB position on land policies to promote youth access to land, outreach event, May 2017, Abidjan, Cote d'Ivoire (Q2, 2018)

Status: cancelled

Activity 4: Organize outreach session at African Capacity Building Foundation / African Union event on the role of youth access to land in African agricultural transformation, April 5-6, 2018, Accra, Ghana (Q2, 2018)

Status: Yeboah C4a and AAP youth team jointly presented FSP work at this event, completed.

Activity 5: AUC-RECs (e.g., IGAD) Land Policy Dialogue/Conference – Hosaena to explore and potentially participate (Q2, 2018)

Status: Hosaena C4a presented synthesis of FSP work on land governance at the Annual Meeting of IGAD Ministers Responsible for Land and Ministers responsible for Agriculture, 18 October 2018, Nairobi –Kenya, completed.

Activity 6: Land outreach event in Washington, DC, AAEA meetings, August 5-7, 2018, MSU/IFPRI to participate, showcasing C4a Land key findings and policy implications to date (Q3, 2018).

Status: the proposed session for presenting this work was not accepted by the AAEA so this cannot proceed.

Activity 7: MSU (Jayne, Muyanga, Yeboah and RENAPRI) Plenary Session at 2018 International Conference of Agricultural Economists (ICAE)/Vancouver, presenting key findings from C4a Land work. Also, IFPRI/Hosaena parallel sessions and organized symposium at 2018 ICAE/Vancouver, presenting key findings from C4a Land work. (Q3, 2018)

Status: The plenary proposal for presenting this work was accepted and a 2-hour plenary session at the ICAE was successfully held on August 1, 2018 to an audience of over 200 international researchers on the causes and consequences of changing farm size distributions in Africa and the rise of medium-scale farms.

Activity 8: IFPRI/Hosaena support to ALPC on design of 5 year programs on Monitoring and Evaluation of Land governance as well as program on Youth, access to land and employment opportunities (Q1 - Q4, 2018)

Status: Provided technical support to AUC/AfDB/UN-ECA Africa Land Policy Center (ALPC) in the finalization of a draft 5-year ALPC strategy and business plan (2018-2022) on "Monitoring and Evaluation of Land Governance in Africa". Draft ALPC 5-year strategy and business plan (2018-2022) finalized and endorsed by the ALPC technical steering committee meeting, June 1, 2018.

Activity 9: IFPRI/Hosaena Cross-country (Nigeria, Mozambique, Ghana and Ethiopia) synthesis report on drivers of tenure insecurity and innovative measure of safeguarding land rights (Q3, 2018) Status: In-progress - to be completed by February 15, 2019Replaced by Cross-country (Nigeria, Mozambique, Ghana and Ethiopia) report on "Gender and Land in Africa". Draft completed and submitted for publication as part of the 2019 ReSAKSS Annual Trends and Outlook Report (ATOR) on "Gender Parity in Rural Africa: From Commitments to Outcomes".

Activity 10: IFPRI/Hosaena Complete FSP Research Policy Brief after completion of synthesis report above (#9) (Q4, 2018)

Status: In-progress

Activity 11: IFPRI/Hosaena (outreach) Domestication of the new framework/toolkit for Monitoring and Evaluation of Land Governance in 5 African countries (Q1 – Q3, 2018)

Status: MELA domestication process completed in five African countries - Malawi, Madagascar, Tanzania, Rwanda and Zambia.

TASK 7: SYNTHESIZING POLICY FINDINGS AND LESSONS ON CROSS-CUTTING THEMES

The FSP program has considered gender and nutrition as cross-cutting themes in research related to food security policy. The internal assessment conducted by Kristy Cook documented several gender related policy findings and activities within FSP, and had made a recommendation to undertake a systematic review and synthesis of one or more cross-cutting themes. Under this priority task 7, we have conducted a systematic review of all FSP publications and outputs with the aim of synthesizing key findings and identifying concise policy recommendations in regards to gender and nutrition. This has led to the writing of two policy research briefs.

Achievements:

Two policy briefs synthetizing key findings and identifying policy recommendations regarding gender and nutrition have been completed and will be made available on the FSP-IL website before the end of the year.

An organized session on nutrition and gender sensitive policies was organized at the Food Security Policy Innovation Lab (FSP-IL) close-out workshop held in Washington D.C.

Together, the briefs and session, have contributed to raise awareness on the importance of gender's equality and women empowerment in addressing food and nutrition insecurity.

Outputs:

- Theriault, V., and Maredia, M. 2018. Key Lessons for Addressing the Gender Gap in Agriculture. Feed the Future Innovation Lab for Food Security Policy Research Brief. Draft. East Lansing: Michigan State University.
- Theriault, V., and Maredia, M. 2018. Farm to Plate: Policy Options to Enhance Nutrition. Feed the Future Innovation Lab for Food Security Policy Research Brief. Draft. East Lansing: Michigan State University.
- Dr. Theriault organized a session on nutrition and gender sensitive policies at the Food Security Policy Innovation Lab (FSP-IL) close-out workshop held in Washington D.C. The organized session was composed of five presentations, followed by a discussion. The discussants were Krista Jacobs and Tim Quick. The presentations were:
 - The Integrated Framework for Gender Analysis of Nutrition Policy (Elizabeth Mkandawire)
 - How Paying Greater Attention to Gender-Defined Roles in Households and Communities Can Contribute to Address Malnutrition (Todd Benson)
 - o Gender and Diet Diversity (Melinda Smale)
 - o Implications of the Ongoing Diet Transformation on Nutrition (Dave Tschirley)
 - Emerging Early Actions for Bending the Curve in Sub-Saharan Africa's Nutrition Transition (Steve Haggblade)

The organized session at the FSP-IL workshop highlighted research conducted by FSP-IL on the cross-cutting issues of gender and nutrition sensitive policies. New evidence of the gender gap in

agriculture and the trends and patterns of the triple burden of malnutrition in sub-Saharan Africa were presented. Insights on how to better integrate gender into the policy-making process and how to better connect what is eaten with what is grown and processed were discussed. Abstracts of presentations on this topic are available at:

https://www.canr.msu.edu/fsp/reflection19/Session%20details%20Day%202%20Theme%205.pdf

SECTION 3: REPORT ON ADDITIONAL ACTIVITIES IN THE FINAL YEAR AMENDED WORKPLAN

In July 2019, the final year workplan was amended to incorporate following elements: a) Extension of the workplan period to include July 1, 2019 to January 14, 2020; and b) Support to two additional activities not previously included in the workplan. A status update for each of these two activities is provided below.

1. Collaborative research activity with the Livestock Systems Innovation Lab. Support was provided for a desk study to look at the risks of the presence of aflatoxin found in milk and the negative implications it has had on milk consumption by children in some African countries in recent years, and to draw policy implications with the aim of enhancing the human health impacts. A report summarizing the main results of this desk study is forthcoming as FSP Research Report. Main findings are summarized here.

Summary: Compilation of aflatoxin M1 (AFM1) occurrence data shows that AFM1 is widespread worldwide in milk from multiple dairy animals; as well as from dairy products such as cheese, butter, and yogurt. Although the majority of the reported milk and dairy product samples worldwide had AFM1 levels that were below the US FDA action level for AFM1 of 0.5 ppb, or 0.5 µg/kg (µg/L), there are three remaining concerns:

- 1. The majority of these milk and dairy product samples would NOT meet the European Union maximum tolerable limit for AFM1 of $0.05~\mu g/kg$ (ten times stricter than the FDA action level). This could mean substantial economic losses for nations attempting to export milk and dairy products to, or within, the EU.
- 2. For populations worldwide that consume large quantities of milk and/or dairy products, AFM1 exposures may reach levels that could cause concern for human health. In particular, infants and children who may consume more of these products may be more heavily exposed.
- 3. The African nations for which AFM1 occurrence data were available appear to have the highest AFM1 levels worldwide in their milk and dairy products: far higher than the FDA action level. These nations include Nigeria, Burundi, and Democratic Republic of the Congo. Two other nations with very high AFM1 levels in dairy products are Jordan and Syria. If populations in these nations consume high levels of dairy products, AFM1 could pose significant health concerns.

What can be done to reduce the risk? There are several possible solutions:

Reduce the amount of the parent compound, AFB1, in dairy animal feed. Of all possible solutions, this one is likely to be the most practical and feasible. By reducing the amount of the parent compound (and most toxic of the aflatoxins) AFB1 in dairy animal feed, the dairy animals will metabolize less of it to the metabolite AFM1, which is then secreted in their milk. Although maize and peanuts are the major sources of aflatoxin in both animal feed and human food, aflatoxin can accumulate in most types of feeds if it is stored for longer than one month in warm and wet climates (typically between 30 degrees north and south latitude), where there is the possibility for cross-contamination with other crops that may harbor Aspergillus fungi. Reducing AFB1 in animal feed, therefore, would entail moving away from maize and peanut sources, and ensuring that the animal feed is stored for not too long and in relatively cooler and drier conditions.

Include additives in dairy animal feed that can adsorb the aflatoxin. Work has also been done to develop binders, or enterosorbents, that can be added to animal feed to "bind" the aflatoxin in the animals' guts; so that they excrete it before it travels to the liver and is metabolized to AFM1. One example of this that has been tested extensively in both animal and human populations is NovaSil (Wang et al. 2017). Others are under development both in the public and industrial sectors. That would mean that - even if there were AFB1 present in the animal feed - the adsorbent feed additive would reduce the internal dose of aflatoxin for the animals, who would then produce less AFM1 in milk.

Reduce the amount of AFM1 in the finished product through lactic acid fermentation. In a recent study, lactic acid fermentation – a common method to ferment a variety of traditional foods worldwide – was shown to reduce AFM1 levels from the original food to the finished food product (Ezekiel et al. 2019). Lactic acid fermentation is a key processing step in many popular dairy foods worldwide: yogurt, kefir, kishk, certain cheeses, and kumis (airag). In addition to the sensory changes - such as taste and texture - made to the milk to produce these foods, lactic acid fermentation has the benefit of reducing mycotoxin levels.

Encourage reduction of dairy consumption in populations where AFM1 levels have been shown to be extremely high. This is a sub-optimal control strategy to reduce AFM1 exposure, because dairy products provide important nutrients in many populations worldwide; including overall caloric intake, fat, calcium, protein, and probiotics (in the case of fermented dairy foods). Therefore, this suggestion to reduce AFM1 exposure should only be made if the above strategies are not possible.

2. A second additional activity included in the extended workplan was to support some startup activities of the new Innovation Lab for Food Security Policy Research, Capacity, and Influence (PRCI). FSP provided support to the management team (i.e., Director, Capacity Building Lead, and technical and support staff) of this new Innovation Lab at Michigan State University in the planning and implementation of some of their start-up activities, which included developing the workplan and MEL plan, administering the competitive process to identify policy research centers in Africa and Asia for capacity development, support in the conduct of stakeholder consultations to identify research priorities, and to organize an internal lab launch conference (ILLC) with policy research organizations, USAID missions, and other national, regional, and global stakeholders (scheduled in November 2019). In addition, in the remaining 3 months we plan to support follow-up to the ILLC, launching of communities of practice, and beginning the formation of research teams. We will also support research and mentoring faculty on PRCI as they begin to form research teams with African and Asian colleagues. This support activity directly contributes to the following objective of FSP Innovation Lab: Objective 2: Foster credible, inclusive, transparent and sustainable policy processes at country level.

Through this support, FSP is contributing to strengthening the building blocks for national policy systems, to promote inclusion of and dialogue among all stakeholders around critical policy issues, and disseminating examples of successful innovation and best practices in policy system capacity building we have accumulated through the implementation of FSP IL over the past 6 years.

ANNEX A: LIST OF ONGOING BUY INS AND ASSOCIATE AWARDS

Description	Dates	Amount	Status
Food Security Policy Leader	7/15/2013 -	Amount: \$15,000,000	(as of October 2019) Operational
Award	1/14/2020	Obligated: \$15,000,000	Operational
RC102750	1/14/2020	Obligated: \$15,000,000	
Buy-Ins:			
USAID/Mali	10/20/2014—	Amount: \$900,000	Operational
RC104270	1/14/2020	Obligated: \$900,000	Operational
USAID/Tanzania (ASPIRE)	6/1/2016-	Amount: \$6.000,000	Operational
RC106131	1/14/2020	Obligated: \$6,000,000	Орегинопал
USAID/Tanzania	10/20/2014	Amount: \$500,000	Operational
RC104271	1/14/2020	Obligated: \$500,000	Орегинопия
USAID ZAMBIA	6/1/2016-	Amount: \$1,500,168	Operational
RC106132	1/14/2020	Obligated: \$1,500,168	Орегинопия
USAID/West Africa	10/20/2014	Amount: \$600,000	Operational
RC104272	1/14/2020	Obligated: \$600,000	Орегинопия
USAID/CDAIS Toolkit	12/11/2017-	Amount: \$700,000	Operational
RC107949	1/14/2020	Obligated \$700,000	орегинопи
USAID/Venezuela	12/11/2017-	Amount: \$300,601	Operational
RC107950	1/14/2020	Obligated: \$300,601	o p
USAID/Lit review	10/30/2018–	Amount: \$130,000	Operational
RC109012	1/14/2020	Obligated: \$130,000	F
Associate Awards:	, ,	0 ")	
Food Security Policy Project	9/24/2014-	Amount: \$7,718,509	Operational
(Myanmar)	9/30/2020	Obligated: \$6,995,307	1
RC104236	' '		
Malawi New Alliance Policy	11/24/2014-	Amount: \$4,002,467	Completed
Acceleration Support (NAPAS)	2/27/2019	Obligated: \$4,002,467	1
RC104584	' '		
Senegal Agricultural Policy	7/27/2015-	Amount: \$6,000,000	Completed
Project (PAPA)	3/31/2019	Obligated: \$6,000,000	1
RC105142			
Nigeria Agricultural Policy	7/1/2015-	Amount: \$12,499,999	Operational
Project	6/30/2020	Obligated: \$11,363,537	1
RC105214			
Mali Associate Award	2/17/2016 -	Amount: \$4,399,932	Operational
RC105885	2/15/2021	Obligated: \$3,267,807	
African Great Lakes Coffee	7/20/2015-	Amount: \$1,800,000	Complete
RC105110	7/19/2018	Obligated: \$1,376,805	
Venezuela AA	7/24/2019 -	Amount: \$1,500,000	Operational
RC110170	12/31/2020	Obligated: \$600,000	
Tanzania AA	1/1/2020 -	Amount: \$6,500,000	Operational
RC110459	12/31/2024	Obligated: \$1,000,000	

ANNEX B: FEATURED STORIES/NEWS ARTICLES

https://www.canr.msu.edu/fsp/news/

- <u>FSP Colleagues Reflect, Share Insights at Workshop in Washington DC</u>. FSP researchers from around the world gathered in Washington DC for the Innovation Lab for Food Security Policy Reflection Workshop from March 5-7, 2019.
- FSP Reflection Workshop 2019. For the past five years, FSP has implemented a robust program on policy research and capacity development. This event is the culmination of that work and will focus on reflection on accomplishments and challenges.
- <u>5th Annual Agricultural Policy Conference in Tanzania</u>. The 5th Annual Agricultural Policy Conference (AAPC) has kicked off in Dodoma, Tanzania, bringing leaders in the area to discuss progress and challenges.
- "Rise of the Medium-Scale Farms" in The Citizen Tanzania. Article by Thom Jayne and Milu Muyanga was featured in the December 20, 2018 print edition of The Citizen Tanzania.
- <u>Medium-Scale Farms are on the Rise in Africa. Why This is Good News</u>. Medium-scale farmers are a growing population in Africa, and Thom Jayne and Milu Muyanga explain why that's good news in this article for the Conversation.
- On Agrilinks: Building Resilience in Nigerian Agriculture. Recommendations for the Nigerian agricultural system to embrace resilience through three principles, in order to feed its population into the future under highly uncertain conditions.
- MSU and its Partners' Achievements in Mali. A brochure, in English and in French, tells the story: Institution building, policy reforms, scientist and student trainings. Réalisations de MSU et de ses partenaires au Mali.
- Myanmar's Rural Revolution: Mechanization & Structural Transformation. What's the disconnect between evidence of a dynamic and rapidly transforming economy, and the widely reported low levels of agricultural mechanization? by Myat Thida Win, Ben Belton, and Xiaobo Zhang.
- <u>Land Pressure and African Agricultural Development</u>. An interview with Thomas Jayne, SciDevNet, 10/30/18
- WEBINAR: Do Medium and Large-scale Farms Generate Income Spillovers for Rural Households? Nov. 6, 2018, 10-11 AM T. Jayne and J. Chamberlin: What's the impact of land acquisitions by foreign and local investors on smallholder households and rural communities?
- <u>Government Includes Rice in Subsidy Programme</u>. NAPAS: Malawi supports the rice subsidy program reform.
- NAPAS: Malawi Intensely Disseminates Policy Information. NAPAS: Malawi participated in four events to disseminate policy briefs and research findings.
- New Report Uncovers the "Hidden Middle" of Africa's Agricultural Economy. An article about the release of the 2019 Africa Agriculture Status Report and the collaborative research effort that made it possible.
- Research on Farm Input Subsidies has Important Implications for African Policymakers. An article that highlights University Foundation Professor of Agricultural, Food, and Resource Economics (AFRE), Thomas Jayne's presentations to African policymakers at the African Green Revolution Forum in Ghana.
- FSP Research Featured in The Economist. Research by AFRE graduate student Myat Thida Win and Associate Professor Ben Belton regarding agricultural mechanization in Myanmar

- has been featured in The Economist. This research was funded by the Feed the Future Innovation Lab for Food Security Policy.
- David Ortega Shares Insights to New Import Taxes Underscoring China's Role as Growing
 <u>U.S. Food Supplier</u>. NPR Story featuring David Ortega, AFRE Associate Professor and
 FSP member.
- <u>David Ortega Shares Insights with Forbes on the Economics of Coffee Farming</u>. An Article in Forbes Magazine where Associate Professor David Ortega, a collaborator on FSP's Africa Great Lakes Coffee (AGLC) project shares insights on the coffee farming crisis based on his FSP funded research in Rwanda.
- FSG Work Highlighted in Blog Post by Chief Economist of USAID. Chief Economist of USAID Dr. Louise Fox has highlighted FSG work by FSG's Thom Jayne and Milu Muyanga in her most recent blog post.
- Real Rural Wages Rise 40 Percent in just 5 Years: Study. An article in the Myanmar Times featuring the work of FSP Researchers Duncan Boughton and Ben Belton

ANNEX C: TWITTER ACCOUNT ANALYTICS

Impressions: Number of times users saw a specific post on Twitter.

Engagements: Total number of times a user has interacted with a Tweet. This includes all clicks anywhere on the Tweet (Including hashtags, links, avatar, username, and Tweet expansion), retweets, replies, follows, and likes.

Your Tweets earned 57.2K impressions over this 91 day period



October 1, 2018- December 30, 2018

Engagements for tweets increase when stories feature faculty members or postings promoting publications written by faculty. Large engagements after releasing the Quarterly Update Newsletter as well. Decline in engagements and impressions after decreased frequency of postings.

Overall, posts linking to the website drives more individuals to visit the website.

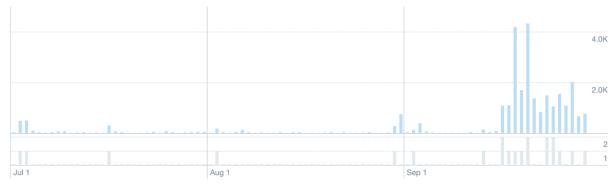
Your Tweets earned 22.8K impressions over this 91 day period



December 31, 2018- March 31, 2019

Posts regarding reflection workshops and labs show the most impressions through this time period. The decline in engagements and impressions remain due to the decreased frequency of postings.

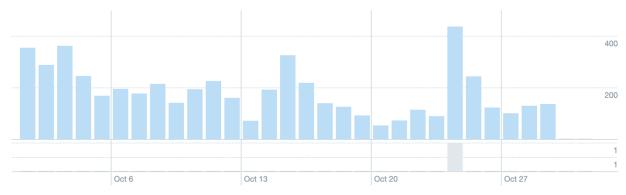
Your Tweets earned 29.7K impressions over this 91 day period



July 1, 2019 - September 30, 2019

Our participation in the Feed the Future #HerImpact social media campaign contributed to almost all of our impressions during this time frame. FSP was without a communications manager for most of the summer and this contributed to a decline in posts and ultimately impressions for the months of June, July, and August.

Your Tweets earned 5.4K impressions over this 31 day period



October 1, 2019 - October 31, 2019

Participation in the #HerImpact campaign was extended into October and continued to reach users throughout the month.

ANNEX D: SOCIAL MEDIA REACH

Top 3 Posts from October 1, 2018 – May 1, 2019

Post #1



https://bit.ly/2xfLISp@USAIDBurma pic.twitter.com/Omz3kaqAJB

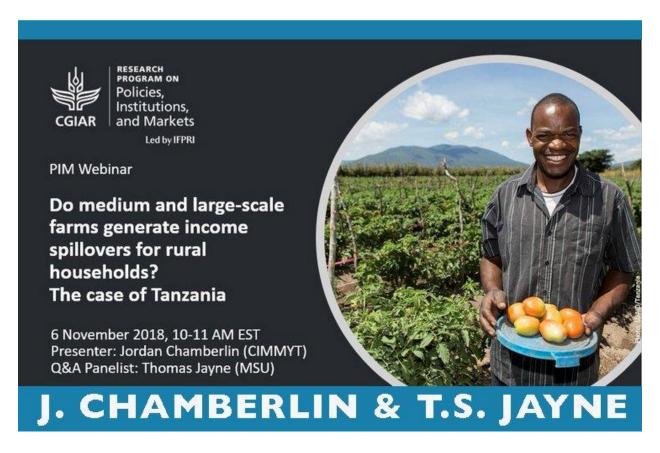
Times people saw this Tweet on Twitter: 2,220 Impressions

Total engagements	2
Media engagements	8
Likes	8
Detail expands	4
Retweets	2
Replies	1
Link clicks	1
Profile clicks	1



Times people saw this Tweet on Twitter: 1,954 Impressions

Total engagements	32
Detail expands	14
Likes	8
Retweets	4
Link clicks	3
Profile clicks	2
Media engagements	1



Food Security Policy @foodsecuritylab

T. Jayne and J. Chamberlin: What's the impact of #land acquisitions by foreign and local investors on #smallholder households and rural communities in #Tanzania? @FeedtheFuture @Agrilinks @usaidtanzania

https://bit.ly/2yIT4iU_pic.twitter.com/I8MaPqmlrP

Times people saw this Tweet on Twitter: 2,395 Impressions

Total engagements	56
Likes	13
Link clicks	13
Detail expands	12
Media engagements	8
Retweets	5
Profile clicks	5

Top 3 Posts from May 1, 2019 - October 31, 2019



Times people saw this Tweet on Twitter: 4,507 Impressions

Total engagements	103
Link clicks	4
Likes	22
Detail expands	10
Media engagements	46
Retweets	6
Profile clicks	14



Times people saw this Tweet on Twitter: 3,697 Impressions

Total engagements	17
Media engagements	78
Likes	31
Detail expands	39
Retweets	7
Replies	2
Link clicks	1
Profile clicks	7



Times people saw this Tweet on Twitter: 3,436 Impressions

Total engagements	58
Detail expands	3
Likes	13
Retweets	8
Link clicks	6
Profile clicks	10
Media engagements	17

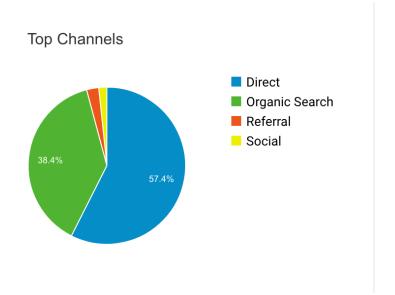
ANNEX E: WEB SITE TRAFFIC

General Overview

Over the past year we saw a 44.6% increase in users to the site compared to the previous year. There was also a noticeable uptick in users during the month of May. According to the analytic search data this increase was driven by direct navigation to the site, as opposed to those arriving at the site through the use of a search engine or another avenue such as social media. Outside of the month of May, user visits to the site were mostly comparable to those of the previous year and remained relatively consistent throughout the year. Analytic data shows that organic searches are how users most consistently access the site but given the large increase of direct navigation to the site in May, direct navigation was the most used pathway to the website for the year. Social media continues to be an important avenue for expanding the audience for our work but it has not contributed greatly in direct traffic back to our website.



X-axis represents month and estimated date of user visits, Y-axis represents number of user visits.



Audience Overview

Users are predominantly from the United States, followed by Tanzania and Nigeria in a distant second and third. Our users came from 162 different countries.

		Users	? ↓
),856 of Total: (20,856)
1. 🥦 Unit	ted States	11,887	(57.04%)
2. 🖊 Tan	zania	950	(4.56%)
3. Nig	eria	676	(3.24%)
4. Mal	awi	669	(3.21%)
5. 🏭 Unit	ted Kingdom	495	(2.38%)
6. Mya	anmar (Burma)	457	(2.19%)
7. 🔤 Indi	a	448	(2.15%)
8. Ken	ya	369	(1.77%)
9. 🔀 Sou	th Africa	312	(1.50%)
10. 🔤 Rwa	anda	237	(1.14%)

ANNEX F: PUBLICATIONS

FSP Research Papers: https://www.canr.msu.edu/fsp/publications/fsp-research-papers

- Agricultural Productivity and Rural Household Incomes: Micro-Level Evidence from Zambia. Jason Snyder, Thomas Jayne, Nicole Mason, Paul Samboko, 2019. FSP Research Paper 151. East Lansing: Michigan State University.
- Can Conservation Agriculture Save Tropical Forests? The Case of Minimum Tillage in Zambia. Hambulo Ngoma and Arild Angelsen, 2019. FSP Research Paper 150. East Lansing: Michigan State University.
- Agricultural Machinery Business Development in Shan State: A Comparative Analysis. Eric Abaidoo, Ben Belton 2019. FSP Research Paper 149. East Lansing: Michigan State University.
- Dietary Patterns in Mali: Implications for Nutrition. M. Smale, V. Theriault, R. Vroegindewey, 2019. FSP Research Paper 148. East Lansing: Michigan State University.
- What Drives Food Processor Use of Local versus Imported Inputs? Evidence from the Malian Dairy Sector. Vroegindewey, Thériault, Richardson, Chung, 2019. FSP Research Paper 147. East Lansing: Michigan State University
- Impacts of Climate Change on Water Availability in Zambia: Implications for Irrigation Development. Byman H. Hamududu and Hambulo Ngoma, 2019. Feed the Future Innovation Lab for FSP Research Paper 146. East Lansing: Michigan State University.
- Pay, Talk, or 'Whip' to Conserve Forests: Framed Field Experiments in Zambia. Hambulo Ngoma, Amare Teklay Hailu, Stephen Kabwe, and Arild Angelsen, 2019. FSP Paper 145. East Lansing: Michigan State University.
- Irrigation Development for Climate Resilience in Zambia: The Known Knowns and Known Unknowns. Ngoma, Hamududu, Hangoma, Samboko, Hichaambwa, Kabaghe, 2019. FSP Research Paper 144. East Lansing: Michigan State University.
- La Subvention Des Engrais au Mali: Origines, Contexte et Evolution. Yénizié Koné, Véronique Thériault, Alpha Kergna, et Melinda Smale, 2019. FSP Research Paper 142- FR. East Lansing: Michigan State University.
- Are Agricultural Subsidies Gender Sensitive? Heterogeneous Impacts of the Farmer Input Support Program in Zambia. Henry Machina, Hambulo Ngoma, Auckland N. Kuteya, 2019. FSP Research Paper 141. East Lansing: Michigan State University.
- Improving Agricultural Policy System Performance in Mali: Stakeholder Diagnostics and Prescriptions. Abdramane Traoré, Amadou Samaké, Ousmane Sanogo, Steven Haggblade and Yenizie Koné, 2019. FSP Research Paper 140. East Lansing. Michigan State University
- The Edible Oil Milling Sector in Myanmar's Dry Zone. Ben Belton and Myat Thida Win, 2019. FSP Research Paper 138. East Lansing: Michigan State University.
- Value Chain Analysis of Goats in Zambia: Challenges and Opportunities of Linking Smallholders to Markets. Thelma Namonje-Kapembwa, Harrison Chiwawa, Nicholas Sitko, 2019. FSP Research Paper 139. East Lansing: Michigan State University.
- Do Crop Income Shocks Widen Disparities in Smallholder Agricultural Investments? Panel Survey Evidence from Zambia. Yoko Kusunose, Nicole M. Mason, Solomon Tembo, 2019. FSP Research Paper 137. East Lansing: Michigan State University.
- Migration in Southern Shan State: Characteristics and Outcome. Eaindra Theint Thu, Khun Moe Htun, and Ben Belton, 2019. FSP Research Paper 136. East Lansing: Michigan State University.

- Household Dietary Patterns and the Cost of a Nutritious Diet in Myanmar. Kristi Mahrt, David Mather, Anna Herforth, and Derek Headey, 2019. FSP Research Paper 135. East Lansing. Michigan State University
- Consumer and Retailer Preferences for Local Dairy Products: Evidence from Stacked Choice Experiments in Urban Mali. Ryan Vroegindewey, Robert Richardson, David Ortega, and Veronique Theriault, 2019. FSP Research Paper 134. East Lansing. Michigan State University
- Food Security and Nutrition in Malawi: Policy Reform Within the Context of Supra-National Frameworks and Recent Domestic Developments. Olivier, Mkandawire, Gouws, van der Schyff, Gildenhuys, 2019. Food Security & Nutrition in Malawi. FSP Research Paper 133. East Lansing. Michigan State University
- Is Conservation Agriculture Climate- Smart, or Can It Be? A Synthesis from Sub-Saharan Africa. Hambulo Ngoma, Arild Angelsen, Thomas S. Jayne, and Antony Chapoto, 2019. FSP Research Paper 132. East Lansing. Michigan State University
- Agricultural Research Capacity and Extension Linkages in Myanmar: Assessment and Recommendations. Duncan Boughton and Su Su Win, 2019. FSP Research Paper 131. East Lansing, Michigan State University.
- The Effects of Feed Costs and Increased Energy Needs on Broiler Farm Productivity: A Dynamic Programming Approach. Padilla, Liverpool-Tasie, Myers, 2019. FSP Research Paper 130. East Lansing, Michigan State University.
- Reduction des Marges Commerciales des Produits Agricoles: Implications Pour la Securite Alimentaire des Groupes Vulnerables au Mali. Haggblade, Koné, Traoré and Traoré, 2019. FSP Research Paper 129. East Lansing, Michigan State University.
- Rapport De Synthese Des Ateliers De Restitution Des Resultats De L'evaluation Du Processus D'elaboration Des Politiques Agricoles Et De Securite Alimentaire Par Les Intervenants Au Mali. Amadou Samaké, Ousmane Sanogo et Abdramane Traoré, 2019. Feed the Future Innovation Lab for Food Security Policy Research Paper 128 - FR, East Lansing, Michigan State University.
- The Roles of Agroclimatic Similarity and Returns on Scale in the Demand for Mechanization: Insights from Northern Nigeria. Hiroyuki Takeshima, 2019. FSP Research Paper 127. East Lansing, Michigan State University.
- Role of Land Access in Youth Migration and Youth Employment Decisions: Empirical Evidence from Rural Nigeria. Ghebru, Amare, Mavrotas, and Ogunniyi, 2019. Feed the Future Innovation Lab for Food Security Policy Research Paper 126. East Lansing, Michigan State University.
- Perceived Tenure (In)Security in the Era of Rural Transformation Gender-Disaggregated Analysis from Mozambique. FSP Research Paper 125. East Lansing, Michigan State University.
- Scrutinizing the Status Quo: Rural Transformation and Land Tenure Security in Nigeria. Hosaena Ghebru and Fikirte Girmachew, 2019. Feed the Future Innovation Lab for Food Security Policy Research Paper 124. East Lansing, Michigan State University.
- The Role of the Locations of Public Sector Varietal Development Activities on Agricultural Productivity: Evidence from Northern Nigeria. Hiroyuki Takeshima and Abdullahi Mohammed Nasir, 2019. FSP Research Paper 123. East Lansing, Michigan State University.
- Creating the Necessary Policy Context for Progress on the Malabo Declaration: A Review of Food Security and Nutrition Policy Changes in 11 Africa Countries. Hendriks, Olivier,

- Mkandawire, Mabuza, and Makhura. FSP Research Paper 122. East Lansing, MSU
- Fertilizer Subsidy Effects on the Diet Quality of Farm Women in Mali. Smale, M., V. Theriault, and A. Assima, 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 121. East Lansing, Michigan State University.
- Rural Transformation in Southern Shan State: Results from the Community Component of the Shan Agriculture and Rural Economy Survey. Lambrecht, Belton, 2019. Feed the Future Innovation Lab for Food Security Policy Research Paper 120. East Lansing, Michigan State University.
- Agricultural Machinery Supply Businesses in Myanmar's Dry Zone: Growth and Transformation. Belton, Fang, Abaidoo, 2019. Feed the Future Innovation Lab for Food Security Policy Research Paper 119. East Lansing: Michigan State University.
- A Preliminary Assessment of Herbicide Quality in Mali in the Presence of Proliferating Unregistered Brands of Glyphosate. Haggblade, Diarra, Assima, Keita and Traoré, 2018 FSP Research Paper 93. East Lansing, Michigan State University.
- Pulse & Oilseed Traders in Central Myanmar: Value Chain Structure and Conduct. Ben Belton, David Mather, 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 118. East Lansing: Michigan State University.

FSP Policy Research Briefs: https://www.canr.msu.edu/fsp/publications/fsp-policy-research-briefs

- Transforming Agriculture to Improve Food and Nutrition Security in Nigeria. Olivier Ecker and Adam Kennedy, 2019. FSP Research Brief 99, East Lansing: Michigan State University.
- Mechanization in Nigeria: What needs to be done to stimulate demand and support market growth? Hiroyuki Takeshima and Adam Kennedy, 2019. FSP Research Brief 98, East Lansing: Michigan State University.
- Nigeria Land Governance Reform: What needs to be done to stimulate demand and support market growth? Hosaena Ghebru and Adam Kennedy, 2019. FSP Research Brief 97, East Lansing: Michigan State University.
- Pay, Talk or 'Whip' to Conserve Forests: Framed Field Experiments in Zambia. Hambulo Ngoma, Amare Teklay Hailu, Stephen Kabwe, and Arild Angelsen 2019.FSP Research Brief 96, East Lansing: Michigan State University.
- Regard sur les origines de la subvention des engrais au Mali. Yenizié Koné, Alpha Kergna, Abdramane Traoré, Naman Keita, Véronique Thériault, Melinda Smale, Steven Haggblade, 2019., FSP Research Brief 95- FR, East Lansing: Michigan State University.
- Introducing Food Safety Labels in Complex Food Supply Chains: Evidence from a Choice Experiment in Nigeria. Sanou, Liverpool-Tasie, Vincenzina, Kerr, 2019. FSP Research Brief 93, East Lansing: Michigan State University.
- Reducing Post-Harvest Losses in Tomatoes. Hephzibah Onyeje Obekpa, 2019. FSP Research Brief 92, East Lansing: Michigan State University.
- Climate Change Adaptation in the Nigerian Agricultural Sector. Schmitt-Olabisi, Liverpool-Tasie, Onyeneke, Choko, Osuntade, Sanou, Singa, Chiemela, 2019. FSP Research Brief 91, East Lansing: Michigan State University
- Demographic Factors and Nigeria's Dairy Production for the Year 2015. Onyinye Prince Choko, 2019. FSP Research Brief 90, East Lansing: Michigan State University.
- Curbing Post Harvest Losses: The Plight of Onion Farmers in Nigeria. Balaraba Abubakar

- Sule, 2019. FSP Research Brief 89, East Lansing: Michigan State University.
- Impact des tracasseries routières sur les populations vulnérables au Mali. Steven Haggblade, Yenizie Koné, Abdramane Traoré et Pierre Traoré, 2019 FSP Research Brief 87, East Lansing: Michigan State University.
- Agriculture, Land Access and Economic Growth in Africa: An Instrumental Variable Approach. Chukwudi Charles Olumba, 2019. FSP Policy Research Brief 86. East Lansing: Michigan State University.
- The Nexus between Malnutrition and Agricultural Subsector Outputs in Nigeria. Hephzibah Onyeje Obekpa, 2019. FSP Research Brief 85, East Lansing: Michigan State University.
- Farmers' Perception of Causes of Soil Degradation in Northern Taraba, Taraba State of Nigeria. Philip Hegarty James, 2019. FSP Policy Research Brief 84. East Lansing: Michigan State University.
- Constats empiriques sur le programme pilote de subvention e-voucher au Mali. Koné, Kergna, Traoré, Keita, Haggblade, Thériault et Smale, 2019. FSP Policy Research Brief 83. East Lansing: Michigan State University.
- Nutrition and growing your own food: Dietary Diversity Evidence from North Central Nigeria. Hephzibah Onyeje Obekpa, Michael Olabisi, 2019. FSP Policy Research Brief 82. East Lansing: Michigan State University.
- Community-Scale Climate Adaptation: Evidence from Ebonyi State, Nigeria. Choko, Schmitt Olabisi, Onyeneke, Nwawulu Chiemela, Liverpool-Tasie and Rivers III, 2019. FSP Policy Research Brief 81. East Lansing: Michigan State University.
- An Analysis of the Mango Value Chain in Malawi. Zephania Bondera Nyirenda, Flora Janet Nankhuni, and Michael Andrew Bret, 2019. Feed the Future Innovation Lab for Food Security Policy Research Brief 80. East Lansing: Michigan State University.
- A Review of the Alignment of the Republic of Uganda's Draft Agriculture Sector Strategic Plan with the Malabo Commitments with Regard to Food Security and Nutrition. Nic J.J. Olivier, Sheryl L. Hendriks, and Elizabeth Mkandawire, 2019. Feed the Future Innovation Lab for Food Security Policy Research Brief 79. East Lansing: Michigan State University.
- Are Financing Policies Sensitive to Food Systems Transformation in Malawi? Makhura, Adegbite, Mkandawire, Olivier, Nankhuni, Nyondo & Hendriks, Feed the Future Innovation Lab for Food Security Policy Research Brief 78. East Lansing: Michigan State University.
- Mapping Policy Responses to Food Systems Transformation in Malawi. Makhura, Adegbite, Mkandawire, Olivier, Nankuni, Nyondo & Hendriks, Mapping Policy Responses to Food Systems Transformation in Malawi. Feed the Future Innovation Lab for Food Security Policy Research Brief 77. East Lansing: Michigan State University.
- Quality Comparison of Fraudulent and Registered Pesticides in Mali. Steven Haggblade, Amadou Diarra, Wayne Jiang, Amidou Assima, Naman Keita, Abdramane Traoré and Mamadou Traoré, 2019. Feed the Future Innovation Lab for Food Security Policy Research Brief 76. East Lansing: Michigan State University.
- The Role of the Locations of Public Sector Varietal Development Activities on Agricultural Productivity. Hiroyuki Takeshima and Abdullahi Mohammed Nasir, Feed the Future Innovation Lab for Food Security Policy Research Brief 75. East Lansing: Michigan State University.
- An Evaluation of the Level of Integration and Alignment of the Malabo Commitments, Africa's Agenda 2063 and the SDGs in 10 National Agricultural and Food Security Investment

Plans. S. Hendriks, Mabuza, K. Hendriks, Olivier, Makhura, Mkandawire, Mkhwanazi, Mkusa and Vilakazi, October 2018. Feed the Future Innovation Lab for Food Security Policy Research Brief 71.

FSP Peer Reviewed Publications. https://www.canr.msu.edu/fsp/publications/fsp-peer-reviewed-publications

- Burke, William J., Thomas S. Jayne and Nicholas Sitko (2019). <u>Do Medium-scale Farms</u>
 <u>Improve Market Access Conditions for Zambian Smallholders? Journal of Agricultural</u>
 <u>Economics.</u>
- AGRA. (2019). <u>Africa Agriculture Status Report: The Hidden Middle: A Quiet Revolution in the Private Sector Driving Agricultural Transformation (Issue 7).</u> Nairobi, Kenya: Alliance for a Green Revolution in Africa (AGRA). Tom Reardon was technical advisor and is lead author for the volume. Chapters with FSP affiliated authors include:
 - o Kormawa, P. Yumkella, J. Njuguna, T. Reardon. 2019. "Conclusions and Way Forward," Chapter 11 in AGRA. (2019). **Ibid**.
 - Liverpool-Tasie, LSO, I. Okuku, R. Harawa, T. Reardon, S. Wallace. 2019. "Africa's <u>Changing Fertilizer Sector and the Role of the Private Sector</u>," Chapter 9 in AGRA. (2019). **Ibid**.
 - Awokuse, T., T. Reardon, A.O. Salami, N.A. Mukasa, T. Tecle, F. Lange. 2019.
 "Agricultural Trade in Africa in an era of Food System Transformation: Policy Implications," Chapter 6 in AGRA. (2019). Ibid.
 - Meyer, F.H., T. Davids, T. Kapuya, P. Westhoff, T. Reardon. 2019. "Avoid Hitting the Wall by Leveraging Investments of Midstream Heroes in African Food Value Chains," Chapter 4 in AGRA. (2019). Ibid.
 - Reardon, T., T. Awokuse, S. Haggblade, T. Kapuya, S. Liverpool-Tasie, F. Meyer, B. Minten, D. Nyange, J. Rusike, D. Tschirley, R. Vos. 2019. "<u>The Quiet Revolution and Emerging Modern Revolution in Agri-food Processing in Sub-Saharan Africa</u>," Chapter 3 in AGRA. (2019). **Ibid.**
 - Reardon, T., T. Awokuse, S. Haggblade, T. Kapuya, S. Liverpool-Tasie, F. Meyer, B. Minten, D. Nyange, J. Rusike, D. Tschirley, R. Vos. 2019. "The Quiet Revolution in Agri-food Distribution (Wholesale, Logistics, Retail) in Sub-Saharan Africa," Chapter 2 in AGRA. (2019). Ibid.
 - Reardon, T., T. Awokuse, S. Haggblade, T. Kapuya, S. Liverpool-Tasie, F. Meyer, B. Minten, D. Nyange, J. Rusike, D. Tschirley, R. Vos. 2019. "Private Sector's Role in Agricultural Transformation in Africa: Overview," Chapter 1 in AGRA. (2019). Africa Agriculture Status Report: The Hidden Middle: A Quiet Revolution in the Private Sector Driving Agricultural Transformation (Issue 7). Nairobi, Kenya: Alliance for a Green Revolution in Africa (AGRA).
- Burke, William J., Thomas S. Jayne and Nicholas Sitko (2019). <u>Do Medium-scale Farms</u>
 <u>Improve Market Access Conditions for Zambian Smallholders?</u> Journal of Agricultural Economics.
- Sarah Kopper and T. S. Jayne. 2019. <u>Market access, agro-ecological conditions, and Boserupian agricultural intensification patterns in Kenya: Implications for agricultural programs and research</u>. **World Development,** forthcoming, December 2019.
- Ortega, David L., Bro, Aniseh S., Clay, Daniel C., et al. 2019. <u>Cooperative membership and coffee productivity in Rwanda's specialty coffee sector</u>, 05 July 2019.

- T. S. Jayne, Sieglinde Snapp, Frank Place, Nicholas Sitko. Sustainable agricultural intensification in an era of rural transformation in Africa, Global Food Security, Volume 20, March 2019, 105-113.
- Muyanga, Milu, and T. S. Jayne. 2019. Revisiting the Farm Size-Productivity Relationship Based on a Relatively Wide Range of Farm Sizes: Evidence from Kenya. American Journal of Agricultural Economics, March 2019
- Hambulo Ngoma, Arild Angelsena, 2018. Can conservation agriculture save tropical forests? The case of minimum tillage in Zambia. Forest Policy and Economics, Volume 97, December 2018
- Myat Thida Win, Ben Belton, and Xiaobo Zhang, 2018. Chapter in Myanmar Transformed? People, Places and Politics, edited by Justine Chambers, Gerard McCarthy, Nicholas Farrelly, and Chit Win (Singapore: ISEAS - Yusof Ishak Institute, 2018).
- Daniel Kyalo Willy, Milu Muyanga, and Thomas Jayne (2019). Can economic and environmental benefits associated with agricultural intensification be sustained at high population densities? A farm level empirical analysis. Land Use Policy, Issue 81
- Xavier Tezzo, Ben Belton, Gareth Johnstone, Martin Callow, 2018. Myanmar's fisheries in transition: Current status and opportunities for policy reform, Marine Policy 97 (2018) 91-100
- Sauer, C., Mason, N., Maredia, M., and Mofya-Mukaka, R. 2018. Does adopting legume-based cropping practices improve small-scale farm households' food security? Panel survey evidence from Zambia. Food Security (November)

ANNEX G: OUTREACH

Presentations https://www.canr.msu.edu/fsp/outreach/presentations/

- Agriculture and Rural Transformation in Myanmar: Evidence Generation for Resilient and Inclusive Policy and Program Design. D. Boughton and B. Belton, LIFT Forum 2019, Nay Pvi Taw, June 12, 2019.
- Pesticides frauduleux en Afrique de l'Ouest: croissance des marchés et faiblesse du suivi posthomologation. Steven Haggblade. 11 juin 2019
- Myanmar's Rural Transformation: Evidence from the Food Security Policy Project. Ben Belton, Food Security Policy Project, Michigan State University, May 23, 2019
- Agriculture and Rural Transformation in Myanmar: Implications for Development Strategy with a Spotlight on Shan State. Ben Belton, Isabel Lambrecht, Duncan Boughton. April 26, 2019.
- Land and Rural Transformation in Southern Shan State: A Comparative Perspective. Ben Belton, Food Security Policy Project, British Embassy, Yangon. May 9, 2019.
- Fraudulent pesticides in West Africa: quality comparisons and policy implications. Haggblade, Diarra, Jiang Assima, Keita, Traore, and Traore, April 2, 2019
- The "Quiet Revolution" in Myanmar's Aquaculture Value Chain. Ben Belton. DFID Livelihoods Conference, Pyapon, Myanmar. February 4, 2019.
- SHARES Community Survey Key Findings. Isabel Lambrecht. Agri-Food Value Chain Development (AVCD), December 11, 2018.
- LIFT Agri-food Value Chain Development in Myanmar Project: An Overview. LIFT Fund Board meeting, Yangon, Dec 11, 2018.
- Shan Agriculture and Rural Economy Survey: Selected Highlights. Belton, Win, Myintzu, Aung, Win, Naing, Lin, Soe, Kyaw, Thein Thu, Thun, Fang
- Are Medium-Scale Farms Driving Agricultural Transformation in Africa? T. S. Jayne, M. Muyanga, F. K. Yeboah, A. Aromolaran, A. Chapoto, T. Shonhe, F. Dzanku, N. Mdoe and A. Wineman. APRA Annual Research Review and Planning Workshop University of Ghana, December 4, 2018
- Changing Farm Structure and Agricultural Commercialization: Implications for Livelihood Improvements among Small-Scale Farmers in Nigeria. Adebayo B Aromolaran, Milu Muyanga, Thomas Jayne, Saweda Liverpool-Tasie, Titus Awokuse, Elijah Obayelu, Fadlullah O. Issa, APRA Annual Research Review and Planning Workshop, University of Ghana, December 3, 2018.
- Africa's Transforming Agrifood System: Implications for Youth Skills Development. F. Kwame Yeboah, T.S. Jayne, Keynote Presentation at the 5th Annual ReNAPRI Stakeholders Conference, Zanzibar, Tanzania, November 28, 2018
- Sustainable Agricultural Productivity Growth: What Does it Mean in Practice and How to Achieve it? Hambulo Ngoma, 2018. Indaba Agricultural Policy Research Institute, Lusaka, Zambia 5th Annual Conference of the Regional Network of Agricultural Policy Research Institutes (ReNAPRI) Park Hyatt Hotel, Zanzibar, Tanzania, November 28, 2018
- The Changing Farm Structure in Africa: Causes, Consequences and Policy Implications. Milu Muyanga, T. S. Jayne, Kwame Yeboah, Ayala Wineman, Antony Chapoto, Divan Vanderwesthuisen, Presentation at International Center for Tropical Agriculture (CIAT) Kenya Nairobi, November 23, 2018

- The Looming Youth Employment Challenge in sub-Saharan Africa. Milu Muyanga, Ntengua Mdoe, Dennis Otieno, T. S. Jayne, Presentation at the South Eastern Kenya University, Kitui, Kenya, November 21, 2018
- Pay, Talk or 'Whip' to Conserve Forests: Framed Field Experiments in Zambia. Hambulo Ngoma, Amare Teklay Hailu, Stephen Kabwe, and Arild Angelsen, 2018. AFRE Brown Bag Seminar, Michigan State University, East Lansing, MI, November 13, 2018
- The Intersection of Youth Access to Land, Migration and Employment Opportunities: Evidence from Sub---Saharan Africa. F. Kwame Yeboah, T. S. Jayne, Milu Muyanga, Jordan Chamberlin. 2018. Sustainability and Development Conference University of Michigan, Ann Arbor, MI, November 9-11, 2018
- Do Medium and Large Scale Farms Generate Income Spillovers for Rural Households? The Case of Tanzania. Jordan Chamberlin and T. S. Jayne, PIM / IFPRI Webinar, November 6, 2018
- Rural Transformation in the Dry Zone: How Much and for Whom? Ben Belton, Mateusz Filipski. "Rural Transformation in the Dry Zone: How Much and for Whom?" Summit Park View Hotel, Yangon. October 29, 2018.
- Strengthening Higher Agricultural Education in Africa (SHAEA): Description and Selected Findings to Date. John Bonnell, Thomas Jayne, Amy Jamison, Suresh Babu, and Peter Goodman, Presentation at RUFORUM Annual Meeting, Nairobi, Kenya, October 25, 2018
- The "Quiet Revolution" in Aquaculture Value Chains. Ben Belton, World Small-Scale Fisheries Congress, Chiang Mai, Thailand, October 22, 2018
- Properly Ferment and Prepare your Ogi / Koko / Akamu / Pap! A food safety informational pamphlet on lactic acid fermentation.
- The Art of Research Discovery and Writing Good Articles. Tom Reardon, Michigan State University, October 2018
- Fisheries and Aquaculture Value Chain Study in Malawi. Flora J. Nankhuni, Joseph S. Kanyamuka and Christone J. Nyondo, October 8, 2018, Mangochi, Malawi
- Recent Changes in African Agriculture: Drivers, Obstacles and Outcomes. William Burke and Thomas Jayne, 2018 SEEP Annual Conference, October 1–3, 2018, Arlington, VA
- Are Local Investor Farmers Making Small-Scale Farmers More Productive and Commercialized? Evidence from Nigeria. Milu Muyanga, Thomas Jayne, Adebayo Aromolaran, Saweda Liverpool-Tasie, Titus Awokuse, APRA Work Stream 1 Panel Study Review and Planning Workshop IDS, Brighton, October 1, 2018

Media https://www.canr.msu.edu/fsp/outreach/media/

 Land Pressure and African Agricultural Development. An interview with Thomas Jayne, SciDevNet, 10/30/18

Policy Tools https://www.canr.msu.edu/fsp/outreach/policy-tools/ Nothing to report.

Videos and Audios https://www.canr.msu.edu/fsp/outreach/videos-and-audios/

• <u>Food Security Policy Reflection Workshop.</u> FSP researchers from around the world gathered in Washington D.C. for the Innovation Lab for Food Security Policy Reflection Workshop from March 5-7, 2019.

- <u>Building Resilience through Better Policies: The Case of Fertilizer Policy Reform in Malawi.</u> Feed the Future Innovation Lab for Food Security Policy addresses the theme of resilience in the case of fertilizer policy reform in Malawi.
- WEBINAR: Do Medium and Large-scale Farms Generate Income Spillovers for Rural Households? Nov. 6, 2018, 10-11 AM T. Jayne and J. Chamberlin. Do medium and large-scale farms generate income spillovers for rural households? The case of Tanzania October 26, 2018, organized by PIM CGIAR
- F Nankhuni Explains Methodology for Malawi Special Crops Act Review. October 23, 2018. MSU AFRE, NAPAS: Malawi Chief of Party, Flora Nankhuni explains the methodology that was used in the reviews for The Special Crops Act/ Agriculture General Purposes Act, at the validation meeting.
- <u>Malawi 2018 Agriculture Fair</u>. A video interview of the Director of Extension Services, Dr. Jerome Nkhoma and NAPAS: Malawi Chief of Party, Dr. F. Nankhuni, October 2018.
- The Quiet Revolution in Food Systems in Africa & Asia. October 17, 2018. Thomas Reardon: This video explains how a convergence of factors is provoking tsunami like rapid changes in the agrifood system of Africa. Keynote lecture for the Nigeria Association of Agricultural Economists.
- What Are Some Ways to Apply the "Toggle Switch Idea". October 13, 2018. Discussion 3 about writing an article for a peer-reviewed journal (9'34"), T. Reardon and S. Liverpool Tasie
- How to Get Published in a Peer Reviewed Journal. October 13, 2018. How to write a successful article: 5 key points in a 1 minute video
- What Are Some Ways to Make the Case for your Work's Contributions to the Literature.
 October 13, 2018. Discussion 2 about writing an article for a peer-reviewed journal (9'37"), T. Reardon and S. Liverpool Tasie.
- How Could You Sell a Research Idea about Nigeria to a Non-Nigerian Reviewer. October 13, 2018. Discussion 1 about writing an article for a peer-reviewed journal (9'53"), T. Reardon and S. Liverpool Tasie
- The Art of Research Discovery and Writing Good Articles VIDEO. October 12, 2018. How to get published in peer-reviewed journals, a lecture by T. Reardon for the FSP Nigeria Agricultural Policy Project, October 12, 2018 (1:17)
- The "Special Crops Act / Agriculture General Purposes Act" validation meeting. October 1, 2018. On behalf of the Secretary for Agriculture, Irrigation and Water Development, the Director of Livestock and Animal Health Development, Dr. Patrick Chikungwa, officially opened the "Special Crops Act / Agriculture General Purposes Act" validation meeting. He highlighted the importance of the review.

ANNEX H: STATUS OF DATASET SUBMISSION TO DDL

#	Component	Dataset	Status	Date	Notes
1	C1/2 Asia	Myanmar Aquaculture Agriculture	Submitted	Apr-19	
	0.12.1	Survey (MAAS)			
2	C1/2 Asia	Rural Economy and Agriculture Dry	Submitted	Apr-19	
3	C1/2 Asia	Zone Survey (READZS) Rural Economy and Agriculture Dry	Submitted	Apr-19	
Ü	31, 2 11010	Zone Supplemental Community	odominiod	11p1 17	
		Survey			
4	C1/2 Asia	Dry Zone Seed System Survey	Submitted	Nov-19	
5	C1/2 Asia	Shan State Agriculture and Rural Economy Suvery (SHARES)	Submitted	May-19	
6	C1/2 Asia	Shan Supplemental Community Survey	Submitted	May-19	
7	C1/2 Asia	Mon State Rural Livelihoods Survey	Submitted	Jun-19	
8	C1/2 Asia	Yangon Mechanization Cluster	Submitted	Sep-19	
	0.12.1	Survey		0 10	
9	C1/2 Asia	Rural Economy and Agriculture Dry Zone Off-Farm Surveys:	Submitted	Sep-19	
4.0	C4 /2 A :	Agricultural Machinery Suppliers	0.1. 11	0 40	
10	C1/2 Asia	Rural Economy and Agriculture Dry Zone Off-Farm Surveys:	Submitted	Sep-19	
		Agricultural Machinery Outsourcing			
		Service Providers			
11	C1/2 Asia	Rural Economy and Agriculture Dry	Submitted	Sep-19	
	0.12.1	Zone Off-Farm Surveys: Oil Mills		0 10	
12	C1/2 Asia	Rural Economy and Agriculture Dry Zone Off-Farm Surveys: Pulses and	Submitted	Sep-19	
		oilseed traders			
13	C1/2 Asia	Farmer demand for quality seed and	Submitted	Sep-19	
		adoption of improved varieties		-	
14	C1/2 Asia	Farmer demand for quality seed and	Submitted	Sep-19	
		adoption of improved varieties: RRC communities			
15	C1/2 Asia	Shan Agriculture and Rural	Submitted	Sep-19	
10	31, 2 11010	Economy Off-Farm Surveys: Maize	odominiod	oop 13	
		Traders			
16	C1/2 Asia	Shan Agriculture and Rural	Submitted	Sep-19	
		Economy Off-Farm Surveys:			
17	C1/2 Asia	Agricultural Input Suppliers Shan Agriculture and Rural	Submitted	Sep-19	
17	G1/ 2 1131a	Economy Off-Farm Surveys:	oublineed	бер 15	
		Agricultural Machinery			
18	C1/2 Asia	Livestock Value Chain Survey: Pig	Pending	Nov-19	To be submitted in Nov 2019
	C1 /2 A =:=	and Poultry Farmers	C11- J		To be subscitted as a se
	C1/2 Asia	Livestock Value Chain Survey: Feed Distributors	Cancelled		To be submitted as one dataset, row 18
	C1/2 Asia	Livestock Value Chain Survey:	Cancelled		To be submitted as one
	. , = ======	Wholesalers/Retailers			dataset, row 18

4	Comment	Detect	Chatan	Dete	Notes
10	C1/2 Agia	Dataset	Status	Date Oct 10	Notes
19	C1/2 Asia	Sagaing Seed sub-sample	Submitted	Oct-19	
20	C1/2 ESA Malawi	2015 Malawi Agriculture and Food Security Policy Processes Baseline Survey	Confirmed	Jan-18	
21	C1/2 ESA Malawi	2017 Malawi Agriculture and Food Security Policy Processes Endline Survey	Confirmed	Mar-19	
22	C1/2 ESA Malawi	2017/18 Malawi Value Chain Studies	Pending	Sep-18	PI left before submitting dataset. We are in the process of recruiting someone to help prepare the datasets for submission
23	C1/2 ESA Malawi	Malawi - Commodity Balance Sheets - Maize	Submitted	Apr-19	
24	C1/2 ESA Malawi	Malawi - Commodity Balance Sheets - Soybeans	Submitted	Apr-19	
25	C1/2 ESA Malawi	Malawi - Commodity Balance Sheets - Soybean Oil	Submitted	Apr-19	
26	C1/2 ESA Malawi	Malawi - Commodity Balance Sheets - Soybean Meal	Submitted	Apr-19	
27	C1/2 ESA Mozambique	Mozambique - Commodity Balance Sheets - Rice	Submitted	Apr-19	
28	C1/2 ESA Mozambique	Mozambique - Commodity Balance Sheets - Maize	Submitted	Apr-19	
29	C1/2 ESA Tanzania	Quality of Agriculture and Food Security Policy Processes, Stakeholder Survey, Tanzania, 2016	Confirmed	Jun-18	
30	C1/2 ESA Tanzania	Quality of Agriculture and Food Security Policy Processes, Stakeholder Survey, Tanzania, 2019	Submitted	Nov-19	
31	C1/2 ESA Tanzania	Tanzania - Commodity Balance Sheet - Sunflower Meal	Submitted	Apr-19	
32	C1/2 ESA Tanzania	Tanzania - Commodity Balance Sheet - Sunflower Oil	Submitted	Apr-19	
33	C1/2 ESA Tanzania	Tanzania - Commodity Balance Sheet - Sunflower	Submitted	Apr-19	
34	C1/2 ESA Tanzania	Tanzania - Commodity Balance Sheet - Wheat	Submitted	Apr-19	
35	C1/2 ESA Tanzania	Tanzania - Commodity Balance Sheet - Rice	Submitted	Apr-19	
36	C1/2 ESA Tanzania	Tanzania - Commodity Balance Sheet - Maize	Submitted	Apr-19	
37	C1/2 ESA Zambia	Quality of Agriculture and Food Security Policy Processes,	Confirmed	Jun-18	
38	C1/2 ESA Zambia	Stakeholder Survey, Zambia, 2016 Large-scale Trader Survey in Zambia	Confirmed	Apr-19	

#	Component	Dataset	Status	Date	Notes
39	C1/2 ESA Zambia	Quality of Agriculture and Food Security Policy Processes, Stakeholder Survey, Zambia, 2018	Pending	Dec-19	Data cleaning and organization ongoing; Report will not be ready until November 2019
40	C1/2 ESA Zambia	Policy preferences survey of rural residents in Zambia	Pending	Dec-19	Data cleaning and organization ongoing; Report will not be ready until November 2019
41	C1/2 ESA Zambia	Policy preferences survey of stakeholders in Zambia	Pending	Dec-19	Data cleaning and organization ongoing; Report will not be ready until November 2019
42	C1/2 ESA Zambia	Emergent Farmer Survey - Suvery of medium to large scale farmers in six districts in Zambia	Submitted	Apr-19	
43	C1/2 ESA Zambia	Zambia - Commodity Balance Sheets - Maize	Submitted	Apr-19	
44	C1/2 ESA Zambia	Zambia - Commodity Balance Sheets - Soybeans	Submitted	Apr-19	
45	C1/2 ESA Zambia	Zambia - Commodity Balance Sheets - Soybean Oil	Submitted	Apr-19	
46	C1/2 ESA Zambia	Zambia - Commodity Balance Sheets - Soybean Meal	Submitted	Apr-19	
47	C1/2 WA	2009 Social Accounting Matrix for Gambia constructed from national accounts data and other existing data.	Confirmed	Aug-16	
48	C1/2 WA	2009 Social Accounting Matrix for Mauritania constructed from national accounts data and other existing data.	Confirmed	Aug-16	
49	C1/2 WA	2009 Social Accounting Matrix for Liberia constructed from national accounts data and other existing data.	Confirmed	Aug-16	
50	C1/2 WA	2009 Social Accounting Matrix for Sierra Leone constructed from national accounts data and other existing data.	Confirmed	Aug-16	
51	C1/2 WA	CAADP Results Framework Indicators	Confirmed	Feb-18	
52	C1/2 WA Mali	Farm household survey in Sudan savanna of Mali, 2014/15	Confirmed	Jun-17	
53	C1/2 WA Mali	Inventory of processed foods, 2016	Confirmed	Jan-18	
54	C1/2 WA Mali	Quality of Agriculture and Food Security Policy Processes: Stakeholder Survey, Mali 2017	Confirmed	Jun-18	

#	Component	Dataset	Status	Date	Notes
55	C1/2 WA Mali	Farm household survey in two agroecological zones, 2017/18	Pending	Jun-19	In French. Needs to be submitted through Dataverse. PI raised issues about ability to do this.
56	C1/2 WA Mali	Women diet diversity: Survey on the diet diversity of rural women in two agro-ecological zones	Pending	Jun-19	In French. Needs to be submitted through Dataverse. PI raised issues about ability to do this.
57	C1/2 WA Mali	Consumer preferences for dairy: Survey of Malian urban consumers' preferences for dairy products	Pending	Jun-19	In French. Published on Datavese, will be submitted to DDL soon.
58	C4a	Socio-Economic Farm Data - Mozambique/2016, including medium-scale farms	Confirmed	Dec-18	
59	C4a	Socio-Economic Farm Data - Senegal/2016, including medium- scale farms	Confirmed	Dec-18	
60	C4a	Survey of about 1200 households in rural Tanzania. Collect household demographic data, agricultural practices, incomes, soil samples, and household location GPS coordinates	Confirmed	Dec-18	
61	C4a	Socio-Economic Farm Data - Malawi/2014, including medium- scale farms	Submitted	Dec-18	
62	C4a	Survey of all medium-and large scale farms in eight (8) in rural Tanzania under crop, and GPS coordinates of the villages	Submitted	Dec-18	
63	C4b	Retail survey in 3 cities in Tanzania documenting market share of different types of retail outlets, and rates of change of market share across major food groups in Tanzania. Retail outlets (Supermarket chains, independents, traditional shops, market vendors and street vendors).	Registered, waiting for links to submit the dataset	May-19	
64	C4b	Survey of processors of maize meal and mixed meal products in three cities in Tanzania to examine recent changes in the structure of this important sector.	Registered, waiting for links to submit the dataset	May-19	
65	C4b	Surveys across a range of processed food groups to estimate the size distribution of firms and the labor intensity and competitiveness across that size distribution.	Registered, waiting for links to submit the dataset	May-19	

#	Component	Dataset	Status	Date	Notes
66	C4b	Stacked surveys of traders and processors in the maize and poultry value chains of Nigeria, combined with testing of food samples for aflatoxin contamination	Pending	Dec-19	Data cleaning and organization ongoing
67	FSP Core	Policy preferences survey of rural residents in Nigeria	Pending	Dec-19	Data cleaning and organization ongoing; Report will not be ready until December 2019
68	FSP Core	Policy preferences survey of stakeholders in Nigeria	Pending	Dec-19	Data cleaning and organization ongoing; Report will not be ready until December 2019
69	FSP core and Nigeria AA	Quality of Agriculture and Food Security Policy Processes, Stakeholder Survey, Nigeria, 2016	Confirmed	Jun-18	
70	FSP core and Nigeria AA	Quality of Agriculture and Food Security Policy Processes, Stakeholder Survey, Nigeria, 2018	Pending	Dec-19	Data analysis and report writing still not completed until Dec 2019
71	FSP core and Senegal AA	Quality of Agriculture and Food Security Policy Processes, Stakeholder Survey, Senegal, 2018	Pending	Dec-19	Data analysis and report writing still not completed until Dec 2019
72	Nigeria AA	Tractor sellers in Kaduna state, Nigeria	Confirmed	May-19	
73	Nigeria AA	Tractor owners in Benue state, Nigeria	Confirmed	May-19	
74	Nigeria AA	Irrigators around Abuja, Nigeria	Confirmed	May-19	
75	Nigeria AA	Informal Food Traders Survey, Nigeria	Submitted	Oct-19	
76	Nigeria AA	Kaduna State Government Revenues	Submitted	Jun-19	
77	Nigeria AA	Kaduna State Government Expenditures	Submitted	Jun-19	
78	Nigeria AA	Kaduna State Agricultural Production Data	Submitted	Jun-19	
79	Nigeria AA	Cross River State Nigeria Agricultural Development Project Funds and Expenditures	Submitted	Jun-19	
80	Nigeria AA	Cross River State Agricultural Input Prices	Submitted	Jun-19	
81	Nigeria AA	Cross River State Agricultural Production Data	Submitted	Jun-19	
82	Nigeria AA	Kebbi State Storage and Market Characteristics Survey Wave 1	Submitted	Jun-19	
83	Nigeria AA	Storage and Grain Market Characteristics Survey Wave 2	Submitted	Jun-19	
84	Nigeria AA	NBS Kebbi State Nigeria Grain Prices Monthly 2000 to 2016	Submitted	Jun-19	

