



Feed the Future Innovation Lab for Food Security Policy
January 2019

Annual Report:

October 1, 2017 – September 30, 2018

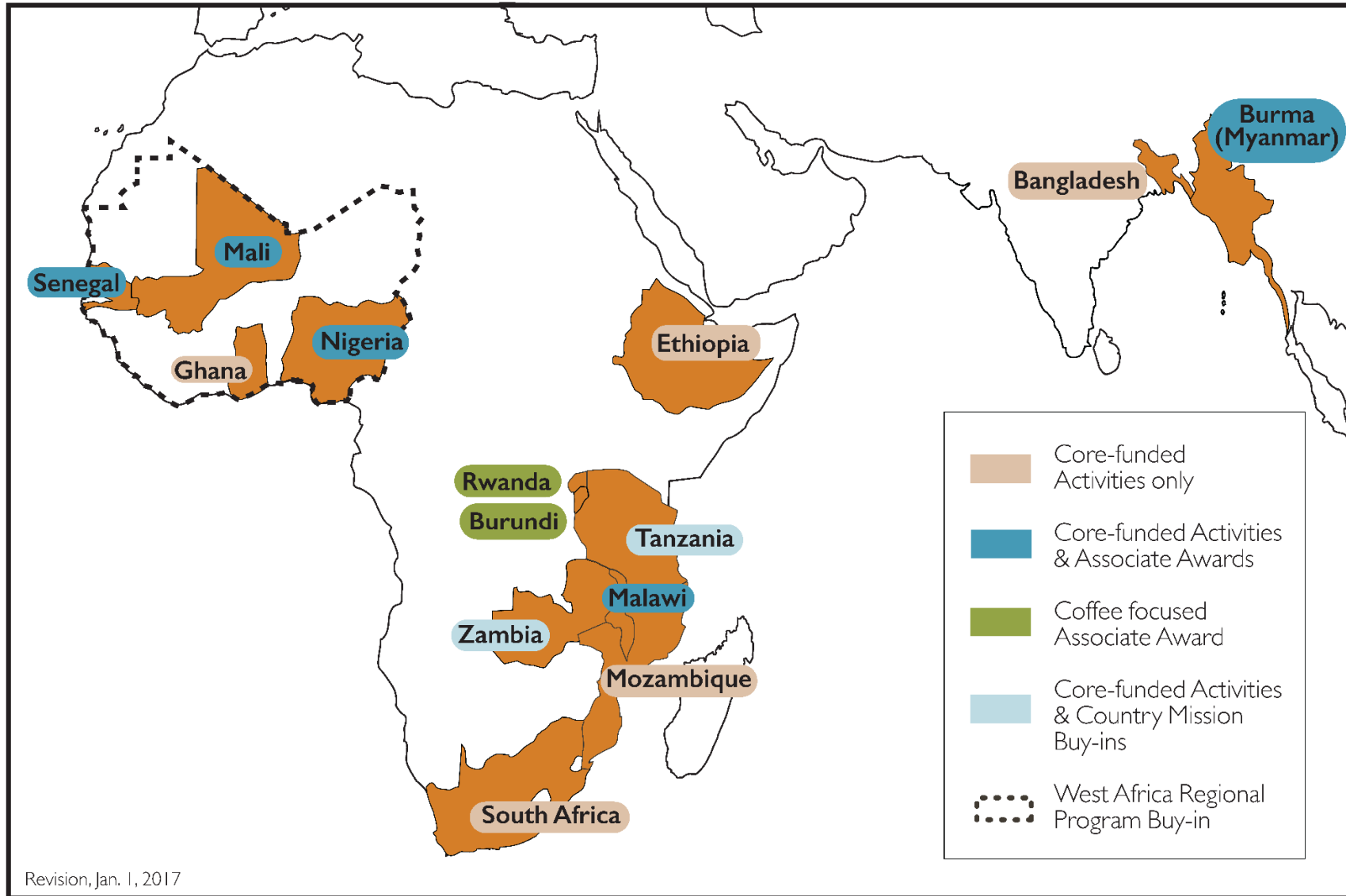
(Award AID-OAA-L-13-00001)

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
- International Food Policy Research Institute
- 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
 - Institut Polytechnique Rural (IPR)
 - 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
 - University of Ibadan
- Senegal
 - Senegal's Ministry of Agriculture, Directorate for Analysis, Forecasting and Statistics (DAPS)
- Senegalese Institute for Agricultural Research (ISRA)
- University Cheikh Anta Diop of Dakar.
- Tanzania
 - Directorate of Policy & Planning (MAFC)
 - Department of Agricultural Economics and Agribusiness (DAEA), Sokoine University
 - Policy Analysis Group
- Zambia
 - Zambia Land Alliance
 - Indaba Agricultural Policy Research Institute (IAPRI)
 - IAPRI
- International
 - AFAP
 - Africa Rising
 - Bill and Melinda Gates Foundation (BMGF)
 - CGIAR PIM (CRP2)
 - CIMMYT
 - ECOWAS Global Center for Food Systems Innovation (GCFSI)
 - IFDC
 - ICRISAT KSU Sustainable Intensification Innovation Lab
 - ReNAPRI
 - ReSAKSS-Asia

ACRONYMS

AA	Associate Award
AAEA	African Association of Agricultural Economists
ACBF	African Capacity Building Foundation
AEZs	Agro-Ecological Zones
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
AU	Africa Union
BFAP	Bureau for Food and Agricultural Policy
BFS	Bureau for Food Security (USAID)
BMGF	Bill and Melinda Gates Foundation
BRN	Big Results Now
C1, C2, C3, C4, C5	Components of the FSP workplan
CAADP	Comprehensive Africa Agriculture Development Programme
CARD	Centre for Agricultural Research and Development, Bunda College, Malawi
CESD	Centre for Economic and Social Development, Myanmar
CDAIS	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
CLPA	Conference on land Policy in Africa
CSP	Comité Sahélien des Pesticides
CSA	Climate Smart Agriculture
DAEA	Department of Agricultural & Agribusiness Economics
DAPS	Department of Agricultural Planning Services (Malawi)
DAPS	Ministry of Agriculture, Directorate for Analysis, Forecasting and Statistics (Senegal)
DEC	Development Experience Clearinghouse
DLEC	Developing Local Extension Capacity
DPP	Directorate of Policy & Planning
DST	Department of Science and Technology
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
FSP	Food Security Policy (Feed the Future Innovation Lab)
FTF	Feed the Future
FUM	Farmers Union of Malawi
FY	Fiscal Year
GCFSI	Global Center for Food Systems Innovation
GFSS	Global Food Security Strategy
CGE	Computable General Equilibrium
GISAIA	Guiding Investments in Sustainable Agricultural Intensification in Africa
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GOT	Government of Tanzania
HLPE	High Level Panel of Experts
IAAE	International Association for Applied Econometrics
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
IFDC	International Fertilizer Development Center
IFPRI	International Food Policy Research Institute
IITA	International Institute of Tropical Agriculture
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
JSR	Joint Sector Review
KOICA	Korea International Cooperation Agency
LANADA	Laboratoire National d'Appui au Développement Agricole
LASIP II	Liberia Agricultural Sector Investment Plan
LG(A)	Local Government (Authority)
LGFA	Local Government Finance Act
LIFT	Livelihoods and Food Security Trust Fund
LPI	Land Policy Initiative

LSMS	Living Standards Measurement Study
LUANAR	Lilongwe University of Agriculture and Natural Resources
MAFC	Ministry of Agriculture, Food Security and Cooperatives
MALF	Ministry of Agriculture, Livestock and Fisheries
MCC	Millennium Challenge Corporation
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
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
NRF	National Research Foundation of South Africa
NSO	National statistics office
NTFPs	Non-timber Forest Products
PE	Partial Equilibrium
PIM	Policy, Institutions and Markets
PMO-RALG	Prime Minister's Office Regional Administration and Local Government
PRPoSAM	Projet de Recherche sur la Politique de Sécurité Alimentaire
PS	Permanent Secretary
PSNP	Productive Safety Net Program
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'Énumération or in English enumeration areas
SNAPP	Science for Nature and People Partnership
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
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 year 5 has focused on Mali and Zambia. Some activities were also supported in Malawi and Myanmar through carry-over funds from last year.

In Mali, the FSP team has engaged in sustained efforts to strengthen local institutional capacity for policy analysis. MSU and IER conducted a joint review of Mali's fertilizer subsidy program, the top priority expressed by the Malian ministry of Agriculture. Five agricultural university students at IER mentored successfully defended their theses in November 2017 while an additional seven inducted into the 2018 cohort conducted field research in August, drafted their theses in September and will defend in the final quarter of 2018. In addition, Malian co-authors contributed to four internationally refereed professional publications during the past year, international recognition that serves to improve their professional stature over time.

In Myanmar, FSP conducted a research study on "Strategic Planning for Irrigation Development", in consultation with the Ministry of Agriculture, Livestock and Irrigation (MOALI). The main objectives of the study are to assess the current irrigation status and potential for development to enhance the agriculture sector of Myanmar, and to examine the effectiveness of irrigation in promoting agricultural growth and food security. Preliminary results show that given land suitability, economic profitability, availability 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 and 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 suggest that irrigation will support dry season production of pulses, oil crops and vegetables. Complementary investments are needed to enhance access to improved varieties, extension, and financial services.

FSP continued to participate in policy dialogues **in Zambia** and to facilitate the participation of Zambian stakeholders in international policy dialogues. For example, MSU funded the Zambian Minister of Agriculture and two Ministry associates to attend the World Food Prize conference in October, 2017. FSP in collaboration with IAPRI and the Ministry of Agriculture also completed a survey of about 1,200 households in six districts to compare the number of medium- and large-scale farms in these six districts with the estimates of such farms according to the Crop Forecast Surveys. The purpose of this full listing was to gauge the latter's ability to adequately capture the number of medium/large farms and understand the extent to which medium-scale farms are acquiring land in rural Zambia and competing for land with smallholder farmers. Additionally, a new study using the best-worst scaling method was initiated in Zambia and a working paper is in progress to understand farmers' preferences for expanding input subsidy programs, versus increasing maize price support, versus other policy options such as investments in infrastructure, irrigation, R&D, extension, credit, etc. In addition, FSP researchers have led numerous technical trainings to enhance local policy analysis capacity in Zambia.

In Malawi, FSP core supported activities in 2017-18 have focused on technical research capacity building of the Lilongwe University of Agriculture and Natural Resources (LUANAR) through its Centre for Agricultural Research and Development (CARD). This is part of our commitment towards the development of core analytical capacity based within national policy think-tanks/research institutes. Towards this goal, the University of Pretoria's researchers associated with the Bureau for Food and Agricultural Policy (BFAP), in collaboration with the Food and Agricultural Policy Research Institute (FAPRI), hosted a five days training on market analysis and modelling in late September to a cross section of participants drawn from both the public and private sector institutions, the academia, and civil society. The aim of this training was to enable CARD and a larger number of policy analysts in Malawi to develop and use Partial Equilibrium crop models for policy analysis and market outlook projections in national and regional contexts to inform policy makers.

Under **Component 3**, work on **Kaleidoscope Model** was published in the World Development. Two papers on gendering nutrition policy have been published in Development Policy Review and BMC Pregnancy and

Childbirth. 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 model has been submitted. During this period, a yearlong research effort on the impacts of the devolution of agriculture in Ghana was completed and the final report presented to key stakeholders.

Additionally, work on the preparation of a **comprehensive electronic database** of key international, African (AU) and regional (SADC) instruments relating to food security and nutrition imposing obligations and/or containing firm commitments; and Malawi-specific domestic constitutional provisions, key policies, key legislation and key strategies dealing with food security, continued during the reporting period. The database has been submitted to ReSAKKS for incorporation in its existing electronic database. Also, significant progress was made in the drafting of the pre-final version of the FSP C3-A4 Malawi Food Security and Nutrition Governance Report.

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 (INSAH, CSP, UEMOA, ECOWAS), USAID and USDA's Foreign Agricultural Service (FAS).

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 NAIPs in attaining the Malabo and SDG2 targets related to food security and nutrition, and (iv) assessing the gender equality components against commitments. This methodology has been integrated into the ReSAKSS NAIP support tools and forms part of the CAADP Technical network support. Insights from a **rapid assessment of the 11 available NAIPs** show that in general, they suffer from: a) Lack of alignment with national development frameworks (national development plans) and other sectoral policies, programs and strategies. ; b) there is no theory of change or pathway to progress that links the actions to the impact required (achieving the Malabo outcomes) ; c) the indicators do not align with the Biennial Review report, SDGs and other national targets ; d) the Institutional Architecture is not well structured to provide leadership, coordination and accountability. 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, researchers in African research institutes, and in African development organizations 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 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. Coverage of C4a land research has also featured prominently in mainstream media including the front page article in New York Times, and two articles in The Economist. This is an evidence that FSP's research findings about the rise of medium-scale farms is gaining traction and that policy discussions need to consider their impacts on youth access to land and broader rural transformation processes.

In partnership with IFPRI's PIM CRP, FSP's work on **land tenure and land registration policy** has also supported the AU-LPI in Monitoring and Tracking Progress in implementation of the 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 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. The IFPRI-FSP researcher were tasked to revise/update the draft land policy fiche and integrate evidence-based recommendations that takes into account the policy environment in the country. This document recommends that Ethiopia should revisit the current restriction on land rental markets as specified in the federal land proclamation, which imposes size and durational restrictions in order to discourage long-term migration to urban areas. Other recommendations include amendments to the proclamation to allow for leases with longer durations, following what some regions in the country were already doing. The land policy fiche will be submitted to a technical unit at the Ministry of Agriculture for further review and consideration, and subsequently for the Minister's endorsement. In addition to this effort at the federal level, FSP-funded researchers are also involved in similar policy engagement to inform on-going land reform agenda of the regional state of Tigray.

Progress was made toward the completion of two books: one on Africa's Rural Transformation, (eds. Jayne, Chamberlin, and Benfica) highlighting the role of agricultural productivity growth; the other being a draft manuscript of a book on **agricultural mechanization**, including the writing of the synthesis of common and collective messages across the chapters. In addition, papers analyzing the interactions of smallholders' mechanization decisions and farming exit decision, has been accepted for publication in a peer-reviewed journal, and a paper analyzing the linkage between the policies on complementary inputs and the adoption of mechanization by smallholder in Nepal has been completed. The international conference on *South-South Knowledge Sharing on Agricultural Mechanization* was held in Addis Ababa in October, by IFPRI, CIMMYT, and Ethiopian Agricultural Mechanization Forum, where researchers, government officials, private sector from Asia and African countries, and international 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 AMSEC program.

Other major activities supported under C4a includes: A) exploring the relationships between **agricultural transformation and youth employment** in Africa's economic transformation. This activity has aimed to develop new insights about the emerging key opportunities for youth employment within the rapidly transforming economies of sub-Saharan Africa. A FSP C4a team member led the 2018 Chicago Council Report on *Youth for Growth* and was a featured participant at the 2018 Chicago Council Global Food Security Symposium, March 21-22, 2018, Washington, DC. 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. Field research for these two activities were initiated in the reporting period and final outputs will be completed in FY2019.

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 IFAD Rural Development Report 2019, which draws heavily on both the diet change and employment work that has been done under C4b; and b) engagement in Tanzania on oilseeds policy, and agroprocessing strategy. Finally, our country 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 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:** This activity builds on the C3 activity mapping of food security and nutrition policies and programs done globally (78 countries) and the FTF policy matrixes carried out for countries. The work documents policy changes, new policies passed with regard 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 UP team has identified the indicators relevant to food security and nutrition from the SDGs, CAADP Results Framework, Agenda 20163 First 10-Year Implementation Plan and Biennial Review. Reviews of eleven country NAIPs, with in-depth reviews of Malawi, Nigeria and Liberia—were completed in the reporting period. These were well received and have led to substantial changes in the NAIP quality in both Malawi and Liberia.

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: a) across FSP work streams, especially between the country and global components; b) with other partners where it can make a significant difference in effecting policy change or capacity building; and c) with Missions. The management team helped coordinate the process of developing a workplan for the final 18 months of the FSP core funded activities. In addition, FSP has continued its effort to communicate on the impact of its work through “outcome stories.” The web site continues to support the overall project as well as in-country activities. It serves as a repository of documents as well as a new dissemination tool. Baseline survey for the two qualitative M&E indicators was completed in Senegal, and a follow-up survey for these indicators was completed in Malawi and Nigeria. Three new buy-ins were awarded to FSP, which include—a) the development of CDAIS toolkit; b) agriculture sector assessment in Venezuela; 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. Final outputs of these Task groups will be completed by March 2019.

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 (IRs) of increased agriculture productivity, improved market access, increased public and private investment, new rural farm and non-farm employment, and improved resilience.

FSP Organization, Target Geographies and Approach

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

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

Components C1 and C2 are designed jointly and grouped by region (West Africa, Eastern and Southern Africa, Asia) to capture potential geographical spillovers. They are implemented in close collaboration with global components, whose agendas directly support several strategic areas identified in the AUC draft implementation strategy to implement the Malabo Declaration. A list of ongoing buy-ins and associate awards are included in Annex A.

DETAILED ACTIVITIES AND ACHIEVEMENTS

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 from Year 4). This year is 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 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) are working closely with several key local institutions – the Institut d’Economie Rurale (IER), Institut Polytechnique Rural (IPR), Université de Ségou and Cellule de Planification et de Statistiques du Secteur Développement Rural (CPS/SDR) -- 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 a joint review of Mali’s fertilizer subsidy program, the top priority expressed by the Malian Ministry of Agriculture. Given regular newspaper reports of corruption and mismanagement in the subsidy program, we believe that our carefully tailored survey work will provide empirical evidence over the coming year to policy makers anxious to reform this system. Longer term, our lead collaborator at IER will earn his PhD by preparing a thesis based on these analytical results. Five agricultural university students at IPR mentored during 2017 year by FSP successfully defended their theses in November 2017. Two of the students received “mention très bien” while three received “mention bien” and one has received a scholarship to complete a Master degree in Canada. Another seven students, five from IPR and two from Université de Ségou, have conducted original research during the summer of 2018, completed thesis drafts in September and will defend their thesis in the final quarter of 2018. In addition, Malian co-authors contributed to four internationally refereed professional publications during the past year, international recognition that serves to improve their professional stature over time. 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:

- Planning, stakeholders, and research team: October 3, 5, 10, 12, 17, 19, 26, 30. November 2, 9, 16, 30, December 5,12,19, January 9,16,23,30, February 6,13,20,27, March 6,13,20,27, April 3,10,17,24,31, May 1,8,15,22,29, June 5,12,19,26, July 10,17,24, August 7,14,21,28, September 4,11,18,25.
- Comité Sahélien des Pesticides (CSP), Bamako November 14-18, 2017 and May 21-25, 2018.
- USAID’s Fall Army Worm taskforce about early actions for improving pesticide regulatory systems, July 17, Washington DC. Discussion centered on early actions for improving pesticide systems in Africa.

Research Papers:

- A Stakeholder Assessment of Agricultural Policy Processes in Mali: Results of a Baseline Survey. October 2017. Abdramane Traoré, Amadou Samaké, Ousmane Sanogo, Steven Haggblade and Mywish Maredia. *Innovation Lab for Food Security Policy Research Paper 76*. East Lansing, MI: Michigan State University
- National Implementation of Regional Pesticide Policies in West Africa: Achievements, Challenges and Priorities. November 2017. Amadou Diarra and Steven Haggblade. *Innovation Lab for Food Security Policy Research Paper 81*. East Lansing, MI: Michigan State University.

- Yield Response of Dryland Cereals in Mali to Fertilizer: Insights from household survey data. January 2018. Hamza Haider, Melinda Smale, and Veronique Theriault. *Feed the Future Innovation Lab for Food Security Policy Research Paper 92*. East Lansing: Michigan State University.
- A preliminary assessment of herbicide quality in Mali in the presence of proliferating unregistered brands of glyphosate. February 2018. Steven Haggblade, Amadou Diarra, Amidou Assima, Naman Keita and Abdramane Traoré. *Feed the Future Innovation Lab for Food Security Policy Research Paper 93*. East Lansing: Michigan State University.

Policy Briefs:

- Trends in West African pesticide markets. October 2017. Steven Haggblade. Innovation Lab for Food Security Policy Research Brief No. 49. East Lansing, MI: Michigan State University.
- Fertilizer Subsidy Impact on Sorghum and Maize Productivity in the Sudanian Savanna of Mali. November 2017. Veronique Theriault, Melinda Smale and Amidou Assima. *Innovation Lab for Food Security Policy Research Brief No. 51*. East Lansing, MI: Michigan State University.
- Regulatory challenges in West Africa: instituting regional pesticide regulations during a period of rapid market growth. Steven Haggblade. November 2017. Innovation Lab for Food Security Policy Research Brief No. 52. East Lansing, MI: Michigan State University.
- The Scope and Scale of Processed Food Retailing in Urban Mali. Veronique Theriault, Ryan Vroegindewey, Amidou Assima, and Naman Keita November 2017. *Innovation Lab for Food Security Policy Research Brief No. 53*. East Lansing, MI: Michigan State University.
- Intrahousehold productivity differentials and land quality in the Sudanian Savanna of Mali. November 2017. Melinda Smale, Veronique Theriault, Hamza Haider and Alpha Kergna. *Innovation Lab for Food Security Policy Research Brief No. 54*. East Lansing, MI: Michigan State University.
- Evaluation du processus d'élaboration des politiques agricoles et de sécurité alimentaire par les intervenants au Mali. Abdramane Traore, Amadou Samake, Ousmane Sanogo, Steven Haggblade et Mywish Maredia. *FTF Policy Brief No.55*. East Lansing, MI: Michigan State University.
- Haggblade, S. and Resnick, D. May 2018. Conceptualizing key drivers of policy change: an introduction to the Kaleidoscope Model. *Feed the Future Innovation Lab for Food Security Policy, Policy Brief 61*. Peer-reviewed journal articles
- Intrahousehold productivity differentials and land quality in the Sudanian Savanna of Mali. Melinda Smale, Veronique Theriault, Hamza Haider and Alpha Kergna. Forthcoming in *Land Economics*.
- Farm family effects of adopting improved and hybrid sorghum seed in the Sudan Savanna of West Africa. January 2018. Melinda Smale, Amidou Assima, Alpha Kergna, Veronique Theriault and Eva Weltzien. *Food Policy* 74:162-171.
- The Malian fertilizer value chain post-subsidy: an analysis of its structure and performance. February 2018. Veronique Theriault, Melinda Smale and Amidou Assima. *Development in Practice* 28(2):242-256.
- "Retailing of processed dairy and grain products in Mali: Evidence from a city-retail outlet inventory", Veronique Theriault, Ryan Vroegindewey, Amidou Assima, and Naman Keita, *Urban Science* 2(1),24; <https://doi.org/10.3390/urbansci2010024>

Field work:

- Round 1 farm survey in Mali completed in October 2017
- Round 2 of our farm household survey in two AEZs completed.
- Round 3 completed, April through May
- Round 4 completed August 2018

Data Analysis:

- Fertilizer response on cereals

- Baseline survey of policy process stakeholders
- Laboratory analysis of pesticide quality

Capacity building:

- In addition to pursuing his PhD program, Ryan Vroegindewey has helped with the analysis of the processed food inventory (R4) and has designed a rapid appraisal study on dairy processing and a consumer preference survey for dairy products in Mali. His field research began during this quarter.
- In addition, Hamza Haider, a second PhD candidate at MSU, has worked with Melinda Smale and Veronique Theriault to clean Living Standards Measurement Study (LSMS) production data in order to analyze productivity impacts and responses to fertilizer (RP# 92). He also contributed to the policy brief and forthcoming journal article on intrahousehold productivity differentials and land quality.
- Five student theses completed with project support in 2017
- An additional seven students conducted thesis research and prepared theses in the summer of 2018, for formal presentation and defense in the final quarter of 2018.

Presentations:

- Implementing Regional Pesticide Policies in West Africa During a Period of Rapid Market Growth: Achievements, Challenges and Opportunities. November 14, 2017. Amadou Diarra and Steven Haggblade. Presentation at the CILSS 41st meeting of the Comité Sahélien des Pesticides, Bamako, Mali
- Farm family effects of adopting improved and hybrid sorghum seed in the Sudan Savanna of West Africa. Paper presented at the 2018 Global Sorghum Conference, Cape Town, South Africa. April 11, 2018. Melinda Smale, Amidou Assima, Alpha Kergna, Veronique Theriault, Eva Weltzien.
- Quality Assessment of Herbicides Sold in Mali: Preliminary Laboratory Results.” Steven Haggblade and Amadou Diarra. Presented to the 42nd meeting of the Comité Sahélien des Pesticide (CSP), Bamako May 22, 2018.
- Retailing of processed dairy and grain products in Mali: Evidence from a city-retail outlet inventory. Paper presented at the Northeast Agricultural and Resource Economics Association Annual Meeting, Philadelphia. June 12, 2018 Veronique Theriault and Ryan Vroegindewey.
- The "Hidden Middle" of Dairy Value Chains: An Organizational Economics Analysis of Dairy Processor Strategies in Mali. Accepted poster at the conference on disruptive innovations, value chains, and rural development organized by the World Bank, Washington D.C. June 13, 2018. Ryan Vroegindewey and Veronique Theriault.
- Africa’s Emerging Herbicide Revolution: sources of market disruption. World Bank/International Consortium on Applied Bioeconomy Research (ICABR) Conference on “Disruptive Innovations and Rural Development,” June 14, 2018, Washington, DC. Steven Haggblade.
- Farm-level impacts of falling prices, counterfeit herbicides and variable quality. World Bank/International Consortium on Applied Bioeconomy Research (ICABR) Conference on “Disruptive Innovations and Rural Development,” June 14, 2018, Washington, DC. Melinda Smale.
- Regional regulatory challenges in West Africa. World Bank/International Consortium on Applied Bioeconomy Research (ICABR) Conference on “Disruptive Innovations and Rural Development,” June 14, 2018, Washington, DC. Amadou Diarra.
- Decision-making within agricultural households: New concepts, empirical, approaches, and outcomes. Accepted proposal for an organized symposium at the International Conference for Agricultural Economics. Vancouver, Canada. August 2, 2018. Veronique Theriault.
- Intrahousehold productivity differentials and land quality in the Sudanian Savanna of Mali. Accepted presentation at the International Conference for Agricultural Economics. Vancouver, Canada. August 2, 2018. Melinda Smale.

Outcomes:

Our review of the new ECOWAS pesticide regulations suggest that markets have grown much faster than regulatory capacity. Financing for the three regional pesticide regulatory bodies, as well as for national regulatory agencies deprived of their dossier fees, remains an unresolved issue. Our country case studies suggest that national regulators will not be able to move forward with confidence until these regional bodies begin to take shape and clear financing mechanisms have been set in place. MSU is currently working actively with CILSS, CSP, ECOWAS and various donors to plan for a formal review of financing options for these regional regulatory agencies. In addition, MSU has taken the lead in piloting low-cost models of outreach to farmers who currently face considerable difficulty distinguishing between high-quality and fraudulent pesticides. These efforts involve ongoing collaboration 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.

Challenges and updates:

- Security remains an ongoing challenge, limiting travel throughout Mali. In response, we have conducted a formal security review and instituted a security plan involving improved monitoring, tighter review of travel plans, purchase of a satellite telephone, restricted local travel and careful vetting of hotels based on security rating. Our field survey coordinators have likewise had to modify field research practices by splitting up vehicles to avoid attracting attention of jihadist carjackers. In some locations, local authorities insisted that travel by vehicle was too dangerous, given widespread hijackings of pickup trucks, and so our survey teams traveled by motorbike instead. In several extreme cases, enumeration areas (SEs) selected for study had to be replaced given concerns about insecurity in specific villages. In these cases, we replaced the insecure locations with comparable SEs (same AEZ and fertilizer subsidy system) where security issues did not arise.
- Elections. The recent presidential election campaign has produced significant social strife and tension, all of which intensified during the past quarter. In addition, several of our outreach activities have been pushed back in time to the fourth quarter of 2018 and the first quarter of 2019.
- Subcontracting. Much of our success in conducting credible, actionable, policy-relevant research depends on our longstanding scientific collaboration with Mali’s Institut d’Economie Rurale (IER). Administrative difficulties in renewing our subagreement with them have handicapped implementation of our joint farm household survey and follow-up analytical work. We remain hopeful that these contracting issues can be ironed out soon.

Data Management Update

	Dataset Type	Brief description	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	Farm household survey in Sudan savanna of Mali, 2014/15	Household survey featuring asset summaries and plot-level information on land allocation, cropping, input use, soil fertility and outputs	April 2016	December 2016	Yes
2	Inventory of processed foods, 2016	Inventory of processed dairy and cereal products produced and sold in Mali	July 2017	January 2018	Yes
3	Agriculture and	Quality of Agriculture and	July 2017	June 2018	Yes

	Dataset Type	Brief description	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)
	Food Security Policy Process Survey Data	Food Security Policy Processes: Stakeholder Survey, Mali 2017			
4	Farm household survey in two agro-ecological zones, 2017/18	Household survey featuring asset summaries and plot-level information on land allocation, cropping, input use and outputs	December 2018	February 2019	No

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.

Previous FSP core support to Myanmar 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, the focus will shift to working closely with Ministry of Agriculture, Livestock and Irrigation (MOALI) Department of Planning, where a new Agricultural Policy Unit (APU) is being established in response to an FSP proposal developed by IFPRI and MSU in July. The APU will be a critical entry point for introducing evidence-based policy analysis, prioritizing public investment, and support the 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. 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 suggest 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 carry-forward funds from previous year.

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 Policy Forum carried out in MOALI, Nay Pyi Taw on March 20, 2018
- Multi-donor meeting held in MSU Office, Yangon on March 22, 2018
- Technical report illustrating the analytical results and interpretation of the irrigation potential in Myanmar under preparation
- Policy Note based on the technical report under preparation

Outputs:

Meetings:

- A Policy Forum organized by Dr. Duncan Boughton, MSU in collaboration with the Ministry of Agriculture, Livestock, and Irrigation (MOALI) was held on March 20, 2018 in MOALI, Nay Pyi Taw. High-level policymaker such as Dr. Tin Htut, Permanent Secretary and Mr. U Zaw Min Htut, Director, Irrigation Department, MOALI as well as directors from other government institutions were present during the Forum. Experts from the government offices such as from the Department of Agriculture and Irrigation Department among others, and academe including Yezin Agricultural University (YAU) also participated as well as development partners like the Japan International Cooperation Agency (JICA), Korea International Cooperation Agency (KOICA), International Water Management Institute and donor agencies consisting of World Bank and USAID. Dr. Mark Rosegrant, Director, Environment and Production Technology Division (EPTD) and Project Leader and Rowena Valmonte-Santos, Senior Research Analyst, EPTD joined the Forum from IFPRI team.
 - PS Tin Htut opened the Forum followed by Mr. U Zaw Min Htut who presented the “Importance and contribution of irrigation to agriculture development strategy”. Dr. Rosegrant presented the preliminary results and analysis of the project. Question and Answer session followed the presentation of Dr. Rosegrant. The forum served as platform to present the results of this project to the government agencies and other stakeholders.
- A multi-donor meeting was also organized by Dr. Boughton in MSU Office in Yangon on March 22, 2018. Dr. Rosegrant presented the preliminary results of the study to key staff from USAID, LIFT and Development Strategy and Governance Division, IFPRI.

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. Table 1 (below) provides the type of data and sources used in the model development.

Table 1. Data sources for developing national-scale hydrological/crop simulation model of Myanmar

Type	Source
Topography	HydroSHEDS ¹
Soil	FAO/UNESCO Soil Map of the World ²
Land Use/land cover	GLC2000 ³ and SPAM ⁴
Precipitation	APHRODITE (Asian Precipitation - Highly-Resolved Observational Data Integration Towards Evaluation)
Temperature, solar radiation, relative humidity and wind speed	National Centers for Environmental Prediction (NCEP) Climate Forecast System Reanalysis (CFSR)

Notes:

1. Available at <http://hydrosheds.org/>
2. Spatial data with derived soil properties are obtained from <http://www.waterbase.org/>
3. Available at <http://forobs.jrc.ec.europa.eu/products/glc2000/glc2000.php>

4. Produced by IFPRI's Spatial Allocation Model (SPAM) containing spatially downscaled estimates for crop production in Myanmar
5. Available through global weather data portal for SWAT at <https://globalweather.tamu.edu/>

Written Materials:

- Technical report – A draft Technical Report describing the rationale, objectives, methods, results, analysis and policy implications of strategic irrigation development for Myanmar will be submitted during the second quarter of CY2018.
- Policy Note – Draft Policy Note under preparation

Presentations

- PowerPoint presentation prepared by IFPRI team (including Dr. Hua Xie, Research Fellow, (EPTD) and presented by Dr. Rosegrant during the Policy Forum and the multi-donor meeting.

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:

Workshop:

- The first course of Agricultural Policy Analysis workshop was organized from November 6, 2017 to November 10, 2017 in Myanmar. This course was organized by Dr. Duncan Boughton and Dr. Suresh Babu and in collaboration with YAU and was attended by 37 participants from Ministry of Agriculture, Livestock, and Irrigation (MOALI), Myanmar and YAU. This workshop was led by Dr. Suresh Babu. Namita Paul, Research analyst also joined from the IFPRI team. The key objective of this workshop was to develop a policy environment in which there is a full understanding of the policy process, concepts, and terminologies related to explain policy concepts, develop a common language for discussing policy, and identify policy topics for future policy training exercises.
- A one-day consultation was organized by Dr. Suresh Babu for the Agriculture Policy Unit in MOALI, Myanmar to follow up with different policy groups in Myanmar and finalize details regarding the second training on Agricultural Policy Course – Thematic Issues, Policy Process, and Conceptual Analysis on January 9, 2018.
- Dr. Suresh Babu, Senior Research Fellow and Head of Strengthening Program at IFPRI, conducted a day long workshop for the Policy Community of Practice organized by The Livelihoods and Food Security Trust Fund (LIFT) for tracking progress in policy implementation on Jan 10, 2018.
- The second course of Agricultural Policy Analysis workshop was organized from March 26, 2018 to March 30, 2018 in Myanmar. This course was organized by Dr. Duncan Boughton and Dr. Suresh Babu and in collaboration with YAU, and the Ministry of Agriculture, Livestock, and Irrigation (MOALI), Myanmar.

This workshop was led by Dr. Suresh Babu. Namita Paul also joined from the IFPRI team. The second session was a more “hands on” training and enable participants (MOALI APU and focal points, YAU faculty/staff) to gain experience in the application of analytical tools for policy analysis. The practical training during this course allowed participants to identify the gaps in current policies and provide recommendation to the policymakers.

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 draft report based on the comparative advantage analysis has been completed and is in the process of being published as a working paper. 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.

Data Management Update

	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	Mon State Rural Livelihoods Survey	Household Data Set	March 2017	April 2019	No
2	Myanmar Agri-Aquaculture Survey	Household Data Set	June 2017	March 2019	No
3	Rural Economy and Agriculture in the Dry Zone	Household Data Set	May 2018	June 2019	No
4	Dry Zone Seed System Survey	Household Data Set	February 2019	March 2019	No
5	Shan State Agriculture and Rural Economy Survey	Household Data Set	April 2018	April 2019	No

COMPONENT C1/C2 EASTERN AND SOUTHERN AFRICA – MALAWI

Introduction: 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. Under NAPAS:Malawi, the FSP partners support the government of Malawi as it works to implement the policy reform agenda to which it committed in late-2013 under the New Alliance Country Cooperation Framework for Malawi. In addition, the University of Pretoria (UP), using FSP resources, led a training of journalists in Malawi as a Component 2 activity. Overall, only limited core resources from the global FSP project were used in FY 2018 to support FSP Components 1 and 2 activities in Malawi.

In FY2017, FSP resources were budgeted to build capacity in partial equilibrium modeling at the Centre for Agricultural Research and Development (CARD). This activity was completed in this reporting period through carry-forward funds.

Activity 3: Capacity building in PE modeling methods

Description: Training was provided by the staff from University of Pretoria in the use of partial equilibrium (PE) modeling methods for policy analyses and national and regional crop market outlook projections to researchers affiliated with the Centre for Agricultural Research and Development (CARD). CARD is a policy research institution associated with the Lilongwe University of Agriculture & Natural Resources, Bunda, Malawi and is a member of the Regional Network of Agricultural Policy Research Institutes (ReNAPRI).

This activity was led by Richard Kachule from CARD and Ferdi Meyer and Tracy Davids of UP. Mr. Kachule has received basic training in PE modeling and, using PE techniques, has been producing ReNAPRI's 10-year outlook for the maize sector in Malawi since the first ReNAPRI stakeholder conference was presented in Lusaka in 2014. The approach to PE modeling that has been employed by ReNAPRI over a number of years and also in this training, is a middle approach to doing policy analysis that is easier to understand and to use and considerably less data-intensive than computable general equilibrium (CGE) modeling approaches. The ReNAPRI PE modelling output and the approach to market and price analysis that forms the basis for this approach was applied in various activities over the past year.

Outputs:

Presentations:

- The 5-year outlook for the Malawi maize and soybean industry was presented at the ReNAPRI stakeholder conference in Cape Town on 1 December 2017. The power point presentations are available on the ReNAPRI website. www.ReNAPRI.org. Presentations on research findings regarding agricultural transformation.
- At an organized session of the 30th International Conference of Agricultural Economists (ICAE) in Vancouver on 29 July 2018, researchers from FAPRI (University of Missouri), University of Pretoria and ReNAPRI hosted an organized session of the development of the soybean industry in Southern and Eastern Africa. Ferdi Meyer presented a presentation entitled: "Anticipating the evolution of African oilseed markets: Will Africa fill the gap? The ReNAPRI PE model was used to generate the outlook that was included in this presentation.

Meetings:

- Researchers from CARD contacted and had discussions with various stakeholders in the oilseed value chain, and more specifically the soybean value chain to validate the commodity balance sheets and pricing data for the soybean partial equilibrium (PE) model that was added to the existing ReNAPRI PE model database.

Data Analysis

- Development of the balance sheet for the Malawi soybean industry was completed. The database was again updated for maize and soybeans in August 2018.

Policy Briefs:

- FSP News Brief in October 2017: “Training and Capacity Building in Partial Equilibrium Modelling at the Center for Agricultural Research and Development (CARD) - Malawi”, Richard Kachule, Ferdi Meyer, Julian Binfield and Tracy Davids.
- Three policy briefs to be posted on renapri.org. Two are forthcoming. Completed and posted: *Africa's Evolving Employment Trends: Implications for Economic Transformation*, Policy Brief No. 8

Indirect output following capacity building in ReNAPRI countries:

- Modelling soybean markets in Eastern and Southern Africa Meyer (2018). Meyer F., Traub, L.N., Davids, Chisanga, B., Kachule, R., Chiziane, O., Popat, M., Binfield, J., Boulanger, P.; Modelling soybean markets in Eastern and Southern Africa; Regional Network of Agricultural Policy Research Institutes (ReNAPRI); EUR 28978 EN; doi:10.2760/20598.

Capacity building:

- The Lilongwe University of Agriculture and Natural Resources (LUANAR) through its Centre for Agricultural Research and Development (CARD) in collaboration with FAPRI and BFAP hosted a five days training from the 25th to 29th September, 2017. The training was facilitated by experts from FAPRI and BFAP. A cross section of participants was drawn from both the public and private sector institutions, the academia and civil society. Participants from public sector institutions included those from the Ministry of Agriculture, Irrigation and Water Development; Ministry of Trade, Industry and Tourism; The Malawi Revenue Authority and the Reserve Bank of Malawi. Private sector institutions included the Auction Holdings Commodity Exchange and the Malawi Oilseeds Sector Transformation (MOST) while lectures and postgraduate students represented the academia from LUANAR and the civil society was represented by the Civil Society Agriculture Network (CISANET).
- The training comprised of both theory and practical sessions. Before the actual training commenced, some background presentations were made by Dr. Flora Nankhuni representing the New Alliance Policy Acceleration Support Project (NAPAS) under the Ministry of Agriculture, Irrigation and Water Development. This presentation focused on activities and accomplishments of NAPAS in Malawi. Following Dr. Nankhuni's presentation was a joint presentation by Ms. Elizabeth Mkandawire and Prof. Nic Olivier from the University of Pretoria.
- A field trip was organized on the afternoon of the last day of the training. The group visited a soybean processing/crushing plant which produces soybean cooking oil and soybean meal/cake which is used as an ingredient in livestock feed. The purpose of the industrial tour was for the training participants to appreciate the processes that take place in processing soybean and constraints the processing plant faces in terms of supply of raw materials (soybean) and any policy issues that affect operations of the plant. It was learnt that Malawi is a net importer of cooking oil as such, all the cooking oil produced at the plant is 100% for the Malawi market. On the other hand, the soybean meal/cake is supplied to the local feed manufacturers and exported to countries such as Zimbabwe.

Outcomes of the PE training in Malawi:

- The aim of the training in market analysis and partial equilibrium modelling is to enable CARD and a larger number of policy analysts in Malawi to develop and use Partial Equilibrium crop models for policy analysis and market outlook projections in national and regional contexts to inform policy makers. Some of the recent ways in which these models have been used for policy advice include: predicting impacts of the 2015/16 drought on staple maize markets in Eastern and Southern Africa; modelling the impact of discretionary trade policies on the Zambian maize market; assessing the socio-economic impact of the sugar tax on the South African sugar industry; and the application of the ReNAPRI PE model in a pilot study on policy prioritization using value chain analysis in Tanzania for the Bill and Melinda Gates

Foundation.

- This modelling technique also offers a pragmatic and systematic approach to analyze market trends and develop various future scenarios under alternative policy options and mega trends that are shaping the transformation of agriculture on the continent. This can assist government to plan by understanding what the potential impact of policies can be on the industry.
- Following participation of officials from the Ministry of Agriculture, Irrigation and Water Development (MoAIWD) in the PE training at CARD, the ministry officials found the PE model to be useful in the Ministry's computation of the Food Balance Sheet (FBS). To that effect an agreement yet to be formalized was reached for CARD to be an integral part in the computation of the country's FBS which is done by the MoAIWD annually. Through this engagement, CARD was invited to the first meeting organized by the MoAIWD in collaboration with the FAO whereby FAO introduced the new methodology in computing FBS. Richard Kachule represented CARD at that meeting which took place at the Ministry's Department of Fisheries from 24 to 26 October 2017.
- Following the introduction of the new methodology by FAO, a one-week training on Food Balance Sheet Methodology was organized by the MoAIWD in collaboration with FAO. The training took place at Mount Soche Hotel from 20th to 24th November, 2017. Richard Kachule from CARD participated in the training. A few more training sessions to complete the cycle on the new FBS methodology were held end of February 2018.

ReNAPRI Stakeholder Conference, 30th November – 1st December 2017

The fourth Annual ReNAPRI stakeholder Conference was held on 30th November and 1st December in Cape Town, South Africa. The topic of the conference was: "Unfolding Agricultural Transformation in Africa: Strategies for sustainable development". More than 100 stakeholders from government, private sector and academia attended the conference. The Annual Stakeholders Conference is a ReNAPRI led and driven initiative that creates a platform for information sharing and dialogue on relevant agricultural policy issues among various regional stakeholders such as: policymakers, leading research institutions, the agricultural community, and other development partners. The theme was selected in recognition that the pace and scope of agricultural transformation rests on enlightened policies and needs to be informed by solid evidence. The fundamental questions at the core of the future of agriculture transformation in Africa are linked to issues of political governance – whether governments will adopt policies and spend their scarce resources in ways that truly promote broad-based agricultural productivity growth. For this reason, ReNAPRI's 4th Annual Stakeholder Conference focused on identifying policy strategies that can generate the incentives for system-wide private investment in food systems that contribute to broad based growth.

Key Objectives

The key objectives of the 4th Annual ReNAPRI Stakeholders' Conference were:

1. Examine constraints to transformational investment in the agri-food system
2. Unpack the emerging trends in land distribution and the implication on governance structures
3. Explore agricultural productivity trends/options considering climate change and increasing resource constraints
4. Investigate the potential employment opportunities for youth in the agri-food system
5. Anticipate the 10-year outlook for maize, wheat, rice, sugar, and soybeans within the context of rapidly changing agricultural systems both regionally and globally
6. Enhance engagement of African parliaments in issues pertaining to African agricultural transformation; and,
7. Assess the operational feasibility of alternative policy options by clearly identifying concrete strategies that address the challenges to transformation – i.e. focusing on the "how" questions.

Approach

The ReNAPRI conference was held over a day-and-a-half period and comprised the following activities:

- Keynote presentations focused on “unfolding” agricultural transformation and highlighting the key challenges;
- Panel discussions including industry experts/stakeholders, charged with identifying concrete strategies that address the challenges and ensure sustainable development; and
- Dialogue with parliamentarians on how best they can support agricultural transformation efforts at national levels.

Outcomes:

- Awareness of the challenges to agricultural transformation;
- Identification of concrete strategies aimed at addressing the challenges;
- Increased understanding of parliamentarians on agricultural transformation dynamics and their role in supporting increase of national budget allocation to the agricultural sector;
- Linkages and partnership among the various stakeholders.

Data Management Update

	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 in Malawi	Historical commodity data on supply, demand, and trade in markets for maize and soybean in Malawi.		October 2018	No
2	2015 Malawi agriculture and food security policy processes baseline survey	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	January 2018	Yes
3	2017 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 to be completed by end of Q2 calendar 2018	November 2018	No
4	2017/18 Malawi value chain studies	Survey of value chain actors in the Pigeon pea, groundnuts, roots and tubers (cassava, Irish potatoes and Sweet potatoes), macadamia nuts, tea, coffee, bananas, tomatoes and mangoes value chains.	June 2018	Q3 of 2018	No

COMPONENT C1/C2 EASTERN AND SOUTHERN AFRICA – TANZANIA AND OTHER COUNTRIES

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 GISAIA/Tanzania project. Dr. Nyange provides support to DPP/MAFC in agricultural policy analysis, capacity building, and policy coordination activities to meet MAFC-driven research and capacity building priorities.

In Year 1 of FSP, Dr. Nyange and a team of MSU faculty and local analysts responded to a direct request from MAFC and the Prime Minister’s Office for Local and Regional Government (PMO-RALG) to lead a study and policy outreach activities related to the GoT’s commitment to ‘reduce or remove the Local Government Authority (LGA) Crop Cess (tax)’. This study was co-funded by FSP core and GISAIA-Tanzania.

Beginning in October 2014, FSP increased its research, policy engagement and capacity building activities in Tanzania through additional funding provided by both FSP-core and funds from a USAID/Tanzania Buy-in. 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 on-going 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 ASPIRES (Tanzania mission buy-in project).

Outcomes (with 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 within Ministry of Agriculture, and integration of improved market analysis into policy decision making;
- During this period the MIU was formally launched, office space was obtained and rehabilitated, and the office – staffed by ASPIRES staff and staff from the Ministry of Agriculture – has begun to function. Staff are now undertaking initial analyses to advise government on import and tariff policy during the coming crop season.
- 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.

The following is a summary of ASPIRES's Year 3 (FY '18) progress:

Component 1: Policy Outreach and Advisory:

Activity: Nutrition

Objective 1: Strengthen national policy, strategy and programming

- Evaluated the 1992 Food and Nutrition Policy (FNP)
- Incorporated key nutrition issues into the 2017 National Health Policy
- Provided a justification for a standalone FNP and submitted it to the Ministry of Health Community Development, Gender, Elderly and Children (MoHCDGEC)
- Developed a strategic plan of the Parliamentary Group on nutrition, food security and child rights (2018-2023)
- Provided supportive supervision to 28 low performing LGAs with PO-RALG.

Objective 2: Strengthen coordination and governance of the National Multi-Sectoral Nutrition

Action Plan (NMNAP) implementation among PMO, PO-RALG and TFNC

- Held key nutrition stakeholder meetings¹ including the national multi-sectoral nutrition working group and the high level steering committee on nutrition.
- Supported Dodoma region to develop their regional nutrition plan and budget and 2018 Annual Joint Multi-Sectoral Nutrition Review meetings.

Objective 3: Institutional capacity building

- Secoded a full time staff to TFNC to assist it in accelerating NMNAP implementation

Objective 4: Research and advocacy

- Supported TFNC to develop the National Nutrition Research Agenda (NNRA²) for the period 2018-23
- Integrated nutrition into the 4th Annual Agricultural Policy Conference (AAPC)

Activity: MIU

ASPIRES collaborated with the Ministry of Agriculture and the Ministry of Industries, Trade and Investment to accelerate activities under the MIU as follows.

Objective 1: Strengthening Institutional Linkage and awareness

- Held MIU awareness meetings with MoA and MITI
- Organized a workshop for major institutions involved in data collection to monitor food and agriculture. These are MoA, MLF, MITI, NBS, Customs (TRA), EAGC, TAHA and others.

Objective 2: Follow-up on approval of MIU staff

- Completed the first step in getting staff for MIU
- Identified six competent individuals as potential candidates to work in different sections of the MIU

¹ These helped to strengthen the coordination of various stakeholders in achieving NMNAP objectives.

² The NNRA has six priorities which were agreed upon at various stages of stakeholders' engagement.

Objective 3: MIU office building renovations and procurement of equipment

- Identified an office building for the MIU
- Procured a contractor and commenced renovations

Objective 4: Designing historical price data template for MIU

- Initiated the designing of a standard price data set template to be used by the MIU.

Objective 5: Data analysis, report writings and dissemination

- Engaged MIU staff in preparing quarterly bulletins.

Activity: Agricultural Sector Development Programme (ASDP II)

- Supported the official launch of ASDP II
- Supported high level meeting of Permanent Secretaries to strategize implementation of ASDP II including mainstreaming of PAG/PAC policy activities under Component 4 on sector enablers.

Activity: Edible Oil

- Produced a policy research brief with Dalberg with key policy recommendations to enhance competitiveness in the edible oil industry.
- Held continuous policy dialogue which resulted in the approval of some policy recommendations in the 2018 Finance Bill such as the extension of timeline of import tariff on crude palm oil.

Activity: Advancing policy reforms in the livestock and fisheries subsector

- Established collaboration with MoLF.
- Facilitated a roundtable discussion chaired by the Minister of Livestock and Fisheries. The meeting was attended by key representatives of a cross-section of the livestock and fisheries subsectors.

Activity: Secured transaction reforms

- Held initial discussions with the Ministry of Finance and Planning to start build a case on the need of establishing a modern collateral registry.
- Held a meeting with the Research and Policy Department of the Central Bank.
- Presented secured transactions reforms to the Parliamentary Committee on Agriculture, Livestock and Water and to the whole Parliament for increased awareness

Activity: Crop board reforms

- Presented the crop board reforms report to senior management in the Ministry of Agriculture in a meeting that was chaired by the Permanent Secretary of MoA. Upon receiving feedback, ASPIRES worked to update the report to reflect some of the ad hoc reforms such as the removal of fees and charges, decentralization and crop development funds; which were not systematic.
- There was a slowdown in this activity due to the change of leadership – new registrar of treasury

Activity: Produce cess

- ASPIRES started to monitor produce cess reforms and lay out the framework for impact assessment.

Component 2: Policy Coordination

ASPIRES efforts under policy coordination were mainly through the Policy Analysis Group (PAG). Key activities included:

- Hosted the 4th AAPC in Dodoma themed “Integrating Food and Nutrition Security into Economic Transformation and Industrialization”.
- Drafted agricultural fiscal policy recommendations and presented them in various high level policy dialogues.

- Held a seminar with members of Parliament in Dodoma.

Component 3: Capacity Building

- Under capacity building, ASPIRES trained key staff from MoA, SUA, PO-RALG and TFNC on a variety of issues.
- Conducted an initial round of quick assessment across 16 LGAs in 6 agro-ecological zones.

Component 4: Collaborative Policy Research

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.

Data Management Update

C1C2 did not fund data collection. Its funding helped prepare for data collection, which was then funded by Tanzania mission funds. Data sets will be made available through those awards.

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.

Of these, Activities 1 and 3 are completed. Activity 2 remains incomplete and FSP Core-funded activities will be finalized by the end of 2018. FSP Core-funded capacity building activities under Activity 4 will be completed in early 2019 through technical trainings for IAPRI researchers arranged in coordination with IAPRI management. Additional policy-oriented activities have been identified and will be carried out in 2018 to inform and guide the Zambian government’s efforts to promote Climate Smart Agriculture (CSA). Buy-in-funded activities under Activities 2 and 4 will continue in 2019.

In the following sections, we describe progress to date on the four (4) main activities in the approved work plan for C1/C2 Zambia for the period 1 October 2017 – 30 June 2019. These activities (numbered as in the approved work plan) are:

- 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 best-worst 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 will be 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)³ in Zambia.

Achievements:

FSP continued to participate in policy dialogues in Zambia and to facilitate the participation of Zambian stakeholders in international policy dialogues. Some highlights include the completion of the FSP baseline survey report on agriculture and food security policy processes in Zambia, and MSU’s funding of the Zambian

³ 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.

Minister of Agriculture, Hon. Dora Siliya and two Ministry associates to attend the World Food Prize conference in Des Moines, Iowa, in October, 2017. MSU/FSP researchers had in-depth discussions with the Minister and her staff on major land and agricultural policy options, the evolving nature of support to smallholder farmers beyond the Farmer Input Support Program (FISP), and options for promoting climate-smart agricultural programs. While at the conference, FSP also arranged for the Minister to be on a high-level panel of experts from African Development Bank (AfDB), Alliance for Green Revolution in Africa (AGRA), the African Capacity Building Foundation (ACBF), and African research institutes to identify the main ingredients of effective collaboration and mutual capacity development between African governments, international partners and local partners.

FSP in collaboration with IAPRI and the Ministry of Agriculture piloted a full listing of all farms over 5 hectares in six districts of the country. This listing exercise was completed in June, 2017. A total of 4,116 households were listed. The intention of the listing was to compare the number of medium- and large-scale farms in these six districts with the estimates of such farms according to the Central Statistical Office's Crop Forecast Surveys to gauge the latter's ability to adequately capture the number of medium/large farms in Zambia and whether new data collection activities are necessary in Zambia to accurately provide annual national crop production estimates. A second objective of the pilot listing was to provide the sampling frame for a full survey of medium-scale farms in these six districts. The full survey covering about 1,200 households was completed in the six districts as of 31 October, 2017. Data from the survey have been cleaned and analysis is underway during the reporting period. This work will be used to help 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 2018 Ministry of Lands deliberations about appropriate land policies. Revisions of a paper on the inverse relationship between farm size and productivity in Zambia are underway. Outreach events are being planned for 2018/19.

A new stream of work planned for 2018/19 under the land theme will explore the role of access to land on youth migration decisions in Zambia. 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. The study will use recent panel data from Zambia (Rural Agricultural Livelihoods Survey- RALS).

Meetings and Working Papers:

- Milu Muyanga, Kwame Yeboah, Ayala Wineman, Antony Chapoto, T. S. Jayne, Divan Vanderwesthuisen. Are Medium-Scale Farms Driving Agricultural Transformation in Africa? Key note address to be delivered in the 2018 the Congress Food 2030 on Towards Sustainable Agri-Food Systems on September 5, 2018 at University of Hohenheim, Stuttgart, Germany.
- Milu Muyanga, Kwame Yeboah, Ayala Wineman, Antony Chapoto, T. S. Jayne, Divan Vanderwesthuisen. Are Medium-Scale Farms Driving Agricultural Transformation in Africa? Plenary session of the 2018 International Conference of Agricultural Economist on August 1, 2018 in Vancouver, Canada
- Causes, Consequences of Changing Farm Size Distributions in Africa, and Implications on Youth Employment. Milu Muyanga, T.S. Jayne, A. Chapoto, N. Sitko, C. Nkonde, K. Yeboah, J. Chamberlin, A. Wineman, W. Anseeuw, G. Debrah. IAPRI Brown Bag, October 19, 2017
- Patterns, Drivers and Impacts of Rural-Rural Migration in Zambia. Jordan Chamberlin (CIMMYT), Nicholas J. Sitko (FAO), T. S. Jayne (MSU), FAO Technical Workshop on Drivers and Impacts of Migration & Labor Mobility, Dec. 1, 2017, Rome, Italy.
- Rise of Medium-Scale Farms in Africa: Causes and Consequences of Changing Farm Size Distributions. T.S. Jayne, Milu Muyanga, Kwame Yeboah, Jordan Chamberlin, Ayala Wineman, Ward Anseeuw, Antony Chapoto, and Nicholas Sitko, Cape Town, South Africa, December 6, 2017
- Rise of Medium-Scale Farms in Africa: Causes and Consequences of Changing Farm Size Distributions. Milu Muyanga, T. S. Jayne, Felix Kwame Yeboah, Antony Chapoto, Nicholas Sitko, 3rd Annual Global Food Security Conference, Cape Town, South Africa, December 3, 2017
- The Future of Work in African Agriculture: Trends and Drivers of Change. T.S. Jayne, Felix Kwame

Yeboah, and Carla Henry, International Labour Office, Working Paper No. 25, December 2017

- The 2017 ReNAPRI Outlook on Maize, Wheat, Rice, Soybeans and Sugar. Ferdi Meyer. Presenter: Tracy Davids. ReNAPRI meeting in Cape Town, South Africa, Nov. 30-Dec. 1, 2017
- T.S. Jayne, Milu Muyanga, Kwame Yeboah, Jordan Chamberlin, Ayala Wineman, Ward Anseeuw, Antony Chapoto, and Nicholas Sitko, Washington, D.C., November 16, 2017
- Causes, consequences of changing farm size distributions in Africa, and implications on youth employment. Milu Muyanga, T.S. Jayne, A. Chapoto, N. Sitko, C. Nkonde, K. Yeboah, J. Chamberlin, A. Wineman, W. Anseeuw, G. Debrah. Presentation at the Indaba Agricultural Policy Research Institute [IAPRI] Brown Bag, October 19, 2017, Lusaka, Zambia
- Land Policies and Land Distribution Affect Smallholder Livelihoods and Agricultural Transformation. Thomas Jayne, Seattle, WA, October 10, 2017
- Rise of Medium-Scale Farms in Africa: Causes and Consequences of Changing Farm Size Distributions. Milu Muyanga, T.S. Jayne, A. Chapoto, N. Sitko, C. Nkonde, K. Yeboah, J. Chamberlin, A. Wineman, W. Anseeuw, G. Debrah. Presentation at the Global Donor Working Group on Land side on “The Impact of Increasing Capital Flows to Rural Areas: Experiences in Sub-Saharan Africa” during the 44 Committee on World Food Security (CFS), October 9, 2017, Rome, Italy

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 best-worst 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: Preliminary results from this work were presented at the Agricultural and Applied Economics Association (AAEA) annual meeting in August 2018. Additional analyses and working paper preparation are in progress.

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.

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.

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.

Achievements: FSP researchers participated in various meetings and presented their work on this activity as reported below. In particular, FSP and other international partners are part of an expert group on agriculture, food production and forest conservation in Sub-Saharan Africa, whose aim is to inform the governments of Zambia, Ethiopia, Tanzania and Ghana on how best they can reconcile food production to meet growing food demand on the one hand and conserve forests to mitigate climate change on the other hand. Various research reports around climate resilience, climate-smart agriculture and forest management were initiated or completed during the reporting period. Some were presented at various fora or will be presented in upcoming events within FY2018. Details are given below.

Outputs:

Meetings:

- Ngoma attended the first Science for Nature and People Partnership (SNAPP) expert working group meeting on agriculture, food production and forest conservation in Sub-Saharan Africa held in Oxford, 1-6 October 2017, the second meeting held in Cambridge in April 2018 and the third meeting held in Addis Ababa, Ethiopia in September 2018. The purpose of this work is to advise the governments of Zambia, Ethiopia, Tanzania and Ghana on how best they can reconcile food production to meet growing food demand and conserve forests to mitigate climate change. Various outputs including working papers and journal articles are envisaged from this work.
- IAPRI Sustainability **Summit Report**. (prepared with IAPRI and FSP/Zambia input).
- Ngoma participated in an outreach event dubbed "Dialogue on Accelerating the Gains in the Agricultural Sector with the Zambian National Assembly" held on 17 March in Siavonga, Zambia. During this meeting, Ngoma presented on Agriculture, Climate Change and Natural Resource Management in Zambia: Synergies and trade-offs. This meeting was attended by Members of Parliament from selected committees on Agriculture and Natural Resources of the Zambian Parliament.
- Ngoma presented IAPRI's priority research "*Irrigation Development for Climate Resilience in Zambia: The Known Knowns and Known Unknowns*" at IAPRI's 2017 open day in December, 2017 in Lusaka
- 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 completed during the reporting period. This is a timely output given that Zambia recently approved regulations for community forest management, but it is not yet clear how such policy instruments would fare on the ground. Our working paper addresses these concerns, at least in part. This paper was

accepted for oral presentation at the inaugural Sustainability and Development Conference to be held at the University of Michigan, Ann Arbor, MI in November 2018.

- 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. Field work was conducted with 323 farmers in seven villages across two districts in Zambia. 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. Field work was completed during the reporting period and a draft working paper was nearly complete during the reporting period.
- Ngoma is collaborating with a team of experts from around the world in drafting a book chapter titled 'Agricultural Intensification and Forest Conservation'. This follows an invitation to contribute a chapter in a book being developed by the Center for International Forestry Research (CIFOR), a member of the CGIAR centers. The booklet will share experiences from more than 10-years of REDD+ implementation and is earmarked for launch at UNFCCC COP 24 in December 2018, in Poland. A draft chapter was completed during the reporting period and it is now under review.

Research Papers:

- 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. Two outputs from this research are 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*. Retrieved from http://www.iapri.org.zm/images/WorkingPapers/wp130_pdf_full_paper.pdf,
 - Lusaka, Zambia. (A manuscript for possible journal publication is being prepared).
 - Hamududu, B. H., and Ngoma, H. (2018). *Impacts of Climate Change on Water Availability in Zambia: Implications for Irrigation Development*. http://www.iapri.org.zm/images/TechnicalPapers/technical_paper_7.pdf (A revised version was resubmitted for possible publication in Environment, Development and Sustainability)
- Ngoma led the research on valuing the indirect and non-use benefits of Non-timber Forest Products (NTFPs) in Zambia. The aim of this work was to raise awareness to the fact that forest resources and NTFPs in particular have more value beyond their direct use. A better understanding of the total value of NTFPs is needed in order to successfully vouch for sustainable forest management in Zambia. The main output of this research is a working paper "The Value of Non-timber Forest Products in Zambia: Indirect and Non-Use Benefits" authored by Ngoma, Samboko, Nkonde and Gumbo, (2017): http://www.iapri.org.zm/images/WorkingPapers/wp_131.pdf
- FSP researchers finalized the first analysis of its kind assessing the potential of input subsidy programs to contribute to resilience and climate-smart agriculture objectives: [Can Input Subsidy Programs Contribute to Climate Smart Agriculture?](#) T.S. Jayne, Nicholas J. Sitko, and Nicole M. Mason. FSP Research Paper 87. November 2017. This report was presented in Lusaka earlier in the year, and feedback received from Zambian stakeholders, including the Minister of Agriculture, was incorporated into the final report.
- [Input Subsidy Programs and Climate Smart Agriculture: Current Realities and Future Potential](#). Jayne T.S., Sitko N.J., Mason N.M., Skole D. (2017) In: Lipper L., McCarthy N., Zilberman D., Asfaw S., Branca G. (eds) Climate Smart Agriculture. Natural Resource Management and Policy, vol 52. Springer, Cham.
- Hambulo Ngoma and Arid Angelsen. 2017. Can conservation agriculture save tropical forests? The case of minimum tillage in Zambia, Working Papers No. 2/2017, Norwegian University of Life Sciences, School of Economics and Business <https://www.nmbu.no/download/file/fid/25148>.

- 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.” Accepted for publication by *Food Security*, September 2018.
- 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. (2018). Does minimum tillage improve the livelihood outcomes of smallholder farmers in Zambia? *Food Security*, 10(2), 381-396. doi:10.1007/s12571-018-0777-4
- Ngoma, H. & Angelsen, A. (forthcoming, accepted). Can conservation agriculture conserve tropical forests? The case of minimum tillage in Zambia. *Forest Policy and Economics*.
- Ngoma initiated work on a manuscript titled “*Conservation Agriculture: Is it climate smart? Can it be?*” (with Thom Jayne, Arild Angelsen and Antony Chapoto). This work was presented under a symposium Sustainable Agricultural Intensification: How to Make It Happen in Africa at the Global Food Security conference held in Cape Town in December 2017.
- Ngoma presented a paper titled ‘Can input subsidies reduce gendered productivity gaps in agriculture: Panel data evidence from Zambia’ at the 2nd Annual CGIAR Gender Conference held in Addis Ababa, Ethiopia, in September 2018. This paper is under review in *Development Policy Review*
- Ngoma, H., Hailu, A. T., Kabwe, S. & Angelsen, A. (2018). Pay, Talk or 'Whip' to conserve forests: Framed Field Experiments in Zambia. *IAPRI working paper 140*. Lusaka, Zambia: Indaba Agricultural Policy Research Institute.
Capacity building:
- Ngoma provided technical support to IAPRI’s Climate Change and Natural Resources thematic area and designed and conducted a contingent valuation study to estimate the economic value of the indirect and non-use benefits of non-timber forest products (NTFPs) in Zambia. This study was designed to influence forest management policies in Zambia. The study involved face-face interviews with 352 households from seven rural districts of Zambia. This is joint work with Chewe Nkonde from the Department of Agricultural Economics and Extension, University of Zambia, Paul Samboko from IAPRI and Davison Gumbo from the Center for International Forestry Research (CIFOR). The main output is a working paper finalized during the reporting period and reported under research activities above.
- Ngoma continued to provide technical support and led the IAPRI flagship study “*building climate resilience with irrigation development in Zambia*”. This study was part of IAPRI’s priority research outputs and it was designed to provide empirical evidence on the status of smallholder irrigation development in Zambia and on the ex-ante impacts of climate change on water availability, and how this will impact irrigation development. Two outputs from this work were finalized during the reporting period and are reported under research above.

Outcomes:

- Enhanced ability to carry out regional conferences after the joint IAPRI-Vuna-DST-NRF Regional Sustainability Summit

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 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." Accepted for publication by *Food Security*, September 2018.

Technical trainings:

- September 17, 2018: Training on the application of endogenous switching regression methods. 15 people participated (3F and 12 M): 13 were IAPRI researchers, 1 UNZA Lecturer and 1 UNZA MA student. Materials developed by Hambulo Ngoma and Nicole Mason; training facilitated by Hamulo Ngoma.
- June 25, 2018: "An Introduction to Applied Econometrics: Basic Theory and Stata Examples." Training designed and facilitated by Nicole Mason. 9 participants (5 male, 4 female; 8 participants were IAPRI researchers and one was an IAPRI intern who is an MS student at Mulungushi University).
- June 22, 2018: "An Introduction to Economic Experiments with a Focus on Framed Field Experiments." Materials designed by Nicole Mason, Hambulo Ngoma, and Stephen Morgan; training facilitated by Nicole Mason and Hambulo Ngoma. 10 participants (5 male, 5 female; all participants were IAPRI researchers).
- April 16, 2018: "Thoughts on Priority Research Topics to Support Agri-Food Systems Transformation in Africa", T.S. Jayne. This seminar provided guidance to IAPRI researchers on how to identify and carry out research on topics of major interest to African governments and development partners. Participants: 6 government employees + 22 IAPRI staff (16 total women)
- March 1, 2018: "Difference-in-differences" impact evaluation method. The training materials were developed by Mason, who also led the training. Twelve (12) IAPRI researchers participated (7 women and 5 men).

Outcomes:

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

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, 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.

Outputs/achievements related to the FISP e-voucher study:

- Mason, N. 2018. Organizer. "Agricultural Input Subsidy Programs in Sub-Saharan Africa: Are Recent

Program Innovations Improving Program Performance? Evidence from Malawi, Nigeria, & Zambia.” Organized symposium. International Conference of Agricultural Economists. Vancouver, Canada. July 30.

- Mason, N., A. Kuteya, and H. Ngoma. 2018. “Recent innovations to Zambia’s Farmer Input Support Program & insights on short-run effects.” Presentation at the organized symposium on “Agricultural Input Subsidy Programs in Sub-Saharan Africa: Are Recent Program Innovations Improving Program Performance? Evidence from Malawi, Nigeria, & Zambia.” International Conference of Agricultural Economists. Vancouver, Canada. July 30.
- Mason, Ngoma, and Kuteya are now also collaborating with researchers at the University of Illinois at Urbana-Champaign (including Dr. Kathy Baylis) to combine the two teams results for a more in-depth and robust analysis of the effects of the shift to the FISP e-voucher.
- N. Mason, D.A. Tossou, K. Baylis, A. Kuteya, and H. Ngoma. “Does shifting from in-kind input distribution to a flexible e-voucher approach improve input subsidy program outcomes? Evidence from Zambia.” Invited presentation, Applied Microeconomics and Development Seminar. International Food Policy Research Institute. Washington, DC, Sep. 20, 2018.
- FSP’s contribution to the transition of FISP to an e-voucher approach was highlighted in a video produced by Paymal and Maredia in September 2018

Additional Capacity Building/collaborative research related to the Zambia FISP:

- Ngoma worked with Henry Machina and Auckland Kuteya to extensively revise the working paper on the gendered impacts of access to FISP on maize productivity and submitted it for possible publication in *Development Review Policy*.
- Mason, in collaboration with IAPRI researcher Olipa Zulu-Mbata and an MSU graduate student, submitted a co-authored manuscript to *World Development* on the effects of FISP on farmers’ use of soil fertility management practices that can improve maize yield response to inorganic fertilizer. The paper is currently under review.
- Mason and collaborators submitted a manuscript on the effects of the FISP on Zambian smallholders’ incomes and poverty to *Food Policy*

Additional Year 5 outputs related to the Zambia FISP and input subsidy programs in SSA:

Meetings:

- Mason served as a lead trainer at the February 2018 IFDC workshop on Developing Private Sector Agro-Input Markets: Lessons Learned and Emerging Perspectives on Subsidy Programs. Jinja, Uganda
- S. Morgan, N. Mason, K. Levine, and O. Zulu-Mbata. “Dis-incentivizing sustainable intensification? The case of Zambia’s fertilizer subsidy program.” Selected paper presented at the International Association of Agricultural Economists Triennial Conference. Vancouver, Canada, Aug. 1, 2018.
- N. Mason, T.S. Jayne, W.J. Burke, and J. Ariga. “Taking stock of Africa’s second-generation input subsidy programs: Insights from 70+ empirical studies.” Invited seminar at the Indaba Agricultural Policy Research Institute. Lusaka, Zambia. Feb. 27, 2018.
- N. Mason, T.S. Jayne, W.J. Burke, and J. Ariga. “Taking stock of Africa’s second-generation input subsidy programs: Insights from 70+ empirical studies.” Invited presentation at the International Fertilizer Development Center workshop on Developing Private Sector Agro-Input Markets: Lessons Learned and Emerging Perspectives on Subsidy Programs. Jinja, Uganda. Feb. 20, 2018.
- N. Mason, T.S. Jayne, W.J. Burke, and J. Ariga. “Taking stock of Africa’s second-generation input subsidy programs: Insights from 70+ empirical studies.” Invited presentation at the International Fertilizer Development Center workshop on Developing Private Sector Agro-Input Markets: Lessons Learned and Emerging Perspectives on Subsidy Programs. Jinja, Uganda. Feb. 20, 2018.

Research Papers and Other Publications:

- T.S. Jayne, N. Mason, W.J. Burke, and J. Ariga. 2018. “Taking stock of Africa’s second-generation agricultural input subsidy programs.” *Food Policy* 75: 1-14.
- FSP researchers finalized the first analysis of its kind assessing the potential of input subsidy programs to contribute to resilience and climate-smart agriculture objectives: [Can Input Subsidy Programs Contribute To Climate Smart Agriculture?](#) T.S. Jayne, Nicholas J. Sitko, and Nicole M. Mason. FSP Research Paper 87. November 2017. This report was presented in Lusaka earlier in the year, and feedback received from Zambian stakeholders, including the Minister of Agriculture, was incorporated into the final report.
- T.S. Jayne, N. Sitko, N. Mason, and D. Skole. 2018. “Input subsidy programs and climate smart agriculture: Current realities and potential.” In David Zilberman, Leslie Lipper, Nancy McCarthy, D. Zilberman, Solomon Asfaw, and Giacomo Branca, eds., *Climate Smart Agriculture: Building Resilience to Climate Change*. New York, NY: Springer.
- [The Kaleidoscope Model of Policy Change: Applications to Food Security Policy in Zambia - in "World Development"](#). Danielle Resnick, Steven Haggblade, Suresh Babu, Sheryl L. Hendriks, David Mather. 2018. *The Kaleidoscope Model of Policy Change: Applications to Food Security Policy in Zambia*, World Development, Volume 109, September 2018, Pages 101-12
- [Are African Farmers Experiencing Improved Incentives to Use Fertilizer?](#). Lenis Saweda O. Liverpool-Tasie, Thomas Jayne, Milu Muyanga, and Awa Sanou. 2017. Feed the Future Innovation Lab for Food Security Policy Research Paper 78.

Popular Press Coverage:

- *Food Policy* article, “Taking stock of Africa’s second-generation agricultural input subsidy programs”, highlighted in April 19, 2018 article on the Food Tank website entitled, “Rebuilding agricultural subsidies from the ground up.” <https://foodtank.com/news/2018/04/africa-agricultural-subsidies/>

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

Description: The baseline survey on agriculture and food policy processes in Zambia based on responses from 23 stakeholders was completed and the data analyzed. The associated report (listed under Outputs below) was distributed to over 4000 stakeholders in Zambia’s agricultural sector via the IAPRI communications and outreach directorate. The publication of this report was timely as it coincided with Government decision to distribute input subsidies based on the electronic voucher system for the entire country. The report in particular addresses questions around the policy change in the input distribution to the electronic based platform in Zambia.

Outputs:

- [\(Year 4\) Institutional Architecture and Quality of Agriculture and Food Security Processes in Zambia](#). Hambulo Ngoma, Nicholas J Sitko, Thomas Jayne, Antony Chapoto, and Mywish Maredia. 2017. Feed the Future Innovation Lab for Food Security Policy Research Paper 75.

An endline survey and report are planned for FY2019 (funded by the Zambia Buy-In).

Data Management Update

	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	Trader Survey Data	Large-scale Trader Survey in Zambia	June 2018	March 2019	No
2	Emergent farmer survey – conducted by IAPRI	Survey of medium to large scale farmers in six districts of Zambia	Q3-2018	Within 1 month of the publication of a scholarly output	No
3	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

COMPONENT 3: GLOBAL COLLABORATIVE RESEARCH ON POLICY PROCESS AND CAPACITY

Introduction: Component 3 addresses the 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:

Research Papers:

- Paper resubmitted (accepted April 2018). Resnick D, Haggblade, S, Babu S, Hendriks SL and Mather D (2017). The kaleidoscope model of policy change: Applications to food security policy in Zambia. *World Development* 109 (2018) 101–120. <https://authors.elsevier.com/sd/article/S0305750X18301232>
- Draft chapter prepared and submitted for a chapter entitled “The policy making process and its stages: introducing the Kaleidoscope Model for food security policy analysis” by Steven Haggblade (Michigan State University), Suresh Babu (Washington DC), Danielle Resnick (IFPRI, Washington DC) and Sheryl Hendriks for the forthcoming book Hendriks SL (Ed). *Food Security Policy, Evaluation and Impact Assessment*. Routledge, London.

Presentations:

- SAYAS Food Security & Policy Workshop: Policy Direction - Eradication Of Hunger And Achievement Of Food Security (50)
- Understanding Policy Process in Developing Countries: Case Studies and Lessons. Suresh Babu, Policy Dialogue Presentation, September 10, 2018
- What Drives Policy Change? Insights from the Kaleidoscope Model of Food Security Policy. Steven Haggblade, Sheryl Hendriks, and Danielle Resnick, March 29, 2017, IFPRI, Washington, DC

Chapters in books:

- Steven Haggblade, Suresh Babu, Danielle Resnick and Sheryl Hendriks (forthcoming). Chapter 9 The policy making process and its stages: introducing the Kaleidoscope Model for food security policy analysis. In: Hendriks SL (forthcoming 2019). *Food Security Policy, Evaluation and Impact Assessment*. Routledge Eathscan, London.
- Mkandawire E (forthcoming). Chapter 15 Gender assessment. In: Hendriks SL (forthcoming 2019). *Food Security Policy, Evaluation and Impact Assessment*. Routledge Eathscan, London.

Activity 2. Case Studies of Policy Change

- 1 gendering nutrition policy study (Malawi)

Outputs:

Research Papers:

- Hendriks SL. (2017). Evidence and dialogue to inform policy choices for better outcomes in agriculture, food security and nutrition in Africa. Invited presentation at the 3rd Global Food Security Conference, Cape Town, 6 Dec, 2017.
- The Devolution Revolution: Implications for Agricultural Service Delivery in Ghana. Danielle Resnick. 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 95.

Journal papers:

- Mkandawire E and Hendriks SL. 2018. A qualitative analysis of the conceptualization of men's involvement in maternal and child health in rural Central Malawi. *BMC Pregnancy and Childbirth*, 18:37. <https://bmcpregnancychildbirth.biomedcentral.com/track/pdf/10.1186/s12884-018-1669-5?site=bmcpregnancychildbirth.biomedcentral.com>. DOI 10.1186/s12884-018-1669-5
- Elizabeth Mkandawire, Hendriks, S. L. and Mkandawire-Valhmu, L. 2018. A gender assessment of Malawi's National Nutrition Policy and Strategic Plan 2007–2012, *Development Policy Review*, 36(2) 634 - 656 doi:10.1111/dpr.12287. This paper was profiled as part of an international women's day virtual issue on 8 March 2018.
- The Kaleidoscope Model of Policy Change: Applications to Food Security Policy in Zambia - in "World Development". Danielle Resnick, Steven Haggblade, Suresh Babu, Sheryl L. Hendriks, David Mather. 2018. The Kaleidoscope Model of Policy Change: Applications to Food Security Policy in Zambia, *World Development*, Volume 109, September 2018, Pages 101-120
- Integrating Environmental Considerations in the Agricultural Policy Process: Evidence from Nigeria. Suresh Babu, George Mavrotas, Nilam Prasai, 2018. Integrating Environmental Considerations in the Agricultural Policy Process: Evidence from Nigeria, *Environmental Development* 25 (2018) 111–125
- Hendriks SL, Babu SC and Haggblade S (2017). What drives nutrition policy reform? A comparative assessment of micronutrient policy change in Malawi, South Africa and Zambia. Paper in preparation for submission to *Global Food Security*, December 2017 (revision underway).

Capacity building:

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

Book chapters:

- Elizabeth Mkandawire contributed a Chapter titled 'Gender Assessment' based on the tool designed through the gender work under C3 for the forthcoming book Hendriks SL (Ed). *Food Security Policy, Evaluation and Impact Assessment*. Routledge, London.

Evidence of policy impact:

- Recommendations from the gendering Malawi's nutrition policy dialogue have been integrated into the Malawi Multi-sectoral Nutrition Strategy.

Blogs:

- Elizabeth Mkandawire and Sheryl Hendriks. Gender-responsive nutrition policies – a myth or a possibility? *Agrilinks*, June 11, 2018
- Ensuring Food Security and Nutrition Policy Coherence. Sheryl Hendriks and Nic Oliver, *Agrilinks*, June 26, 2018
- Gender-responsive Nutrition Policies – A Myth or a Possibility? Elizabeth Mkandawire and Sheryl Hendriks, *Agrilinks*, June 11, 2018

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:

- During this period, 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.

- Sheryl Hendriks presented the Kaleidoscope Model at the South African Young Academy of Science Food Security & Policy Workshop, 11 April 2018, Birchwood Hotel & OR Tambo Conference Centre, Boksburg, South Africa. The audience was 50 young scientists from SADC. An interactive group work session training scientist how to identify opportunities for policy influence using the KM model was conducted.
- Significant progress has been made in the drafting of the pre-final version of the FSP C3-A4 Malawi Food Security and Nutrition Governance Report (Olivier et al., 2018). It is envisaged that the final version of the draft Report will be discussed with key senior Malawi officials during a workshop provisionally scheduled for July. 2018. Comments received during the planned workshop will be incorporated into the Draft Report, thereafter the final FSP C3-A4 Malawi Food Security and Nutrition Governance Report will be submitted to the Malawi Government, USAID and IFPRI, and published within the context of the Feed the Future Innovation Lab for Food Security Policy Program.
- Activity 4, West Africa Regional Pesticide Policy Engagement. 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. Task 2: FSP Synthesis Document about Lessons Learned. Led by Task Leader Danielle Resnick, team members Benson, Crawford, Haggblade and Hendriks, worked during April and May to produce an initial draft of major lessons learned by the FSP team. A full draft is planned for the end of June, with a team workshop scheduled for July 16, 17 in Washington, DC.
- C 3-Activity 4 (Malawi): The two students who have enrolled at the North-West University for research Masters on topics related to Activity 4 have made good progress as regards the research and the drafting of the first few chapters. It is envisaged that they will submit the final version of their theses in the second semester of 2018.
- An application of the model investigating the role of social protection adoption in Zimbabwe is underway by a student at UP (not funded by FSP but applying the tools).
- Further work on institutional architecture assessment is reported under Component 5.

Outputs:

Data collection:

- Interviews were conducted with the Blair Institute for Global Governance, which is heavily involved in establishing delivery units in Africa. These interviews will contribute to the secondary literature work already being conducted on delivery units and their implications for agricultural service delivery.

Presentations

- "Quality Assessment of herbicides sole in Mali: preliminary laboratory results." By Steven Haggblade and Amadou Diarra. Presentation to the 42nd meeting of the Comité Sahélien des Pesticides (CSP) in Bamako, Mali, May 22, 2018. At the request of the Sahel's regional pesticide regulator, the CSP, Steven Haggblade presented results of MSU's ongoing study of herbicide quality. Given regular farmer complaints about uneven herbicide quality, MSU researchers collected 100 samples of glyphosate from markets across Mali and then had them tested independently at two laboratories. Initial results suggest that unregistered pesticides, which accounted for 40% of the samples collected, are under-dosed -- containing 5% to 18% less active ingredient than stated on the product label. In response, regulators are exploring a series of potential remedies: • expanded market monitoring and confiscation of unregistered products: • tighter labelling requirements; • quality upgrading of regional testing laboratories.
- Eradication of hunger and achievement of food security - an invited plenary presentation that covered the

KM model and African policy agenda for FSN, drawing on the work in C3 and C5. By Sheryl Hendriks. Presentation at the SAYAS Food Security and Policy Workshop, 11 April 2018.

- Devolution Revolution: Implications for Agricultural Service Delivery in Ghana. March 15, 2018. Danielle Resnick. Presentation to the Ministry of Food and Agriculture, IFPRI Ghana Strategy Support offices, Accra, Ghana.
 - Dr. Suresh Babu, Senior Research Fellow and Head of Strengthening Program at IFPRI presented the Kaleidoscope model at a day long workshop for the Policy Community of Practice organized by The Livelihoods and Food Security Trust Fund (LIFT) for tracking progress in policy implementation on Jan 10, 2018.
 - Dr. Suresh Babu presented the Kaleidoscope model and its application for agriculture extension policy in Nigeria during a workshop on Extension Policy Reforms in Nigeria on February 20, 2018.
 - Dr. Suresh Babu presented the Kaleidoscope model and its application during Food Policy Analysis Workshop organized by International Food Policy Research Institute (IFPRI) and Food Planning and Monitoring Unit (FPMU) of the Ministry of Food, Bangladesh held in Dhaka, Bangladesh from February 28th to March 3rd, 2018.
 - Presented ‘Agricultural Transformation in Asia’ at International consortium on Applied Bioeconomy Research held at the World Bank on June 13, 2018.
- Research Papers:
- Innovations in Policy Architecture (FSP C3 – Activity 3): An Inventory of Policy System Reforms (PSRs), January 2018. Steven Haggblade and Danielle Resnick
 - The Devolution Revolution: Implications for Agricultural Service Delivery in Ghana. March 2018. Danielle Resnick. *IFPRI Discussion Paper No. 1714*. Washington, DC: IFPRI and *FSP Innovation Lab Research Paper No.95*. East Lansing, MI: Michigan State University.

Journal publication:

- Babu, Suresh Chandra; Mavrotas, George; and Prasai, Nilam. Integrating environmental considerations in the agricultural policy process: Evidence from Nigeria. *Environmental Development*. Volume 25, pg-111-125. <https://doi.org/10.1016/j.envdev.2018.01.001>
- Policy Briefs:
- What are the impacts of devolution on agricultural civil servants and services in Ghana? March 2018. Danielle Resnick. IFPRI Ghana Strategy Support Program Policy Note 14.
 - Conceptualizing Key Drivers of Policy Change: An Introduction to the Kaleidoscope Model. Steven Haggblade and Danielle Resnick. 2018. Feed the Future Innovation Lab for Food Security Policy Research Brief 61.
- Blogs:
- Is Ghana serious about decentralization? April 2018. IFPRI Blog. (<https://www.ifpri.org/blog/ghana-serious-about-decentralization>)

Challenges: Substantively, this work had planned to focus on a comparison of specific policy reform efforts. Following completion of our broad inventory of policy system reform efforts, the team selected the Big Results Now (BRN) model for specific study to see how it was exported from Malaysia to Tanzania, South Africa and elsewhere and how implementation changed as a result. After extensive preparation for the first of these case studies, during the final planning consultations prior to travel to Tanzania for the first of these studies, the FSP Tanzania country team requested that the C3 team indefinitely postpone this activity due to acute local political sensitivities. Tanzania’s BRN, sponsored by presidential initiative, quickly became taboo under a new incoming administration. This illustrates the practical political difficulties involved in tackling timely but sensitive policy issues. In this instance, the C3 team acceded to the wishes of the country team to avoid provoking sensitive issues that might compromise otherwise strong ongoing local policy engagement.

Final Push towards Policy Influence (Task 1)

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.

The research informing this activity under C5 and Task 1.5 is almost completed. This includes the following reports:

- Sheryl L Hendriks, Nosipho Mabuza, Kevin R Hendriks, Nic JJ Olivier, Moraka N Makhura, Elizabeth Mkandawire, Ntombizethu Mkhwanazi, Leonard Mkusa and Nokuthula Vilakazi (2018). An evaluation of the level of integration and alignment of the Malabo commitments, Africa’s Agenda 2063 and the SGDs in 10 National Agriculture and Food Security Investment Plans. Feed the Future Innovation Lab on Food Security Policy Working Paper no. 107. University of Pretoria and Michigan State University, Pretoria and East Lansing.
- Olivier NJJ et al. (2018). Alignment and coherence of the Malawi food security landscape with international and African frameworks. Feed the Future Innovation Lab on Food Security Policy Working Paper no. 107. University of Pretoria and Michigan State University, Pretoria and East Lansing.
- Olivier NJJ et al. (2018). Mapping the landscape of key international and Africa food security and nutrition instruments. Feed the Future Innovation Lab on Food Security Policy Brief no. 68. University of Pretoria and Michigan State University, Pretoria and East Lansing.
- Olivier NJJ et al. (2018). Brief: Mapping the landscape of Malawi Constitutional, policy, legislative and strategic food security and nutrition frameworks. Feed the Future Innovation Lab on Food Security Policy Brief no. 69. University of Pretoria and Michigan State University, Pretoria and East Lansing.
- Side Event proposal for building capacity and sharing the findings have been accepted for:
 - IFPRI-FAO Accelerating Hunger and Malnutrition conference in Bangkok in 28 – 30 November 2018.
 - 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.

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:

- After attending the first day of the 1-week training course in PE modelling at CARD in collaboration with FAPRI (during which Nic Olivier and Elizabeth Mkandawire gave a presentation on their FSP Component 3 Activity 4 research on Coordination Mechanisms and Policy Design in CAADP-Malawi with the view on providing information on the broader context determining the implementation of the Malawi National Agriculture Policy and the (to be finalized) Malawi NAIP 2), followed by meetings with key Malawi government officials (25 to 26 September 2017), the draft FSP C3-A4 Malawi Food Security and Nutrition Governance Malawi FSP Report was updated during the first two weeks of October 2017.
- In October 2017 the 30 September 2017 version of the *Draft Malawi National Agriculture Investment Plan II (Malawi NAIP2)* was evaluated and reported upon by means of the *Draft Policy Brief 50* (October 2017). The methodology followed by the authors was described as follows:
- “Within this context, the authors have developed (i) a methodology for evaluating the effectiveness of development planning in terms of the alignment and linkages of (a) international, African and regional commitments and (b) 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), (b) a second methodology for assessing the quality of the NAIPs in attaining the Malabo and SDG2 targets related to food security and nutrition, and (iii) a third methodology for assessing the gender equality components against commitments.”
- *The Draft Policy Brief 50* made a number of findings relating to issues not sufficiently addressed in the *Malawi NAIP2*, and concluded with a number of recommendations. This *Draft Policy Brief 50* was made available to a select number of senior Malawi officials involved in the coordination and management of the Malawi NAIP2 process during a research visit to Malawi from 28 October 2017 to 01 November 2017. Comments received have been incorporated in the published brief (50).
- During the 28 October 2017 to 01 November 2017 research visit to Malawi, various follow-up meetings with key Malawi Government officials (who were involved in the NAIP 2 process) as well as with Readwell Musopole (Deputy Coordinator ASWAp, Malawi Government) and Flora Nankuni (MSU and Malawi Dept. of Agriculture) took place. This continued involvement has:
 - assisted in realizing the policy outreach goal of FSP; and
 - impacted directly on policy (and related implementation strategy) formulation processes in Malawi in respect of its NAIP II as well as its alignment to the Food Security and Nutrition objectives and targets as set out in, amongst others, the Sustainable Development Goals (SDGs) and the two 2014 Malabo Declarations.
- In addition, Prof. Nic Olivier was invited to, and attended, the Compact2025 Forum in Lilongwe on 31 October 2017 (the theme of which was “Moving from Relief to Resilience”). Furthermore, a meeting with the chairperson of the newly established Malawi National Planning Commission (NPC) took place; during said meeting the role of the NPC as regards the prioritization of food security and nutrition in the implementation of the 2017 Malawi National Growth and Development Plan was discussed.
- The two students who have enrolled at the North-West University for research Masters on topics related to Activity 4 have made good progress as regards the research and the drafting of the first few chapters. It is envisaged that they will submit the final version of their theses in the second semester of 2018.
- Work on the preparation of a comprehensive electronic database of key -
 - international, African (AU) and regional (SADC) instruments relating to food security and nutrition imposing obligations and/or containing firm commitments; and
 - Malawi-specific domestic constitutional provisions, key policies, key legislation and key strategies dealing with food security, commenced during the reporting period. It is envisaged that this C3– A4 database will be completed during the period April to June 2018, and then (after having been captured in a format prescribed by ReSAKKS) submitted to ReSAKKS for incorporation in its existing electronic database.
- Significant progress has been made in the drafting of the pre-final version of the FSP C3-A4 Malawi Food Security and Nutrition Governance Report. It is envisaged that the final version of the draft Report will be discussed with key senior Malawi officials during a workshop provisionally scheduled for early June 2018. Comments received during the planned workshop will be incorporated into the Draft Report, whereafter

the final the FSP C3-A4 Malawi Food Security and Nutrition Governance Report will be submitted to the Malawi Government, USAID and IFPRI, and published within the context of the Feed the Future Innovation Lab for Food Security Policy Program.

Outputs

Meetings:

- NJJ Olivier (2017). Meetings with key Malawi government officials, Lilongwe (25 to 26 September 2017).
- NJJ Olivier (2017). Attendance: Compact2025 Forum, Lilongwe (31 October 2017.)
- NJJ Olivier (2017). Meeting with chairperson of Malawi National Planning Commission (NPC), Lilongwe (31 October 2017).

Data:

- NJJ Olivier. (2018). Draft Policy data base of food security policies for Africa.

Presentations

- NJJ Olivier, E Mkandawire (2017). Presentation: FSP Component 3 Activity 4 research on Coordination Mechanisms and Policy Design in CAADP-Malawi, 1-week training course in PE modelling at CARD, Malawi (24 September 2017).

Research reports

- Olivier et al (2018). Draft FSP C3-A4 Malawi Food Security and Nutrition Governance Report (work in progress – pre-final version to be discussed with senior Malawi officials during workshop provisionally scheduled for June 2018. Comments to be incorporated, whereafter final Report will be submitted to Malawi Government, USAID and IFPRI, and published within context of the Feed the Future Innovation Lab for Food Security Policy Program).
- An Evaluation of the Level of Integration and Alignment of the Malabo Commitments. S. Hendriks, et al. 2018. An Evaluation of the Level of Integration and Alignment of the Malabo Commitments, ..., Feed the Future Innovation Lab for Food Security Policy Research Paper 107. East Lansing: Michigan State University
- A Review of the Draft Federal Government of Nigeria's National Agriculture Investment Plan - NAIP2. Sheryl L Hendriks. 2018. Feed the Future Innovation Lab for Food Security Policy Research Brief 59.
- Review of the Draft Liberia Agricultural Sector Investment Plan - LASIP II - for 2018 – 2022 ... Sheryl L. Hendriks. 2018. Feed the Future Innovation Lab for Food Security Policy Research Brief 58.
- Lessons for Effective Development Planning: Evaluation of the Pre-final Version Nic J.J. Olivier, Sheryl L. Hendriks, Elizabeth Mkandawire, Nico J.J. Olivier, and Clara Williams. Feed the Future Innovation Lab for Food Security Policy Research Brief 50.

Research briefs

- Nic JJJ Olivier, Sheryl L Hendriks, Elizabeth Mkandawire, Nico JJJ Olivier and Clara Williams (2018). Draft: Lessons for effective development planning: Evaluation of the pre-final version of the draft Malawi's Agriculture Investment Plan (NAIP2). Feed the Future Innovation Lab for Food Security Policy Research Brief #50. Michigan State University, IFPRI and University of Pretoria, East Lansing, Washington DC and Pretoria.

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 the regional pesticide policy workshop convened by CSP and ECOWAS in November 2017.

Though policy formulation has been sound, implementation is failing in two of the three key regional regulatory bodies. Ongoing policy dialogue aimed at remedying these implementation deficiencies focuses on the following key institutions:

- CILSS Institut du Sahel (INSAH)
- Comité Sahélien des Pesticides (CSP)
- Union Monétaire Ouest Africaine (UEMOA)
- Economic Community for West African States (ECOWAS)

Achievements: In response to requests following the initial presentation of the FSP synthesis work to participants at the 41st meeting of CSP in Bamako in November 2017, the lead authors, Amadou Diarra and Steven Haggblade, have conducted a dozen briefings and presentations over the past twelve months. In the process, we have succeeded in engaging interest and resources from a variety of interested stakeholders including major private sector groups, regional testing laboratories, key regulators (INSAH, CSP, UEMOA, ECOWAS), USAID and USDA's Foreign Agricultural Service (FAS).

Outputs:

Team Meetings:

- October 5,12,19,26, November 2,9,30, December 7,14,21, January 11,18,25, February 1,8,15,22, March 1,8,15,22,29, April 5,12,19,26, May 3,10,17,24, June 7,12,19,26, July 12,19,26, August 9,16,23,30, September 6,13,20,27.

Outreach events with policy stakeholders:

- CSP, November 14-18, 2017 (Haggblade and Diarra present findings of 7 country case studies of uneven implementation of regional pesticide policies in West Africa)
- USAID pesticide task force members, December 14, 2017. (Haggblade presents findings of 7 country case studies of uneven implementation of regional pesticide policies in West Africa.
- Special briefing for the INSAH Director General and Permanent Secretary CSP briefing, by Amadou Diarra and Steven Haggblade, February 11, 2018, Bamako.
- Presentation to the USAID/ International Institute of Tropical Agriculture (IITA) regional conference on Fall Army Worm, by Amadou Diarra, February 14, 2018, Cotonou, Benin.
- Briefing documents supplied to ECOWAS Agricultural Commissioner and staff, April 2018.
- Distribution of synthesis report and policy briefs to all CSP members, March 2018.
- Quality Assessment of Herbicides Sold in Mali: Preliminary Laboratory Results.” Steven Haggblade and Amadou Diarra. Presented to the 42nd meeting of the Comité Sahélien des Pesticides (CSP), Bamako May 22, 2018.
- Africa's Emerging Herbicide Revolution: sources of market disruption. World Bank/International Consortium on Applied Bioeconomy Research (ICABR) Conference on “Disruptive Innovations and Rural Development,” June 14, 2018, Washington, DC. Steven Haggblade.
- Farm-level impacts of falling prices, counterfeit herbicides and variable quality. World Bank/International Consortium on Applied Bioeconomy Research (ICABR) Conference on “Disruptive Innovations and Rural Development,” June 14, 2018, Washington, DC. Melinda Smale.
- Regional regulatory challenges in West Africa. World Bank/International Consortium on Applied Bioeconomy Research (ICABR) Conference on “Disruptive Innovations and Rural Development,” June 14, 2018, Washington, DC. Amadou Diarra.

Presentations

- Implementing Regional Pesticide Policies in West Africa during a Period of Rapid Market Growth: Achievements, Challenges and Opportunities. November 14, 2017. Amadou Diarra and Steven Haggblade. Presentation at the CILSS 41st meeting of the Comité Sahélien des Pesticides, Bamako, Mali.
- Implementing Regional Pesticide Policies in West Africa during a Period of Rapid Market Growth: Achievements, Challenges and Opportunities. December 14, 2017. Steven Haggblade. Presentation at USAID/Washington, DC.
- Regulatory Challenges for Monitoring Pesticide Use in West Africa during a major pest infestation. February 14, 2018. Amadou Diarra. Presentation to the IITA/USAID Regional Workshop on Fall Armyworm, Cotonou, Benin.

- Quality Assessment of Herbicides Sold in Mali: Preliminary Laboratory Results.” Steven Haggblade and Amadou Diarra. Presented to the 42nd meeting of the Comité Sahélien des Pesticide (CSP), Bamako May 22, 2018.
 - Africa’s Emerging Herbicide Revolution: sources of market disruption. World Bank/International Consortium on Applied Bioeconomy Research (ICABR) Conference on “Disruptive Innovations and Rural Development,” June 14, 2018, Washington, DC. Steven Haggblade.
 - Farm-level impacts of falling prices, counterfeit herbicides and variable quality. World Bank/International Consortium on Applied Bioeconomy Research (ICABR) Conference on “Disruptive Innovations and Rural Development,” June 14, 2018, Washington, DC. Melinda Smale.
 - Regional regulatory challenges in West Africa. World Bank/International Consortium on Applied Bioeconomy Research (ICABR) Conference on “Disruptive Innovations and Rural Development,” June 14, 2018, Washington, DC. Amadou Diarra.
- Research Papers:
- National implementation of regional pesticide policies in West Africa. November 2017. Amadou Diarra and Steven Haggblade. FSP Innovation Lab Research Paper No.81. East Lansing, MI: Michigan State University.
 - A preliminary assessment of herbicide quality in Mali in the presence of proliferating unregistered brands of glyphosate. February 2018. Steven Haggblade, Amadou Diarra, Amidou Assima, Naman Keita and Abdramane Traoré. Feed the Future Innovation Lab for Food Security Policy Research Paper 93. East Lansing: Michigan State University.
- Policy Briefs:
- Trends in West African pesticide markets. October 2017. Steven Haggblade and Amadou Diarra. Innovation Lab for Food Security Policy Research Brief No. 49. East Lansing, MI: Michigan State University.
 - Regulatory challenges in West Africa: instituting regional pesticide regulations during a period of rapid market growth. November 2017. Amadou Diarra and Steven Haggblade. Innovation Lab for Food Security Policy Research Brief No. 52. East Lansing, MI: Michigan State University.
- Capacity building:
- FSP has helped to plan a USDA/FAS laboratory training workshop for the Laboratoire National d’Appui au Développement Agricole (LANADA) in Côte d’Ivoire.

Outcomes: Our market review and regulatory case studies together suggest a very dire financial situation in which West Africa’s pesticide regulators (national and regional) lack the resources necessary to respond to rapidly growing market pressures and recent pest invasions. In the absence of a solid financing plan for regional and national regulators, it seems likely that regulatory oversight risks faltering at exactly the time when it is needed most to manage growing market pressures and protect agribusiness firms, farmers and consumers. Ongoing FSP interactions with stakeholders at the CSP, INSAH and the Economic Community of West African States (ECOWAS) therefore focus on the urgent follow-up work (financial and technical) required to enable the transition to a regional regulatory system in the coastal countries, currently scheduled for November 2018.

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.

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:

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. After engaging with country teams at a regional workshop in Saly, Senegal in October 2017, Sheryl Hendriks conducted reviews of the Liberia NAIP 2 and shared this with the Liberian team. This was shared with the team during their December 2017 retreat to revise the NAIP. The team made significant changes, including:

- The incorporation of a section on the policy context (inspired by Nic Olivier's work for FSP C3),
- Improvement of the indicators included for FSN (not only in the component focusing on this but throughout the M&E section),
- The inclusion of a theory of change and pathway to impact section that has lifted the indicator levels to impact measures.
- Reconsideration and assessment of the institutional architecture and changes to lift this to a higher level.

Insights from a rapid assessment of the 12 available NAIPs show that in general, they suffer from:

- Lack of alignment with national development frameworks (national development plans) and other sectoral policies, programs and strategies. For example, Nigeria's completely ignores the entire National Food and Nutrition Security Strategy developed in 2016 as part of the Agricultural Development Plan - that the NAIP seeks to implement.
- There is no theory of change or pathway to progress that links the actions to the impact required (achieving the Malabo outcomes). As a result, there are seldom impact indicators. They stop at outputs and outcomes
- The indicators do not align with the Biennial Review report, SDGs and other national targets.
- The Institutional Architecture is not well structured to provide leadership, coordination and accountability. Often there is a national structure but 'sector capture' leads to the NAIP coordination trapped in the Ministry. Malawi is probably the poorest case of this.

This feedback was fed into a second NAIP clinic in Saly, Senegal held the 6 – 9 March and to which Sheryl Hendriks provided backup support to.

A request was received from the Malawi team regarding our availability to review the revised NAIP for this country. We are following up on this request to provide support.

A report on available food security and nutrition indicators was drafted and sent to country teams participating in the Saly workshop as a resource to extract benchmark indicators for the NAIP design.

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. Recommendations from the Malawi and Liberia policy briefs have been taken up in the respective country final NAIPs.

The drafting of the pre-final version of the FSP C3-A4 Malawi Food Security and Nutrition Governance Report (Olivier et al., 2018) is nearing completion. Funding allowing, it is envisaged that the final version of the draft Report will be discussed with key senior Malawi officials during a workshop scheduled for September/October 2018. Comments will be incorporated into the Draft Report, where after the final FSP C3-A4 Malawi Food Security and Nutrition Governance Report will be submitted to the Malawi Government, USAID and IFPRI, and published within the context of the Feed the Future Innovation Lab for Food Security Policy Program.

The institutional architectures, indicators and policy changes in the second generation NAIPs is under analysis using the framework provided above. The work assesses 12 available NAIP 2 documents and their revisions. 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.

In addition, a comparison of the frequency of key Malabo -related FSN search terms in for individual Anglophone and six individual Francophone countries (two of which have already completed their NAIP2s, and six having completed the pre-final versions of their NAIP2s) was undertaken in order to determine to what extent the related Malabo indicators were dealt with in these 10 individual country NAIP2s.

The following reports and briefs are under finalization:

- Olivier NJJ et al. (2018). Alignment and coherence of the Malawi food security landscape with international and African frameworks. Feed the Future Innovation Lab on Food Security Policy Working Paper no. 107. University of Pretoria and Michigan State University, Pretoria and East Lansing.
- Olivier NJJ et al. (2018). Mapping the landscape of key international and Africa food security and nutrition instruments. Feed the Future Innovation Lab on Food Security Policy Brief no. 68. University of Pretoria and Michigan State University, Pretoria and East Lansing.
- Olivier NJJ et al. (2018). Brief: Mapping the landscape of Malawi Constitutional, policy, legislative and strategic food security and nutrition frameworks. Feed the Future Innovation Lab on Food Security Policy Brief no. 69. University of Pretoria and Michigan State University, Pretoria and East Lansing.

Outputs:

Meetings:

- Sheryl Hendriks participated in and presented Learning and capacity building clinic on the integration of scientific evidence in NAFSIP programmatic documents, 9-13 October 2017, Saly Portudal, Senegal
- Flora Nankhuni (NAPAS, Malawi Department of Agriculture): meeting on 09 July 2018 (Lilongwe) to obtain guidance in respect of recent developments within the Malawian agricultural policy and strategic framework (including, but not limited to, the launch of the Malawi NAIP2)
- R. Musopole (Malawi Department of Agriculture: coordinator Malawi NAIP2 drafting): meetings on 4 and 5 July 2018 (Lilongwe) to discuss further involvement of the UP team as regards the mainstreaming and implementation of the final Malawi NAIP2.

- R. Mkandawire (Chairperson: Malawi National Planning Commission): discussion of the role of the Malawi National Planning Commission on 09 July 2018 (Lilongwe). The meeting focused on the Malawi National Planning Commission's central statutory role of overseeing all key transversal national development programmes with specific reference to the monitoring and evaluation of, and the identification of indicators relevant to the implementation of, the Malawi NAIP2.
Presentations:
- Hendriks SL. (2017). NAIP Appraisal Guidance for component 4 Food Security and Nutrition. 9 October 2017. Learning and capacity building clinic on the integration of scientific evidence in NAIFSIP programmatic documents, 9-13 October 2017, Saly Portudal, Senegal.
- Hendriks SL. (2017). Evidence and dialogue to inform policy choices for better outcomes in agriculture, food security and nutrition in Africa. Invited presentation at the 3rd Global Food Security Conference, Cape Town, 6 Dec, 2017.
- Prof Nic Olivier was invited to participate in a FAO East Africa Regional Office in and present a paper on the international, African and regional food security and nutrition frameworks and the role of parliamentarians with regards the realization of the goals and commitments and obligations contained in these instruments with reference to oversight, policy coherence and approval, budget and programme approval, M&E and interventions. The meeting took place in November in Dar es Salaam. This work draws extensively from the work carried out as part of 1.5, C3, Activity 4 and C5.
Research Papers:
- Hendriks SL, Olivier NJJ, Mkandawire E and Olivier NJJ. (2017). Draft methodology for evaluating the effectiveness of development planning in terms of the alignment and linkages of international, African and regional commitments and national transversal development imperatives; the quality of the NAIPs in attaining the Malabo and SDG2 targets related to food security; and nutrition and gender equality. FSP Working Paper.
- Hendriks SL, Fitaweck W, Mkandawire E and Mkusa L. (2018). Draft paper: Food security and nutrition indicators for 20 priority CAADP countries. Feed the Future Innovation Lab for Food Security Policy Research Paper #96. Michigan State University, University of Pretoria and IFPRI. DOI: 10.13140/RG.2.2.18780.49289.
Policy Briefs:
- Olivier NJJ, Hendriks SL, Mkandawire E, Olivier NJJ and Williams C. (2017). Draft Lessons for effective development planning: Evaluation of Malawi's Agriculture Investment Plan. Draft FSP Policy Brief 50, October 2017.
- Hendriks SL (2017). Draft review of the draft Liberia Agricultural Sector Investment Plan (LASIP II) for 2018 – 2022 with a focus on component 4 of the Malabo CAADP Results Framework. FSP Policy Brief.
- Hendriks SL. (2018). Draft: Review of the draft Liberia Agricultural Sector Investment Plan (LASIP II) for 2018 – 2022 with a focus on component 4 of the Malabo CAADP Results Framework. Feed the Future Innovation Lab for Food Security Policy Research Brief #58. Michigan State University, IFPRI and University of Pretoria, East Lansing, Washington DC and Pretoria.
Capacity building:
- Sheryl L. Hendriks (2017). NAIP Component 4: Food security and nutrition. Support to country learning at the Learning and capacity building clinic on the integration of scientific evidence in NAIFSIP programmatic documents, 9-13 October 2017, Saly Portudal, Senegal.
- Sheryl L. Hendriks (2017). NAIP Component 4: Food security and nutrition. On-line support and back-up to country learning at NAIPs Appraisal and Design for the ECOWAS Member States Mutual Learning and Capacity Strengthening Clinic, March 6-9 Saly, Senegal.

Sheryl Hendriks contributed the sections related component 4 in the toolkit: AU/ New Partnership for Africa's Development (NEPAD), IFPRI and ReSAKSS (2018). Metrics, Analytic Questions and Tools for NAIP Design, Appraisal and Tracking. AU/NEPAD, Addis Ababa.

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.

Data Management Update

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

Year 5 activities under C4a continued to revolve around the 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). However, 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 FY2018 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:

In partnership with the World Bank and the Tanzania SPIRES Project, the FSP/C4a team organized a seminar for the Agricultural Sector Development Partner Group in Dar Es Salaam and a workshop for the Ministry of Agriculture and Ministry of Industry and Trade in Dodoma to share our research findings and policy options for consideration on land policy, the rise of medium-scale African investor farms, and an overall agricultural transformation strategy in Tanzania. The meeting with the Ministry of Agriculture was attended by roughly 40 public sector staff, including the Permanent Secretary. The session with the Agricultural Sector Development Partner Group took place on April 9, 2018, while the meeting at the Ministry of Agriculture took place on April 10, 2018.

At the invitation of the University of Dar es Salaam, the FSP/C4a team also convened a session on "Land and the Scramble for Africa's Resources: Land-Grab and the Rise of Medium and Large Scale Farms" in Africa at the 10th Mwalimu Nyerere Intellectual Festival and 10th Mwalimu Nyerere Chair Pan African Studies Anniversary on April 13, 2018.

The FSP/C4a team had a meeting with TAHA and Fintrac to plan on the forthcoming joint medium-scale horticulture study. Horticultural farming is contributing a large share in the value of national marketed surplus and thus likely to contribute largely to the agricultural transformation process. However, since these farms are few, nationally representative population based survey under sample them. Similarly, since most of the horticultural activities are conducted in short cropping (off-season) season, they are likely to be captured in surveys that seek information for main cropping season. This study aims at addressing horticulture medium-scale farming data blind spots. As a precursor to the study, the team conducted a field visit to medium-scale horticultural farms in Bagamoyo along with the SPIRES team and members of the World Bank.

The team also met with members of the National Bureau of Statistics (NBS), Tanzania, working with the C4a and SPIRES/Land and Inputs team to go over their analysis and future capacity building seminar. Relatedly, four senior NBS staff participated in a short-term training program in Advanced Stata Analysis, Sampling for

Agricultural Census, and Data Collection using CAPI Technology at MSU in August 20-24, 2018. During this visit, the team discussed preliminary results of the ongoing agricultural land research work that they are leading as a part of the collaborative research between NBS and MSU.

In general, the FSP/C4a team research activities have resulted in the following achievements:

- Wide international exposure of FSP research on input subsidy programs
- Award-winning research under FSP on these issues
- Engagement with policy makers in the region in regional events and national events in Zambia, Kenya, Tanzania, Nigeria, and Malawi.

Outputs from this Activity:

Presentations

- Are Medium-Scale Farms Driving Agricultural Transformation in Africa? Milu Muyanga, Kwame Yeboah, Ayala Wineman, Antony Chapoto, T. S. Jayne, Divan Vanderwesthuisen. Key note address to be delivered in the 2018 the Congress Food 2030 on Towards Sustainable Agri-Food Systems on September 5, 2018 at University of Hohenheim, Stuttgart, Germany.
- Are Medium-Scale Farms Driving Agricultural Transformation in Africa? Milu Muyanga, Kwame Yeboah, Ayala Wineman, Antony Chapoto, T. S. Jayne, Divan Vanderwesthuisen. Plenary session of the 2018 International Conference of Agricultural Economist on August 1, 2018 in Vancouver, Canada
- FSG Faculty Meets with Akin Adesina, President of the African Development Bank, 2017 World Food Prize Laureate. Jayne, Mason and Liverpool-Tasie discussed FSP research findings on input subsidy programs with Dr. Akin Adesina during his visit to Michigan State University on May 3, 2018.
- Unmistakable Signs of the Actual Ag Transformation. Jayne, T.S, et al. Presentation to the Agricultural Sector Development Partner Group in Dar es Salaam (April 9, 2018) and to the Ministry of Agriculture and Ministry of Industry and Trade in Dodoma (April 9, 2018).
- Global mega trends and their influence on land issues in Africa. Jayne T.S, Milu Muyanga, Isaac Minde, David Nyange. Presentation at the 10th Mwalimu Nyerere Intellectual Festival and 10th Mwalimu Nyerere Chair Pan African Studies Anniversary – 11th -13th April 2018.
- The rise of medium and large scale farms- how does this impact on youth access to land. Ntengue Mdoe, Milu Muyanga. Presentation at the 10th Mwalimu Nyerere Intellectual Festival and 10th Mwalimu Nyerere Chair Pan African Studies Anniversary – 11th -13th April 2018.
- Latest evidence on land conflicts in Tanzania- A typology of the nature, causes, consequences and mitigating measures. Judith Valerian, Milu Muyanga, Isaac Minde. Presentation at the 10th Mwalimu Nyerere Intellectual Festival and 10th Mwalimu Nyerere Chair Pan African Studies Anniversary – 11th -13th April 2018.
- The Changing Farm Structure in Africa: Causes, Consequences and Policy Implications. Milu Muyanga, T.S. Jayne, Isaac Minde, David Nyange, Kwame Yeboah, Jordan Chamberlin, Ayala Wineman, Ward Anseeuw, Antony Chapoto, Nicholas Sitko, 2018 AAPC, Dodoma, Tanzania, February 14, 2018
- Access to Productive Land and Youth Livelihoods: Factors Influencing Youth Decision to Exit From Far. N.S.Y. Mdoe (SUA), C.G. Magomba (SUA), M. Muyanga (MSU), T.S. Jayne (MSU), I.J. Minde (MSU) and T. Mwisomba, 2018 AAPC, Dodoma, Tanzania, February 14, 2018
- Taking Stock of Africa's Second-generation Input Subsidy Programs - Zambia Presentation. Nicole M. Mason, Thomas S. Jayne, William J. Burke, & Joshua Ariga, Lusaka, Zambia, February 27, 2018
- Creating an Enabling Environment for Private Sector Investment in Fertilizer Value Chains in SSA: Empirical Evidence & Knowledge Gaps. Maria Wanzala-Mlobela & Nicole M. Mason on behalf of the PEMEFA team, Jinja, Uganda, February 22, 2018
- An Overview of the Malawi and Zambia Input Subsidy Programs. Charles Jumbe, Stevier Kaiyatsa, & Nicole Mason. Jinja, Uganda, February 20, 2018
- Taking Stock of Africa's Second-generation Input Subsidy Programs. Nicole M. Mason, Thomas S. Jayne, William J. Burke, & Joshua Ariga. IFDC Workshop on Developing Private Sector Agro-Input Markets: Lessons Learned and Emerging Perspectives on Subsidy Programs." Jinja, Uganda, February 20, 2018.

- Africa's Unfolding Agri-food System Transformation (World Bank, Jan. 2018). T.S. Jayne and Holger Kray, World Bank Senior Leadership, Paris, France, January 25, 2018
- Causes and Consequences of Farm Size Distributions. T.S. Jayne, M. Muyanga, K. Yeboah, F. Dzanku, N. Mdoe, T. Shonhe, Bellville, South Africa, January 30–31, 2018
- Are Local Investor Farmers Making Small-Scale Farmers More Productive and Commercialized? Evidence from Nigeria. T.S. Jayne, M. Muyanga, S. Liverpool-Tasie, T. Awokuse, A. B. Aromolaran, Bellville, South Africa, January 30, 2018
- The Rise of Medium-Scale Farms in Africa: Causes and Consequences of Changing Farm Size Distribution. Milu Muyanga, T. S. Jayne, Felix Kwame Yeboah, Antony Chapoto, Nicholas Sitko, 3rd Annual Global Food Security Conference, Cape Town, South Africa, December 3, 2017
- Toward a Holistic Sustainable Intensification Strategy in Sub-Saharan Africa. T.S. Jayne. Panelist remarks Invited session on "Sustainable Intensification in Africa: How to make it happen" Global Food Security Conference. Cape Town, South Africa. 3 December 2017.
- Rise of Medium-Scale Farms in Africa: Causes and Consequences of Changing Farm Size Distributions. T.S. Jayne, Milu Muyanga, Kwame Yeboah, Jordan Chamberlin, Ayala Wineman, Ward Anseeuw, Antony Chapoto, and Nicholas Sitko, Cape Town, South Africa, December 6, 2017
- Agricultural Transformation in Africa: Role for Parliamentarians. T.S. Jayne and Milu Muyanga. Agricultural Transformation in Africa: Role for Parliamentarians. Keynote Address at 4th Annual RENAPRI Stakeholder Conference. Cape Town, South Africa. November 30, 2017.
- Agriculture Transformation in Africa and Prospects for the Grain Sector: A Case for Tanzania. David Nyange, Milu Muyanga, David Tschirley, Thomas S. Jayne. Presentation at the East Africa Grain Council 7th African Grain Trade Summit (AGTS), Dar es Salaam, Tanzania, 5th-7th, October 2017.

Policy briefs and research papers

- Thomas S. Jayne, Nicole M. Mason, William J. Burke, Joshua Ariga (2018). Taking Stock of Africa's Second-generation Agricultural Input Subsidy Programs. **Food Policy**, Volume 75, February 2018, Pages 1-14.
- Can Input Subsidy Programs Contribute To Climate Smart Agriculture? T.S. Jayne, Nicholas J. Sitko, and Nicole M. Mason. FSP Research Paper 87. November 2017.
- Input Subsidy Programs and Climate Smart Agriculture: Current Realities and Future Potential. Jayne T.S., Sitko N.J., Mason N.M., Skole D. (2017) In: Lipper L., McCarthy N., Zilberman D., Asfaw S., Branca G. (eds) Climate Smart Agriculture. Natural Resource Management and Policy, vol 52. Springer, Cham.
- Does Sustainable Intensification of Maize Production Enhance Child Nutrition? Evidence from Rural Tanzania. Jongwoo Kim, Nicole M. Mason, and Sieglinde Snapp. Research Paper 80. October 2017.
- Fertilizer Subsidies and the Role of Targeting in Crowding out: Evidence from Kenya David L. Mather & Thomas S. Jayne, **Food Security**, April 2018, Volume 10, Issue 2, pp 397–417. <https://doi.org/10.1007/s12571-018-0773-8>
- Integrating Climate- and Market-Smartness into Strategies for Sustainable Productivity Growth of African Agri-food Systems. Nicholas J. Sitko and T.S. Jayne. 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 94.
- Can Input Subsidy Programs Contribute to Climate Smart Agriculture? FSP Research Paper 87. T.S. Jayne, Nicholas J. Sitko, and Nicole M. Mason. 2017. Can Input Subsidy Programs Contribute to Climate Smart Agriculture? Feed the Future Innovation Lab for Food Security Policy Research Paper 87. East Lansing: Michigan State University.
- Factor Market Activity and the Inverse Farm Size-Productivity Relationship in Tanzania. Ayala Wineman and Thomas S. Jayne. 2017. Feed the Future Innovation Lab for Food Security Policy Research Paper 79.
- Are African Farmers Experiencing Improved Incentives to Use Fertilizer?. Lenis Saweda O. Liverpool-Tasie, Thomas Jayne, Milu Muyanga, and Awa Sanou. 2017. Feed the Future Innovation Lab for Food Security Policy Research Paper 78.

Journal Articles

- Africa's Evolving Employment Trends. Yeboah, Kwame, and T. S. Jayne. 2018. Africa's Evolving Employment Trends, *Journal of Development Studies*, 54(5)
- Africa's Unfolding Economic Transformation. Thomas S. Jayne, Jordan Chamberlin and Rui Benfica. 2018. Africa's Unfolding Economic Transformation, *Journal of Development Studies*, 54(5)
- The Quiet Rise of Large-Scale Traders in East and Southern Africa. Sitko, N., William J. Burke, and Thomas S. Jayne. 2018. The Quiet Rise of Large-Scale Traders in East and Southern Africa, *Journal of Development Studies*, 54(5)
- Special Issue of JDS: Economic Transformation in Africa, March 2018. T. S. Jayne, Jordan Chamberlin and Rui Benfica, guest editors, Special Issue of JDS: Economic Transformation in Africa, March 2018, *Journal of Development Studies*, 54(5).
- Land Prices Heading Skyward? An Analysis of Farmland Values in Tanzania - Article. Jayne, T., Wineman, A. Land Prices Heading Skyward? An Analysis of Farmland Values in Tanzania, *Applied Economic Perspectives and Policy*, Volume 40, Issue 2 (May 2018), 187-214, October 2017

Outcomes:

Our FSP/C4a research findings are slowly but steadily diffusing out to numerous public, private and civil society groups in Tanzania. We feel that we are slowly shaping the nature of the discussions on African investor farmers in Tanzania, 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.

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

Description:

- 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

Status of outputs as stated in work plan:

1. Completion of LPI outreach event (November 2017). Status: successfully completed.
2. Jayne and Muyanga to attend Global Food Security Conference and RENAPRI conference, both in Cape Town in late November/early December. Status: successfully completed.
3. Completion of cross-country study and policy brief on the role of land policy in agricultural transformation, contributing directly to C1/C2 processes in Malawi, Zambia and Tanzania and also regional level processes with LPI: January, 2018. Status: in progress, scheduled for completion in July 2018.
4. Complete survey work on emergent investor farmers in Senegal started in 2016 and led by UP; produce FSP country report. Status: Completed. C4a researchers are working on draft report to be completed by August 2018.

Meetings:

- Land Policies and Land Distribution Affect Smallholder Livelihoods and Agricultural Transformation. Jayne briefed Bill and Melinda Gates and other senior Gates Foundation representatives on the ways in which land policies and land distribution affect smallholder livelihoods and agricultural transformation, Gates Foundation Headquarters, Seattle. October 10, 2017.

Presentations:

- Agricultural Transformation in Africa: Role for Parliamentarians. T.S. Jayne and Milu Muyanga. Agricultural Transformation in Africa: Role for Parliamentarians. Keynote Address at 4th Annual RENAPRI Stakeholder Conference. Cape Town, South Africa. November 30, 2017.
- Is Small Still Beautiful? The Farm Size-Productivity Relationship Revisited. Milu Muyanga & T.S. Jayne. International Conference on Ecosystem Resilience and Agricultural Productivity. Speke Resort Munyonyo. Kampala, Uganda. November 23, 2017.
- Causes, consequences of changing farm size distributions in Africa, and implications on youth employment. Milu Muyanga, T.S. Jayne, A. Chapoto, N. Sitko, C. Nkonde, K. Yeboah, J. Chamberlin, A. Wineman, W. Anseeuw, D. Godwin. Indaba Agricultural Policy Research Institute [IAPRI] Brown Bag, Lusaka, Zambia. October 19, 2017.
- Rise of Medium-Scale Farms in Africa: Causes and Consequences of Changing Farm Size Distributions. Milu Muyanga, T.S. Jayne, Kwame Yeboah, Jordan Chamberlin, Ayala Wineman, Ward Anseeuw, Antony Chapoto, Nicholas Sitko. Global Donor Working Group on Land side on "The Impact of Increasing Capital Flows to Rural Areas: Experiences in Sub-Saharan Africa" during the 44th Committee on World Food Security (CFS). Rome, Italy. October 9, 2017.
- Agriculture Transformation in Africa and Prospects for the Grain Sector: A Case for Tanzania. David

Nyange and Milu Muyanga. Eastern Africa Grain Council Secretariat 7th African Grain Trade Summit. Dar es Salaam. Tanzania. October 3–7, 2017.

- Customary Tenure System under Scrutiny - How Social and Economic Transformations are Re-defining the Status quo: The Case of Mozambique” at the 2017 2nd bi-annual CLPA, November 14 – 17, 2017, Addis Ababa, Ethiopia. https://www.uneca.org/sites/default/files/uploaded-documents/LPI/CLPA_2017/clpa_programme_web.pdf
- “Scrutinizing the status quo: Rural transformation and land tenure security in Nigeria” at the 2017 2nd CLPA, November 14 – 17, 2017, Addis Ababa, Ethiopia. https://www.uneca.org/sites/default/files/uploaded-documents/LPI/CLPA_2017/clpa_programme_web.pdf
- “Key lessons learnt from implementing the AU-LPI Framework and methodology on Monitoring and Evaluation of Land Governance Africa (MELA)” at a round-table discussion of the 2017 2nd CLPA, November 14 – 17, 2017, Addis Ababa, Ethiopia. https://www.uneca.org/sites/default/files/uploaded-documents/LPI/CLPA_2017/clpa_programme_web.pdf
- Organized a session (together with LPI, the World Bank, UN-Habitat and ILC) on “Land Governance Monitoring In Africa – The MELA Initiative, AU Agenda 2063 and SDGs” as part of 2017 2nd CLPA, November 14 – 17, 2017, Addis Ababa, Ethiopia. Is Small Still Beautiful? The Farm Size-Productivity Relationship Revisited. Milu Muyanga & T.S. Jayne. International Conference on Ecosystem Resilience and Agricultural Productivity. Speke Resort Munyonyo. Kampala, Uganda. November 23, 2017.
- Rise of Medium-Scale Farms in Africa: Causes and Consequences of Changing Farm Size Distributions. T.S. Jayne, Milu Muyanga, Kwame Yeboah, Jordan Chamberlin, Ayala Wineman, Ward Anseeuw, Antony Chapoto, and Nicholas Sitko. University of Western Cape / PLAAS. Cape Town, South Africa. December 7, 2017.
- The Rise of Medium - Scale Farms in Africa: Causes and Consequences of Changing Farm Size Distributions. Milu Muyanga, T. S. Jayne, Felix Kwame Yeboah, Antony Chapoto, Nicholas Sitko. Global Food Security Conference Symposium on "Changing food systems and nutrition: do we have the concepts and data to understand, track, and anticipate the links?" Cape Town, South Africa. December 3, 2017
- Tegemeo Conference 2017 on "Transforming Agriculture for Inclusive Growth and sustainable livelihoods." Nairobi, Kenya. December 5, 2017
- Pulled or pushed out? Causes and consequences of youth migration from densely populated areas of rural Kenya. Milu Muyanga, Dennis Otieno & T. S. Jayne
- Can smallholders farm themselves out of smallholder farming and poverty? Milu Muyanga & T. S. Jayne
- Agricultural Transformation in Africa: Role for Parliamentarians. T.S. Jayne and Milu Muyanga. Agricultural Transformation in Africa: Role for Parliamentarians. Keynote Address at 4th Annual RENAPRI Stakeholder Conference. Cape Town, South Africa. November 30, 2017
- Rise of Medium-Scale Farms in Africa: Causes and Consequences of Changing Farm Size Distributions. T.S. Jayne, Milu Muyanga, Kwame Yeboah, Jordan Chamberlin, Ayala Wineman, Ward Anseeuw, Antony Chapoto, and Nicholas Sitko. Presentation at the World Bank, chaired by the Chief Economist of the World Bank Africa Division, Washington, DC., November 16, 2017.
- Causes, consequences of changing farm size distributions in Africa, and implications on youth employment. Milu Muyanga, T.S. Jayne, A. Chapoto, N. Sitko, C. Nkonde, K. Yeboah, J. Chamberlin, A. Wineman, W. Anseeuw, D. Godwin. Indaba Agricultural Policy Research Institute (IAPRI) Brown Bag, Lusaka, Zambia. October 19, 2017
- Rise of Medium-Scale Farms in Africa: Causes and Consequences of Changing Farm Size Distributions. Milu Muyanga, T.S. Jayne, Kwame Yeboah, Jordan Chamberlin, Ayala Wineman, Ward Anseeuw, Antony Chapoto, Nicholas Sitko. Global Donor Working Group on Land on "The Impact of Increasing Capital Flows to Rural Areas: Experiences in Sub-Saharan Africa" during the 44 Committee on World Food Security (CFS). Rome, Italy. October 9, 2017.
- Land Markets Under the Radar: A Cross-Country Analysis of Market Activity in Sub-Saharan Africa. Ayala Wineman and Thomas Jayne, World Bank Land and Poverty Conference, March 22, 2018

Research Papers:

- Is Small Still Beautiful? The Farm Size-Productivity Relationship Revisited. Milu Muyanga & T.S. Jayne. Paper revised and resubmitted to AJAE.
- Farmland Concentration and Rural Income Growth: Evidence from Tanzania. Jordan Chamberlin and T. S. Jayne. IDWP 157. October 2017.
- Scrutinizing the status quo: Rural transformation and land tenure security in Nigeria. published as NSSP Policy Note # 45, 2017
- Scrutinizing the status quo: Rural transformation and land tenure security in Nigeria” published as NSSP working paper # 43, 2017. <http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/131363>

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.

Outcomes:

- Slow percolation of these research findings into African development organizations' thinking about the agricultural transformation strategies.
- Coverage of C4a land research in mainstream media including front page article in New York Times, and two articles in The Economist – evidence that our findings about the rise of medium-scale farms is gaining traction and that policy discussions need to consider their impacts on youth access to land and broader rural transformation processes.
- Some indications that the Government of Tanzania is asking questions about the role of medium-scale farms and what crops they are growing and selling. This has resulted in ASPIRES committing to produce a paper focusing on medium-scale farms in Tanzania with a view to including the findings in upcoming Tanzanian policy discussions and national plans.

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:

- As part of the policy engagement activity under the FSP project, FSP-funded researchers with a longstanding portfolio of work on land governance, have had substantial input into potential land policy reforms in Ethiopia. Following the pro-liberal reform agenda of the new government in Ethiopia, FSP-supported IFPRI researchers were invited to attend a meeting of the national donor working group on Rural Economic Development & Food Security (REDFS) where the donors presented a draft position paper (policy fiche) on land policy in Ethiopia. The IFPRI-FSP researcher team (due to their strong reputation and expertise on the topic) were later tasked to revise/update the draft land policy fiche and integrate evidence-based recommendations that takes into account the policy environment in the country. Key recommendations included that Ethiopia should revisit the current restriction on land rental markets as specified in the federal land proclamation, which imposes size and durational restrictions in order to discourage long-term migration to urban areas. Building on existing analyses showing that the restrictive policy was having the opposite effect on migration, recommendations from the FSP-funded research include amendment to the proclamation to allow for leases with longer durations, following what some regions in the country were already doing. The land policy fiche will be later submitted to a technical unit at the Ministry of Agriculture for further review and consideration which subsequently will be submitted for the Minister's endorsement. In addition to these effort at federal level, FSP-funded researchers are also involved in similar policy engagement to inform on-going land reform agenda of the regional state of Tigray.
- With an attempt to scrutinize potential flaws in blanket solutions to issues of tenure insecurity, empirical research in Nigeria and Mozambique show that, overall, public tenure risk (expropriation or land eviction) are the real threat to women's tenure security while private tenure risks (ownership, inheritance, border dispute, etc.) are more of a threat to tenure security of male (men). However, a more gender-disaggregated analyses (not only comparing male versus female headed households but also with female as a spouse) show a reversal to the story of what drives tenure insecurity as the results show: (1) Females as a spouse (married women) fears more private tenure risks (signs of intra-household land grabbing); and (2) Female heads (single/unmarried women, widows, divorce/separated) mostly fears private tenure risks in areas with relative vibrant economy and developed land markets - sign of how increase in land scarcity and/or land values erode (adversely affect) women's sense of tenure security in contract to their male counter parts as the former is usually consider to be the residual claimant in such a high stress areas under the customary tenure system. Results also show that land-related legal awareness seem to be more significant in dictating (positively) perceived tenure security of women as compared to their male counterparts.
- Revised and re-submitted a book chapter on "Natural Resource Management and Resource Rights for Agriculture (with Frank Place, and Ruth Meinzen-Dick) for a book on "Agricultural Development: New Perspectives in a Changing World" Edited by Keijiro Otsuka and Shenggen Fan
- 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.
- Participated and present syntheses of lessons learnt from studies on "drivers and impacts of tenure insecurity" at the ALPC partners meeting, May 30-31, Debrezeit Ethiopia
- Participated at the a policy dialogue platform organized by the Development partners' platform on Rural Economic Development and Food Security (RED & FS) in Ethiopia to discuss and finalize "Land policy

fiche” for the Development partners’ platform on Rural Economic Development and Food Security (RED & FS) in Ethiopia – activity led by the EU delegation (May 21, 2018, Addis Ababa Ethiopia).

- Participated at a policy dialogue platform organized by the WB HQ and WB Ethiopia country office in Ethiopia to brainstorm land policy reform option in Ethiopia and ways forward (June 22, 2018, The World Bank Ethiopia country office, Addis Ababa, Ethiopia)
- Book chapter proposal on “Gender, Women and Land Rights” accepted for publication as part of the 2019 ReSAKSS Annual Trends and Outlook Report (ATOR) on “Gender Parity in Rural Africa: From Commitments to Outcomes”.
- Synthesis on key messages from the past research done on “impacts of land titling/registration/certification” funded under FSP and other projects have been shared with the Department of International Development (DFID) to inform DFID programs for 2020 and beyond

Outputs

Publications:

- Kosec, K., Ghebru, H., Holtemeyer, B., Mueller, V., & Schmidt, E. 2018. “The Effect of Land Access on Youth Employment and Migration Decisions: Evidence from Rural Ethiopia.” *American Journal of Agricultural Economics*, 100(3), 931-954.
<https://doi.org/10.1093/ajae/aax087>
- Ghebru H. and Stein Holden (2018) Land Rental Markets and Rural Poverty Dynamics in Northern Ethiopia: Panel data evidence using survival models. Article in press. First published online on October 01, 2018. *Journal Article: Review of Development Economics*. <http://dx.doi.org/10.1111/rode.12548>.
- Ghebru, H., M. Amare, G. Mavrotas and. A. Adebayo (In press) Role of Land Access in Youth Migration and Youth Employment Decisions: Empirical Evidence from Rural Nigeria. NSSP Working Paper 58. Washington, D.C. and Abuja, Nigeria: International Food Policy Research Institute (IFPRI)
- SYNOPSIS on “Scrutinizing the status quo: Rural transformation and land tenure security in Nigeria” published as NSSP Policy Note # 45, 2017
<http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/131465>
- Revised-and-resubmitted “Natural Resource Management and Resource Rights for Agriculture (with Frank Place, and Ruth Meinzen-Dick) finalized and submitted for a book on “Agricultural Development: New Perspectives in a Changing World” Edited by Keijiro Otsuka and Shenggen Fan
- work-in-progress on “Gender, Women and Land Rights” accepted for publication as part of the 2019 ReSAKSS Annual Trends and Outlook Report (ATOR) on “Gender Parity in Rural Africa: From Commitments to Outcomes”.

Conference papers/reports/tools

- Africa-wide guideline (toolkit) for Monitoring and Evaluation of Land governance in Africa - MELA (outlining key thematic areas, principles and indicators that form the basis for tracking) finalized and validated ALPC.
- Rural youth abandoning farming: Myth or Reality? Paper presented at the triennial International Conference for Agricultural Economists triennial meeting, Vancouver, Canada, July 28 – Aug 2, 2018
https://venuewest-my.sharepoint.com/personal/eva_tolosa_venuewest_com/_layouts/15/onedrive.aspx?id=%2Fpersonal%2Feva_tolosa_venuewest_com%2FDocuments%2FICAE%202018%20-%20Program%20booklet%2Epdf&parent=%2Fpersonal%2Feva_tolosa_venuewest_com%2FDocuments&slid=bc329a9e-108d-7000-3ab1-ac7711d149e5
- Land Access, Land Rental Markets and Rural Poverty Dynamics in Northern Ethiopian Highlands: Panel Data evidence using Survival Models. Paper presented at organized symposium on “Land Rental Markets

as a Pathway into Agriculture for Youth in sub-Saharan Africa “for presentation at the 30th International conference of Agricultural Economists, July 28 – August 2, 2018, Vancouver, Canada

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[my.sharepoint.com/personal/eva_tolosa_venuewest_com/_layouts/15/onedrive.aspx?id=%2Fpersonal%2Feva_tolosa_venuewest_com%2FDocuments%2FICAE%202018%20-](https://venuewest-my.sharepoint.com/personal/eva_tolosa_venuewest_com/_layouts/15/onedrive.aspx?id=%2Fpersonal%2Feva_tolosa_venuewest_com%2FDocuments%2FICAE%202018%20-)

[%20Program%20booklet%2Epdf&parent=%2Fpersonal%2Feva_tolosa_venuewest_com%2FDocuments&slid=bc329a9e-108d-7000-3ab1-ac7711d149e5](https://venuewest-my.sharepoint.com/personal/eva_tolosa_venuewest_com/_layouts/15/onedrive.aspx?id=%2Fpersonal%2Feva_tolosa_venuewest_com%2FDocuments%2FICAE%202018%20-)

- Natural Resource Management and Resource Rights for Agriculture. Paper presented at the triennial International Conference for Agricultural Economists triennial meeting, Vancouver, Canada, July 28 – Aug 2, 2018
[https://venuewest-](https://venuewest-my.sharepoint.com/personal/eva_tolosa_venuewest_com/_layouts/15/onedrive.aspx?id=%2Fpersonal%2Feva_tolosa_venuewest_com%2FDocuments%2FICAE%202018%20-)
[my.sharepoint.com/personal/eva_tolosa_venuewest_com/_layouts/15/onedrive.aspx?id=%2Fpersonal%2Feva_tolosa_venuewest_com%2FDocuments%2FICAE%202018%20-](https://venuewest-my.sharepoint.com/personal/eva_tolosa_venuewest_com/_layouts/15/onedrive.aspx?id=%2Fpersonal%2Feva_tolosa_venuewest_com%2FDocuments%2FICAE%202018%20-)
[%20Program%20booklet%2Epdf&parent=%2Fpersonal%2Feva_tolosa_venuewest_com%2FDocuments&slid=bc329a9e-108d-7000-3ab1-ac7711d149e5](https://venuewest-my.sharepoint.com/personal/eva_tolosa_venuewest_com/_layouts/15/onedrive.aspx?id=%2Fpersonal%2Feva_tolosa_venuewest_com%2FDocuments%2FICAE%202018%20-)
- “Piloting AU-LPI Framework on Monitoring and Evaluation of Land Governance Africa (MELA)” presented 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
https://www.uneca.org/sites/default/files/uploaded-documents/LPI/CLPA_2017/clpa_programme_web.pdf
- “Customary Tenure System under Scrutiny - How Social and Economic Transformations are Re-defining the Status quo: The Case of Mozambique” presented at the 2017 2nd bi-annual Conference on land Policy in Africa (CLPA), November 14 – 17, 2017, Addis Ababa, Ethiopia
https://www.uneca.org/sites/default/files/uploaded-documents/LPI/CLPA_2017/clpa_programme_web.pdf
- “The Effect of Land Access on Youth Employment and Migration Decisions: Evidence from Rural Ethiopia” presented at the 2017 2nd bi-annual Conference on land Policy in Africa (CLPA), November 14 – 17, 2017, Addis Ababa, Ethiopia
https://www.uneca.org/sites/default/files/uploaded-documents/LPI/CLPA_2017/clpa_programme_web.pdf
- “Scrutinizing the status quo: Rural transformation and land tenure security in Nigeria” presented at the 2017 2nd bi-annual Conference on land Policy in Africa (CLPA), November 14 – 17, 2017, Addis Ababa, Ethiopia
https://www.uneca.org/sites/default/files/uploaded-documents/LPI/CLPA_2017/clpa_programme_web.pdf
- “Scrutinizing the Status Quo: Gender-disaggregated Implications of Social and Economic Transformations on Perceived Tenure Security in Mozambique” presented at the 18th Annual World Bank conference on Land and Poverty, March 19 – 23, 2018, Washington DC, USA.
https://www.conftool.com/landandpoverty2018/index.php?page=browseSessions&form_session=576&presentations=show
- “A gender-disaggregated Impact of the Pilot Systematic Land Tenure Regularization Program in Nigeria” presented at the 18th Annual World Bank conference on Land and Poverty, March 19 – 23, 2018, Washington DC, USA.
- “Land Access, Tenure Security and the Fate of Rural Youth in Africa: The Case of Mozambique” presented at the 18th Annual World Bank conference on Land and Poverty, March 19 – 23, 2018, Washington DC, USA.

https://www.conftool.com/landandpoverty2018/index.php?page=browseSessions&form_session=644&presentations=show

- “Scrutinizing the status quo: Rural Transformation and Land Tenure Security in Nigeria” presented at the 18th Annual World Bank conference on Land and Poverty, March 19 – 23, 2018, Washington DC, USA.
- “Perceived tenure (in)security in the era of rural transformation: a gender-disaggregated analysis from Mozambique” 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 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.

Outreach/presentations/policy dialogue

- Participated and present syntheses of lessons learnt from studies on “drivers and impacts of tenure insecurity” at the ALPC partners meeting, May 30-31, Debrezeit Ethiopia
- Participated at the a policy dialogue platform organized by the Development partners’ platform on Rural Economic Development and Food Security (RED & FS) in Ethiopia to discuss and finalize “Land policy fiche” for the Development partners’ platform on Rural Economic Development and Food Security (RED & FS) in Ethiopia – activity led by the EU delegation (May 21, 2018, Addis Ababa Ethiopia).
- Participated at a policy dialogue platform organized by the WB HQ and WB Ethiopia country office in Ethiopia to brainstorm land policy reform option in Ethiopia and ways forward (June 22, 2018, The World Bank Ethiopia country office, Addis Ababa, Ethiopia)

Capacity building

- One-day workshop to introduce definition, measurement and reporting on selected indicators/proxies for Monitoring and evaluation of land governance in Africa (MELA) in Tanzania to members 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
- One-day workshop to introduce the definition, measurement and reporting on selected indicators/proxies for Monitoring and evaluation of land governance in Africa (MELA) in Malawi 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 6, 2017
- One-day training workshop on the definition, measurement and reporting on selected indicators/proxies for Monitoring and evaluation of land governance in Africa (MELA) in Madagascar 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 9, 2017, Antananarivo, Madagascar
- One-day training on the methodology for Monitoring and Evaluation of Land governance in Africa (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 Conference on Land Policy in Africa (CLPA), November 14th, 2017, Addis Ababa, Ethiopia.

Media coverage of the MELA project

- 17 October 2017: <http://sdg.iisd.org/news/african-leaders-endorse-institutional-framework-for-improved-land-governance/>
- October 2017: https://au.int/sites/default/files/documents/33005-doc-draft_report_to_au_stc_progress_in_implementing_the_au_declaration_on_land_issues_and_challenges_in_africa_2017_revised_with_guideline.pdf

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 and outreach activities in Ethiopia, Ghana and Nigeria, as well as a few Asian countries

Achievements:

- Progress has been made toward the completion of the draft manuscript of the book on agricultural mechanization, including the writing of the synthesis of common and collective messages across the chapters. Several chapter drafts (India, Nigeria, and Vietnam) have been completed and either published or submitted as IFPRI Discussion Paper series. The revised draft of the introduction chapter that synthesizes the key messages of the book drawing from country chapters have also been completed (Diao et al. 2018). In addition, empirical papers that constitute part of the Nepal chapter, which analyzes the interactions of smallholders’ mechanization decisions and farming exit decision, has been accepted for publication in a peer-reviewed journal, and a paper analyzing the linkage between the policies on complementary inputs and the adoption of mechanization by smallholder in Nepal has been completed.
- The international conference on *South-South Knowledge Sharing on Agricultural Mechanization* was held in Addis Ababa, on October 31 – November 1, 2017, by IFPRI, IFPRI’s Ethiopia Strategy Support Programme, CIMMYT, and Ethiopian Agricultural Mechanization Forum, where researchers, government officials, private sector from Asia and African countries, and international NGOs and donors came together and shared their experiences of mechanization sector growths in their respective countries, with the aim of informing African governments.
- Empirical assessments of the demand for mechanization and its heterogeneity across locations in Nigeria and potentially Ghana
 - The paper investigated how the ownership of tractors changes the returns-to-scale characteristics of maize production in Ghana (Takeshima et al. 2017), has been published from Food Policy.
 - Under the joint funding with IFPRI-led Policy, Institutions and Markets (PIM), a paper investigating the linkages between plant breeding, agroecological diversity, returns-to-scale, and adoptions of mechanical technologies (draft animal and / or tractors) in Nigeria, has been published as IFPRI Discussion paper and selected as one of the three finalists for the Nils Westermarck Prize for Best Poster at the upcoming triennial IAAE conference in Vancouver, Canada, July 2018.

- Empirical analyses continue to fill a huge knowledge gap in agricultural mechanization, specifically, the impacts of agricultural mechanization adoptions, which are the primary factors driving their adoptions (in addition to various supply-side factors). Specifically, building on the aforementioned analyses completed on the impacts on returns-to-scale, further dimensions, the impacts on the economies of scope are now being investigated. The analyses intend to assess 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. The Nigeria papers have been completed and published as working papers (Takeshima et al. 2018c; Hatzenbuehler et al. 2018) under the joint funding with IFPRI's Nigeria Strategy Support Program which is also under the FSP-Core project. The similar paper on Ghana is currently being prepared.

Meetings:

- Engineer Patrick Aboagye, Deputy Director, Agricultural Engineering Services Directorate, Ministry of Food & Agriculture, Accra, Ghana (January 29, 2018)
- Hon. James H. Anbua, Commissioner, Benue Ministry of Agriculture and Natural Resources (February 26, 2018)
- Engineer Ahmed D Adekunle, Senior Technical Adviser to the Honorable Minister of Agriculture on Mechanization / Chairman, Advisory Ministerial Mechanization Committee (AMMC), Office of the Honorable Minister of Federal Ministry of Agriculture and Rural Development, Nigeria (February 27, 2018)
- Engineer ABDULLAHI GARBA ABUBAKAR, Deputy Director of Engineering & Mechanization Division, Federal Ministry of Agriculture and Rural Development, Nigeria (February 28, 2018; June 12, 2018)
- Engr. Abdullahi Aliyu Musa, Dr. Abdulkadir A. Kassim, Government of Kaduna State, Ministry of Agriculture and Forestry (June 20, 2018; August 9, 2018)
- Prof. Chris Daudu, Prof. Mohammed Othman, Prof. Sadiq Abubakar, National Agricultural Extension Research & Liaison Services, Ahmadu Bello University (June 19, 2018)
- Organized the conference international on *South-South Knowledge Sharing on Agricultural Mechanization* in Addis Ababa, in October 31 – November 1, 2017, jointly with IFPRI's Ethiopia Strategy Support Programme, CIMMYT, and Ethiopian Agricultural Mechanization Forum

Outputs:

Presentations:

- Paper “The Roles of Agroclimatic Similarity and Returns to Scale in the Demand for Mechanization: Insights from Northern Nigeria (by Hiro Takeshima)” received Nils Westermark Prize for Best Poster at the IAAE triennial meeting, Vancouver, Canada, July 28 – Aug 2, 2018.
- “*Agricultural mechanization in Africa: Lessons learned from South-South knowledge exchange*” Webinar Series by CGIAR Research Program on Policies, Institutions, and Markets (PIM), Washington DC, October 4, 2018.
- “Agriculture-nutrition linkage in Nigeria” presented at the workshop “*Transforming Agriculture and Food Systems for Better Nutrition and Health: Global and Emerging Perspective*”, Tokyo, Japan, June 28, 2018.
- “*Effects of mechanization on economies of scope in agriculture: Evidence from LSMS-ISA data*” presented at the Second Conference of the Feed the Future Nigeria Agricultural Policy Project, Abuja, Nigeria, August 16, 2018.

Research Papers:

- Bhattarai M, G Singh, H Takeshima & S Shekhawat. (2018). *Farm machinery uses and agricultural industries in India: status, evolution, implications, and lessons learned*. IFPRI Discussion Paper 01715.
- Diao X, J Silver, H Takeshima, X Zhang. (2018). *Synthesis chapter of Agricultural Mechanization Book*. Draft.
- Diao X, J Agandin, P Fang, SE Justice, D Kufoalor & H Takeshima. (2018). *Agricultural Mechanization in Ghana: Insights from a Recent Field Study*. IFPRI Discussion Paper 01729.
- 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.

- Takeshima H. (2017). *The roles of agroclimatic similarity and returns to scale in demand for mechanization: Insights from Northern Nigeria*. IFPRI Discussion Paper 01692.
- Takeshima H. (2018). Mechanize or exit farming? Multiple-treatment-effects model and external validity of adoption impacts of mechanization among Nepalese smallholders. *Review of Development Economics*, in press.
- Takeshima H & Y Liu. (2018). *The Role of Plant-Breeding R&D in Tractor Adoption among Smallholders in Asia: Insights from Nepal Terai*. IFPRI Discussion Paper. IFPRI DP 01719.
- Takeshima H, A Lawal. (2018). *Overview of the Evolution of Agricultural Mechanization in Nigeria*. IFPRI Discussion Paper 01750.
- Takeshima H, N Houssou, X Diao. (2018a). Effects of tractor ownership on returns-to-scale in household maize production: Evidence from Ghana. *Food Policy* 77, 33–49.
- Takeshima H, Y Liu, CV Nguyen & I Masias. (2018b). *Evolution of agricultural mechanization in Vietnam: Insights from a literature review and multiple rounds of a farm household survey*. IFPRI Discussion Paper 01724.
- 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.
- Tilahun H, Y Habte & **H Takeshima**. (2017). *Proceedings of the International Conference: South-South Knowledge Sharing on Agricultural Mechanization*, Addis Ababa. October 31 – November 1, 2017. IFPRI, CIMMYT and Ethiopian Agricultural Mechanization Forum.

Capacity building:

- Under the joint funding with IFPRI's Nigeria Strategy Support Program, a small survey is being conducted to understand the characteristics of private sector tractor sellers in one state in Nigeria. During the process, survey instruments (questionnaires, CSPro files) were shared with local collaborating researchers at the Ahmadu-Bello University of Nigeria.

Outcomes:

- Key research findings have been communicated to the Ghanaian government official, who is in charge of designing Ghana's second Agricultural Mechanization Service Center (AMSEC) program that is currently being implemented. In addition, under the joint funding with IFPRI's PIM and Ghana Strategy Support Program, rapid field assessment was conducted in Ghana from late January toward early February to understand the experiences of the early phase of the second AMSEC program. The Ghanaian officials participated in this field work, where they traveled together with IFPRI team to meet various stakeholders, and key observations from the field as well as aforementioned research studies were shared and views were exchanged. It was learned that, the design of the second phase of AMSEC had incorporated several of earlier recommendations made by IFPRI under the FSP, including the training of machine uses, and support for maintenance, repair as well as spare parts supply. It is expected that the field work in this reporting period further affects the designs of ongoing AMSEC program.
- We also invited the Eng. Aboagye to Washington DC (through the financial support by PIM) and organized a round-table (RT) discussion between Patrick and IFPRI researchers who have been engaged with the research on agricultural mechanization in other countries. Eng. Aboagye feels that this RT is extremely useful for him to get a better understanding of other countries' experiences of agricultural mechanization and the role of the government in facilitating mechanization development. Eng. Aboagye also indicates that this RT is very at the perfect timing as MOFA is drafting agricultural mechanization policy document. He will convey the information learnt from this RT and our recommendations on the future agricultural mechanization programs in Ghana during the RT to his Director and MOFA.
- The meetings had also been held with Engineer Abubakar (Deputy Director of the Engineering & Mechanization Division, Federal Ministry of Agriculture and Rural Development in Nigeria), and Engineer Musa (Director of Agricultural Engineering Service, Kaduna State Ministry of Agriculture and Natural Resource, Kaduna state, Nigeria). At these meetings, more detailed interactions were held regarding how their participations in Bangladesh mechanization study tour organized by IFPRI in 2015 under the joint funding with FSP and PIM, gave them ideas of the designs on new mechanization programs at the Federal

government level and the state level. In particular, Government of Nigeria has extended the support for private-sector led equipment hiring service enterprise originally limited to large four-wheel tractors, to smaller tractors including two-wheel tractors (called Mini Mobile Mechanization System (MMMS)), partly motivated by their observations during PIM-supported Bangladesh mechanization study tour in 2015/16.

- In addition, the aforementioned conference proceedings (Tilahun et al. 2017) has been highlighted in the March 2018 issue of a [technical brief](#) prepared by the Ethiopian Agricultural Mechanization Forum.
- Key messages from the past mechanization research done under FSP and other projects, including [Diao et al. \(2017\)](#), have been incorporated into the report on agricultural mechanization for [Malabo Montpellier Panel report 2018](#).

Activity #4: Exploring the Relationships between Agricultural Transformation and Youth Employment in Africa’s Economic Transformation. (Lead: Jayne, Yeboah)

Description: This activity has aimed to develop new insights about the emerging key opportunities for youth employment within the rapidly transforming economies of sub-Saharan Africa. Our work has been based on the premise that the answer to this question is not uniform across all African countries – much depends on history, initial conditions, levels of education, land scarcity, and the sectors experiencing dynamism. We also aimed to consolidate insights over the period of the FSP IL into policy briefs and synthesis reports, with significant outreach activities being planned for 2018.

Achievements:

In partnership with the Alliance for Africa Partnership at MSU, the C4a team organized a side session at the Africa Think Tank Summit on *The Role of African Policy Think Tanks in Expanding Future Youth Employment Opportunities in support of Agricultural Transformation.* The session was attended by African researchers and policymakers including the African Union Commissioner for Economic Affairs. The meeting provided an opportunity to discuss entry points for collaborating with the African Union as a knowledge partner.

We have made progress on age and gender disaggregated analysis of youth employment patterns for multiple African countries. The findings will shed light on the life cycle effects on employment for both men and women and the diversity of needs present in the heterogeneous youth population, and provide an evidence-base for tailored interventions to address youth challenges.

Progress has also been made on the analysis exploring the intersection of youth access to land and their livelihood choices. A report is expected to be completed in July.

Outputs:

Publications

- Yeboah F. K. and Jayne, T. S. (2018) “Africa’s Evolving Employment Trends,” *Journal of Development Studies*, 54:5, 803-832
- Thomas S. Jayne, Jordan Chamberlin and Rui Benfica. (2018). Africa's Unfolding Economic Transformation, *Journal of Development Studies*, 54(5), 777-787
- Yeboah et al. (2018) Youth for growth: Transforming Economies through agriculture. Chicago Council on Global Affairs. https://www.thechicagocouncil.org/sites/default/files/report_youth-for-growth_20180322.pdf
- Yeboah, F.K. (2018) Youth for growth: Transforming economies through agriculture. A blog post on the key messages from the 2018 Global Food Security Report.
 - <https://www.thechicagocouncil.org/publication/youth-growth-transforming-economies-through-agriculture>
- T.S. Jayne, Felix Kwame Yeboah, and Carla Henry. 2017. The Future of Work in African Agriculture: Trends and Drivers of Change. International Labour Office, Working Paper No. 25, December 2017.

Policy briefs and Research papers

- Sitko, N., William J. Burke, and Thomas S. Jayne. 2018. The Quiet Rise of Large-Scale Traders in East and Southern Africa, **Journal of Development Studies**, 54(5)
- T. S. Jayne, Jordan Chamberlin and Rui Benfica, guest editors, Special issue of the **Journal of Development Studies** on Economic Transformation in Africa
- Yeboah, Kwame, and T. S. Jayne. 2018. Africa's Evolving Employment Trends, *Journal of Development Studies*, 54(5), 803-832.
- Yeboah, F. K. and Jayne T. S. (2017). From Theory to Practice: Exploring Sustainable Solutions to Africa's Developmental Challenges. *African Journal of Food, Agriculture, Nutrition and Development* 17(4):1-11
- Yeboah F. K. and Jayne T. S. (2017) Africa's evolving employment trends: Implications for Economic Transformation ReNAPRI Policy Brief No. 7. November 2017.

Oral presentations

- Women in Agricultural Value Chains: Data from 9 African Countries. T.S. Jayne and Felix K. Yeboah, Bonn, Germany, March 8, 2018
- Africa's Agrifood System and Youth Employment: Trends and Drivers of Change. F. Kwame Yeboah and Thomas S. Jayne, GIZ Webinar Series on Agricultural Value Chains, June 26, 2018
- *The Role of African Policy Think Tanks in Expanding Future Youth Employment Opportunities in support of Agricultural Transformation* Panel discussion at the 2018 Africa Think Tank Summit to be held in Accra, Ghana, April 5-7, 2018.
- Unmistakable Signs of Agri-food Systems Transformation in Africa - April 10, 2018 T.S. Jayne and Holger Kray, Seminar at the Ministry of Agriculture, Government of Tanzania Dodoma, Tanzania, April 10, 2018
- *Designing a Youth-inclusive Agricultural Transformation, Panel discussion at the 2018 Global Food Security Symposium, Washington DC. March 21-22, 2018.* The discussion focused on the key messages from the 2018 Global Food Security Report, which Yeboah and Jayne served as the lead author and taskforce member respectively.
- *Success Factors and Challenges Facing Youth Agribusiness enterprises in Tanzania.* Presented at the 10th Scientific Conference and Annual meeting of the Agricultural Economics Society of Tanzania, Dodoma-Tanzania, 13-14 March 2018.
- *Youthquake: the global rise of next generation.* Panel discussion on how agriculture and technology could be harnessed to reap demographic dividend in Africa. Annual meeting of the Young Professionals Network, Chicago, IL, March 29, 2018. Yeboah was one of three panelists for the session. <https://www.youtube.com/watch?v=jGqNlBdzG-Y&t=2510s>
- *The intersection of Youth Livelihoods and Agriculture in Africa.* Presented at 4th Annual ReNAPRI Stakeholders Conference, Cape Town, South Africa, November 30-December 1, 2017
- Agricultural Transformation in Africa: Role for Parliamentarians. T.S. Jayne and Milu Muyanga. Agricultural Transformation in Africa: Role for Parliamentarians. Keynote Address at 4th Annual RENAPRI Stakeholder Conference. Cape Town, South Africa. November 30, 2017.
- *Transformational investment in agri-food systems and youth employment.* Presented at the 4th Annual ReNAPRI Stakeholders Conference, Cape Town, South Africa, November 30-December 1, 2017
- Interview of Lead author Felix Kwame Yeboah on *Youth for Growth* Report at the Chicago Council Global Food Security Symposium, Washington, DC, March 22, 2018.
- Youth Access to Land, Migration, and Employment Opportunities Thomas Jayne, Kwame Yeboah, Milu Muyanga, and Jordan Chamberlin. IFAD Thematic and Framing Workshop, March 15–16, 2018.
- Patterns, Drivers and Impacts of Rural-Rural Migration in Zambia. Jordan Chamberlin, Nicholas J. Sitko, T.S. Jayne, Rome, Italy, December 1, 2017
- Intersection of Youth Livelihoods and Agriculture in Africa. F. Kwame Yeboah and Thomas S. Jayne.

Keynote Presentation at the 4th Annual ReNAPRI Stakeholders Conference. Cape Town, South Africa. November 30, 2017.

- Transformational investment in agri-food systems and Youth Employment Lulama N. Traub and F. Kwame Yeboah. Keynote Presentation at the 4th Annual ReNAPRI Stakeholders Conference. Cape Town, South Africa. November 30, 2017.
- Making Agriculture Cool Again for Youth in Africa, A Newsletter article based on an interview with F. Kwame Yeboah and Thomas Jayne. Feed the Future Newsletter, November 2017.
- Making Agriculture Cool Again for Youth in Africa, A Newsletter article based on an interview with F. Kwame Yeboah and Thomas Jayne. Feed the Future Newsletter, November 2017.
- Causes, consequences of changing farm size distributions in Africa, and implications on youth employment. Milu Muyanga, T.S. Jayne, A. Chapoto, N. Sitko, C. Nkonde, K. Yeboah, J. Chamberlin, A. Wineman, W. Anseeuw, D. Godwin. Indaba Agricultural Policy Research Institute [IAPRI] Brown Bag, Lusaka, Zambia. October 19, 2017.

Outcomes:

Our research findings are gradually influencing current thinking on the need for continued agricultural productivity growth as part of a comprehensive youth employment strategy in Africa. Observed declining employment shares in farming is often interpreted as a “declining role” of agriculture. This interpretation, however, is source of confusion that fails to distinguish between the causes and effects of the dynamism. Our research that identifies agricultural productivity growth as the source of the on-going dynamism in Africa’s employment structure is gradually changing the erroneous perception of a declining importance of farming. It has provided many public, private, and civil society groups including the Chicago Council on Global Affairs, German Development Cooperation (GIZ), International Fund for Agriculture (IFAD) and Alliance for a Green Revolution in Africa (AGRA) an empirical basis to advocate for and emphasize continued investment in agricultural productivity growth in their programming. Examples of some specific outcomes include:

C4a researchers also influenced the design of several development partners’ youth strategies through their engagement with the International Labor Organization (ILO), the German Development Agency (GMZ and GIZ), IFAD, the Chicago Council, and the African Development Bank.

- Policy engagement at the 2018 Chicago Council Global Food Security Conference on Youth Livelihoods
- Policy engagement/outreach activity at a GIZ-sponsored event in Benin in September 2018.
- The AFDB Coordinator for the ENABLE Youth initiative invited Yeboah to participate in a well-attended African Development Bank session at the AGRF meetings in September 2018 in Kigali, Rwanda. Subsequent discussions with AfDB may provide the opportunity for continued influence over the design of ENABLE Youth programs.
- C4a research on youth access to land was commissioned by IFAD for integration into IFAD’s 2019 Rural Development Report
- A 4-page FSP policy brief was prepared for GIZ that synthesizes work on youth employment under C4a to date (Q2-2018).
 - A better understanding of how Africa’s economies and employment patterns are changing and why. Status – achieved, see below
 - Better evidence base to project future trends and develop policy options that take into account these anticipated trends. Status – achieved, see below

Achievements:

- C4a team member Kwame Yeboah was the lead author of the 2018 Chicago Council Report on *Youth for Growth*, and a featured participant at the 2018 Chicago Council Global Food Security Symposium, March 21-22, 2018, Washington, DC. This event gave provided the opportunity to lay out C4a research on youth livelihoods to a large and influential audience of thought leaders in international and US agricultural development circles.
- As part of outreach activities, Yeboah and Jayne contributed to an [article](#) in the November edition of the

Feed the Future Newsletter. The article shed light on our recent cross-country analysis on the employment trends and the evolving role agriculture is playing in influencing youth livelihoods in Africa.

- Yeboah and Jayne have also completed an International Labor Organization report examining the future of work in Africa's agriculture. The paper is intended to help the International Labor Organizations and African governments understand and respond effectively to the transformational changes shaping the world of work in Africa's agriculture. See: T.S. Jayne, Felix Kwame Yeboah, and Carla Henry. 2017. The Future of Work in African Agriculture: Trends and Drivers of Change. International Labour Office, Working Paper No. 25, December 2017.
- We have also continued efforts to influence policy and programming of organizations with a stake in youth livelihood development. As part of this effort, Yeboah is serving as the lead author for the 2018 Global Food Security Report commissioned by the Chicago Council on Global Affairs. The report examines the challenges and pathways for securing the livelihoods of young people in developing countries through agriculture transformation. Jayne is a member of the taskforce guiding the structure and content of the report. The report is scheduled to be launched in March 2018 and will provide recommendations to the US government on youth employment programming in developing countries.
- Progress has been made towards understanding the success factors and barriers youth entrepreneurship in agricultural value chains. Following a review of the literature on the topic, a survey of youth-led agricultural enterprises was conducted in Ghana and Tanzania. Analysis of the data from the survey is ongoing.
- Yeboah and Jayne have also completed a draft working paper examining the future of work in Africa's agriculture. The paper is aimed at helping the International Labor Organizations and African governments to understand and respond accordingly to the transformational changes shaping the world of work in Africa's agriculture. It is expected to be published in 2018.
- We have also continued efforts to influence policy and programming of organizations with a stake in youth livelihood development. As part of this effort, Yeboah is serving as the lead author for the 2018 Global Food Security Report commissioned by the Chicago Council on Global Affairs. The report examines the challenges and pathways for securing the livelihoods of young people in developing countries through agriculture transformation. Jayne is a member of the taskforce guiding the structure and content of the report. The report is scheduled to be launched in March 2018 and will provide recommendations to the US government on youth employment programming in developing countries.

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

Description: The role of finance in the food system is well known. 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:

- Conducted and collated literature on the existing analytical work on finance policy in Malawi and other related issues that can guide 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.
- Leading the Committee on World Food Security (CFS)'s High Level Panel of Experts (HLPE) project team (PT) to compile a pre-V0 draft of the Report on Multi-stakeholder partnerships to finance and improve food security. The team interacted regularly through Telcon meeting to develop an interface between the role of multi-stakeholder partnerships to enhance innovative finance and to improve food security and

nutrition.

- The PT released V0 draft of the Report on Multi-stakeholder partnerships to finance and improve food security for e-consultation. The team continued to interact regularly through Telcon meeting.
- Working with the Committee on World Food Security (CFS)'s High Level Panel of Experts (HLPE) project team to release a V0 draft of the Report on Multi-stakeholder partnerships to finance and improve food security for e-consultation. The team interact regularly through Telcon meeting do develop an interface between the role of multi-stakeholder partnerships to enhance innovative finance and to improve food security and nutrition.
- High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security (HLPE) Steering Committee Meeting. Discussed revised Version 1 Report and draft Summary and Recommendations for the report. 1-6 May 2018. Yaounde, Cameroun
- High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security (HLPE) Report presented at the University of Roma 3, in Rome on 25 June 2018 (pre-launch session); and the Report was launched in FAO Red Room, Rome on 26 June 2018. The launch was conducted together with the HLPE Coordinator, Dr Nathanael Pingault; the HLPE Report 13 Convener, Dr Muhammad Khan; 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.
- Attended the launch of the Malabo Montpellier Panel Report 2018, Mechanized – transforming Africa's Agriculture Value Chains, in Lilongwe, Malawi on 10 June 2018.
- 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.
- Collection and collation of 75 policy documents on finance and food systems in Malawi for review and analysis.
- Had 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) Steering Committee Meeting. 23-25 November 2018. Rome
- Multi-stakeholder partnerships to Finance and Improve Food Security and Nutrition in the Framework of the 2030 Agenda. Project Team writing meeting plus Workshop with the Centre for Development Innovation at Wageningen University. 6-8 March 2018. Wageningen University. Wageningen Campus, Netherlands.
- High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security (HLPE) Steering Committee Meeting. 2-5 May 2018. Yaounde. Cameroun
- Meetings and interaction with government and private sector officials in Malawi. July 9-12 2018

Presentations:

- Multi-stakeholder Partnerships to Finance and Improve Food Security and Nutrition in the Framework of the 2030 Agenda. Presentation of Version 0 Draft to the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security (the Steering Committee for Peer Review). Rome.
- Multi-stakeholder Partnership coordination mechanism options to enable Food Security implementation. Presentation and participation at the Food Security Policy Workshop. The Presidency and the Southern Africa Food Lab, at The Presidency, Government Avenue, Pretoria. South Africa. 21 May 2018
- Multi-stakeholder Partnerships to Finance and Improve Food Security and Nutrition in the Framework of the 2030 Agenda. High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security (HLPE) Report presented at the University of Roma 3, in Rome on 25 June 2018 (pre-launch session);
- Multi-stakeholder Partnerships to Finance and Improve Food Security and Nutrition in the Framework of

the 2030 Agenda. Report launched in FAO Red Room, Rome on 26 June 2018. The launch was conducted together with the HLPE Coordinator, Dr Nathanael Pingault; the HLPE Report 13 Convener, Dr Muhammad Khan; 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.

- 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

- A V0 draft of the HLPE report on “Multi-stakeholder partnerships to finance and improve food security and nutrition” released for e-consultation.
- HLPE. 2018. Multi-stakeholder Partnerships to Finance and Improve Food Security and Nutrition in the Framework of the 2030 Agenda. Version 1 Draft for Peer Review. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome.
- 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

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: Continue 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.

The team will also explore engagement with BFS and partners on farmer “willingness to pay” for improved seed on a range of crops in planning major new seed sector support programs.

Achievements:

See the updates under Activity 1.4 below.

Push towards Policy Influence (Task 1)

Towards the priority task of giving a push towards policy influence, in this final year of FSP, C4a team focused on following four activities building on previous years’ efforts and accomplishments.

1.1. Sustainable Intensification and Climate Smart Agriculture (Lead: Jayne and Muyanga)

Outputs:

- FSP Synthesis Research Report (Q2-2018). Status: draft paper completed and submitted to Global Food Security – Revise and Resubmit stage. Will soon be formatted as FSP Research Paper.
- FSP Policy Brief (Q2-2018). Status: to be finalized directly after aforementioned FSP Research Paper.
- Policy engagement/outreach activity in Africa (venue and date to be determined, linked to CAADP process if possible, possibly under joint sponsorship with AGRA) (Q3-2018). Status: Task 1/C4a work presented at Global Food Security Conference, Cape Town South Africa, December 2, 2017.
- Policy outreach seminar in Washington DC (possibly BFS, venue/date TBD) (Q4-2018). Status: to be planned in consultation with RFS for fall 2018.
- Targeted discussion with African Development Bank, with aim to influence design and implementation of AFDB Feed Africa Initiative on CSA/SI issues Q3-2018). Status: discussion initiated with Dr. Akin Adesina, AfDB President, May 3 2018. Invited to Abidjan Q3-2018 to explore joint FSP-AFDB collaboration on this issue.

Outcomes:

- Our research findings on the emergence of medium sized farms in Tanzania motivated a special session on medium-scale farms and how they are affecting agricultural value chains during 4th Annual Agricultural Policy Conference, February 14-16, 2018, Dodoma, Tanzania.

1.2 Mechanization in Agricultural Transformation: South-South Learning and Knowledge Exchange

(Lead: Takeshima)

In this final year, FSP resources are used to complement PIM and CSSP funding supports for IFPRI researcher to participate in policy engagement activities in Ghana and Nigeria for possible influence on the government’s policy improvements on mechanization. Expected output is a finished case study book on **mechanization south-south learning**.

Other outputs under this reporting period are discussed under Activity 3.

1.4 Seed system policy. (Lead: Maredia.)

Description: In collaboration with PIM, continue research and engagement on farmers’ willingness to pay for quality seeds on different crops. Engage in outreach events to disseminate the findings from the VPC and legume studies. Explore engagement with AGRA, ISSD, BFS and partners on farmer “willingness to pay” for improved seed on a range of crops in planning major new seed sector support programs.

Achievements:

- A proposal for an Organized Symposium at the 30th International Conference of Agricultural Economists to be held in Vancouver, Canada, July 28-August 2, 2018, has been accepted. It is entitled: Increasing smallholder farmers’ access to quality seeds and traits: markets, institutions and policy considerations.
- A concept note on a study focusing on farmers’ willingness to pay for potato seed in Kenya was developed, and shared with PIM collaborators from IFPRI and CIP. Field research for this study was implemented in March in three counties in Kenya in collaboration with CIP-Kenya office. Data from this study was the basis of MS thesis research of an MSU graduate student who assisted in the study design and field research. A research report based on this research will be completed in early 2019, and a manuscript for publication in a journal will be submitted soon after.
- A study on farmer demand for quality seed was implemented in Myanmar in collaboration with IFPRI and ISSD. The field work for this study was funded by the Myanmar AA. Field testing of the instrument and sampling plan was finalized in March. Data collection was completed in May. A research report based on the farmer survey is underway, and will be published in the second quarter of FY 2019. Following are key summary findings from this study:
 - Farmer awareness of and willingness to pay for seed of improved varieties appears low
 - Farmer awareness of need for regular seed replacement appears low
 - Potential for increased demand through farmer exposure to improved varieties and quality seed through on-farm demonstrations

Implications of these findings for seed sector development in Myanmar are:

- Need for increased farmer exposure to improved varieties and quality seed through on-farm demonstrations
- Farmer seed producer SME's may have a competitive advantage in supplying their communities due to lower costs
- Farmer seed producers need access to high quality early generation seed to multiply: opportunity for private seed companies
- Field work for a follow up study on farmer's willingness to pay for quality seed and cost of seed production was carried out in July-August. M. Maredia participated in enumerator training, pilot testing and few days of field work in August. The field work was completed by end of August with data collection and BDM experiments conducted with more than 500 farmers in a sub-set of villages selected for the seed survey. Data analysis is ongoing as part of MS thesis research by an MSU grad student supported through funding from Myanmar AA.
- All the field work towards the country case studies on the joint work with CGIAR PIM program (cluster 1.2) on seed system and policies for vegetatively propagated crops is completed. A meeting of collaborators to discuss the results and findings from the three case studies (Kenya-potato, Vietnam-potato and cassava, and Nigeria-cassava) was held in April.

Data Management Update

	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	Farm household survey	Socio economic farm data - Malawi/2014, including medium-scale farms	Completed August 2016 (journal article in Land)	1st quarter 2018	Yes (Registered in 2016)
2	Farm household survey	Socio economic farm data - Mozambique/2016, including medium-scale farms	Apr-17 – slowed down due to data quality issues, no analysis undertaken yet	1st quarter 2018	Yes (Registered in 2018)
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)

	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)
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)
6	Farmer survey data - Zambia	Listing of all medium-scale farms in six (6) districts in Zambia. This involves obtaining lists from Zambia National Farmers Union and interviews with ward-level extension workers. Develop lists of landholdings over 10 hectares and a separate list for those who operate more than 10 hectares of farmland. After listings are developed, we aim to interview roughly 5% of the medium-scale farms identified in the listing exercise to obtain information on their characteristics, how and when they acquired their farms, main residence (telephone farmer vs. full time farmer), the area under crops, production levels, etc., and GPS coordinates of the villages	1st quarter 2017 (listing), 3rd quarter 2017 (survey)	1 st Quarter 2019	No (Survey will be registered on DDL after first paper is published from this survey)

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:

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

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

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.

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

Description:

- Leveraging AA funds, the C4b Nigeria team will conduct surveys at the following nodes in Oyo State: (a) Poultry producers, (b) Feed mills, (c) Maize wholesalers, (d) Maize farmers, and (d) Poultry retailers.
- The team will work with partners at various research institutes and institutions of higher learning with mandates to support governments in their agricultural policy development and implementation to disseminate this information at multiple levels.
- While working at the federal level in Nigeria, the team will also work at the state level, due to the important role of the states in actual implementation of national policies and the fact that states often have their own specific agenda. In Spring, 2017, seminars on the sector will be organized at several federal and state level fora.

Achievements:

- The surveys for all the nodes have been completed. The data have been checked and are currently being analyzed. A report on maize wholesalers has been finalized. A report on the nature of labor demand across the different nodes is also underway alongside analysis of the various nodes. The team has presented its initial results to different audiences across Nigeria and beyond. In addition, the findings of this work were featured in the February 17 2018 version of the Economist
- Additional work on Aflatoxins along the maize and poultry value chain was conducted with Nigerian partners including a professor at Federal University of Agriculture Abeokuta and his Masters student who was on campus at MSU under the Nigeria Agricultural Policy Project scholars program. C4B supported this work on aflatoxins conducted by MSU faculty and the scholar as part of the poultry maize value chain research.

Outputs:

Meetings:

- The research team met with the World Bank and the Gates foundation, in Nigeria on March 1 and 9, 2018 respectively.

Research Papers:

- Thus far 1 research paper has been completed on the collected data on maize wholesalers and another research paper on the aflatoxin work. Other communications pieces (an AgriLinks post and a project highlight (similar to a policy brief) from the aflatoxin work were also prepared.
- The Transformation of Value Chains in Africa: Evidence from the First Large Survey of Maize Research Paper 91. Saweda Liverpool-Tasie, Thomas Reardon, Awa Sanou, Wale Ogunleye, Iredele Ogunbayo, and Bolarin T. Omonona. January 2018. http://foodsecuritypolicy.msu.edu/resources/the_transformation_of_value_chains_in_africa_evidence_from_the_first_1
- Other communication piece (Agrilinks and project highlight)
- Aflatoxins Jeopardize Food Safety and Entrepreneurial Food Processing Opportunities in Nigeria. Elisabeth Paymal. Agrilinks. February 12, 2018. <https://www.agrilinks.org/post/aflatoxins-jeopardize->

food-safety-and-entrepreneurial-food-processing-opportunities-nigeria

- Aflatoxins Jeopardize Food Safety and Entrepreneurial Food Processing Opportunities in Nigeria. Highlights 14, Oluwatoyin Ademola, Saweda Liverpool-Tasie and Adewale Obadina, February 2018. http://foodsecuritypolicy.msu.edu/resources/aflatoxins_jeopardize_food_safety_and_entrepreneurial_food_processing_oppor

Policy Briefs:

- The Transformation of Value Chains in Africa: Evidence from the First Large Survey of Maize Traders. Policy Research Brief 56. Saweda Liverpool-Tasie, Thomas Reardon, Awa Sanou, Wale Ogunleye, Iredele Ogunbayo, Bolarin T. Omonona. January 2018. http://foodsecuritypolicy.msu.edu/resources/the_transformation_of_value_chains_in_africa_evidence_from_the_first_large

Peer-reviewed journal articles:

- The team published a paper in the Nigerian journal of Agricultural Economics on the chicken maize transformation in Nigeria in October 2017
- Liverpool-Tasie, L. S.O., B. Omonona, A. Sanou, W. Ogunleye, S. Padilla, and T. Reardon (2017). Growth and transformation of chicken and eggs value chains in Nigeria. Nigerian Journal of Agricultural Economics 7(1):1-15

Field work:

- Field work for surveys at several nodes of the maize-poultry value chain was completed in November, 2017. The data collection involved research teams largely composed of graduate students at University of Ibadan and Ahmadu Bello University alongside young faculty at these institutions or other institutions of higher learning.

Data Analysis:

- Data analysis is ongoing.

Capacity building:

- The team continues to work with faculty and students in Nigeria on the data analysis and report writing. The reports produced on this topic thus far are co-authored with MSU faculty, Nigerian faculty and graduate students.
- With support from the MSU C4B team Faculty (Thomas Reardon and Saweda Liverpool-Tasie) are working with Nigerian faculty and students on the data collected at University of Ibadan in South West Nigeria. A similar arrangement is ongoing with a PhD student at Ahmadu Bello University Zaria and the data in Kaduna. In April 2018, the PhD student at UI working with the research team successfully defended his research proposal based on his work with the team and continues to work on his data analysis
- On the topic of aflatoxin along the maize value chain, C4b funds have supported the research on challenges with aflatoxin along the maize and poultry value chain in Nigeria. This work has had a strong capacity building component as an MSU faculty (Saweda Liverpool-Tasie) is working with food scientists in Nigeria. The Nigerian Masters student (Ms. Toyin Ademola) who has been working on his project and her professor (Adewale Obadina) are currently working with MSU faculty to publish these results in an international peer reviewed article.

Presentations:

- Results from the research of the maize-poultry value chain research team was presented at various fora in Nigeria. In October 2017, some of the results were presented at the Nigerian Ag Econ meetings as well as at stakeholder consultations in Abeokuta, Nigeria that brought together actors along the maize value chain in south West Nigeria. In January 2018, some of the results from this work was also presented to a group of stakeholders in Kaduna, Nigeria. They were also stakeholders operating along the maize-poultry value

chain and included government representatives and civil society. On March 1, 2018, some results from the maize-poultry value chain research was presented at the World Bank office in Nigeria in an activity that attracted both domestic and international participants.

- The poultry sub sector in Nigeria by Saweda Liverpool-Tasie. Presentation at the Poultry value chain consultation workshop, Abeokuta Nigeria October 19, 2017
- The poultry sub sector in Nigeria by Saweda Liverpool-Tasie. Presentation at the Poultry value chain consultation workshop in Kaduna, Nigeria, Jan 15th, 2018
- Food Systems Transformation in Africa: Evidence from Nigeria by Saweda Liverpool-Tasie and Thomas Reardon. Presentation at the World Bank Nigeria, March, 1, 2018
- On 18 June 2018, the team participated in the OECD Seminar titled “Urbanization, Food Economy, Employment, and Women” https://www.slideshare.net/SWAC_OECD/agriculture-food-and-jobs-in-west-africa-105323500. Profs Tom Reardon and Saweda Liverpool-Tasie gave a presentation titled “Food Systems Transformation in West Africa: Implications for Jobs and Policy”. Organizers stated that there were 55 confirmed participants (43 male and 12 female). The participants were from a mixture of donors, development agencies, Central Bank governors from several African countries and local and central government in addition to the OECD/ SWAC team.
- The June 28 follow-up panel discussion (webinar) had 63 participants. Seven were in person and 56 on-line. Profs Tom Reardon and Saweda Liverpool-Tasie each gave presentations on “Food Systems Transformation in West Africa: Evidence from Nigeria” and responded to questions from participants. The focus of the discussion was on the role of policy in food systems transformation and the implications of the findings from research on the maize and poultry subsector supported by the Policy Project. Participants wanted to know the presenters view on the role of policy in food systems transformation in Nigeria. They also wanted to know the implications more broadly of the findings in Nigeria for the debate on food systems transformation in Africa more generally.
- Further, on 26 – 27 June 2018, Saweda Liverpool-Tasie presented results on Poultry Farmers perceptions of and adaptation to climate change in Nigeria conducted under C4B. The presentation was made to policy makers and actors along the value chain which included academics, vet doctors, poultry farmers, poultry traders and feed millers.

Outcomes:

- The results presented thus far have been well received. During the 4 presentations made in October 2017 (2), January 2018 and March 2018, there were government representatives who validated the information, and indicated that the information was very useful for prioritizing government and donor funds. Private sector stakeholders including maize wholesalers also appreciated the research findings and policy briefs distributed.
- The results on the aflatoxin work is typically featured in all the presentations on the maize and poultry value chain and often well appreciated.
- However, in addition to presentations made by MSU faculty, the Nigerian Masters student (Ms. Toyin Ademola) working on the aflatoxin work in Nigeria was also able to present the results of her finding to a team including an official at the Kaduna State Ministry of Agriculture in Kaduna. On February 2, 2018, she talked about the challenges of aflatoxins (a mold that grows on crops such as maize with a detrimental effect on human health) in maize- based products. She discussed her key study finding that domestically produced processed maize products tend to have aflatoxins beyond acceptable levels for human consumption. The ministry official appreciated the information and emphasized the importance of maize in Kaduna State and Kaduna’s leading role in the supply of maize in Nigeria

Challenges:

- While the data collection has been completed using CAPI, several issues during the cleaning and verification have required going back to the programmer. There has been some delay in getting issues ironed out which has affected the data analysis of several nodes. However, it is expected that these will all be resolved by end of 2018.

Data Management Plan:

- The team will make the data available in line with USAID requirements after the team has analyzed all the nodes and produced research outputs.
- The team will work with partners at various research institutes and institutions of higher learning with mandates to support governments in their agricultural policy development and implementation to disseminate this information at multiple levels.

As discussed above, the team continues to work with faculty and students in Nigeria in the data analysis and report writing. On the poultry and maize value chain work. Some of the work of the team was presented at the Nigerian AgEcon meetings in 2017 and published in their journal. Similarly, all the stakeholder fora where results have been presented thus far have had representatives from the different stakeholder groups. Members of the research team and students working with the project are affiliated with various institutions. For example, one of the research supervisors is from the research institute mandated to support one of the study states (Oyo) on issues of agriculture.

In the Aflatoxin work, the team is working with Federal University of Agriculture, Abeokuta and its biotechnology center to understand the prevalence of the problem along the maize value chain.

- While working at the federal level in Nigeria, the team will also work at the state level, due to the important role of the states in actual implementation of national policies and the fact that states often have their own specific agenda. In Spring, 2017, seminars on the sector will be organized at several federal and state level fora.
- As planned, the team made several presentations at Federal and state level in the Spring of 2017. One was in Oyo State
- The growth and dynamism of the poultry sub sector in Nigeria by Saweda Liverpool-Tasie. Presentation made at the Kaduna State Ministry of Agriculture on February 23, 2017
- Value chain concepts and Analysis by Thomas Reardon. Presentation made at Ahmadu Bello University, February 20 and 21, 2017.
- The growth and transformation of the poultry sub sector in Nigeria. by Saweda Liverpool-Tasie. Presentation made at Ahmadu Bello University on February 21, 2017
- The growth and transformation of the poultry sub sector in Nigeria. by Saweda Liverpool-Tasie. Presentation at Oyo State Ministry of Agriculture, Feb 28, 2017
- Other presentations were also made later in Summer 2017, Fall 2017 and Spring 2018.
- For Summer, 2017, a presentation was made at the Annual meeting of the Applied and Agricultural Economics Association (AAEA) meetings in Chicago
 - Rapid agri-food system transformation in sub-Saharan Africa: Preliminary evidence from processed food inventories in Nigeria by Saweda Liverpool-Tasie, Thomas Reardon and Jennifer Abagyeh-Igbudu. Presented at the AAEA, July 31, 2017
- For Fall 2017, the presentation at the Nigerian Ag Econ meetings had national reach with faculty and students from all over Nigeria in attendance. Also in attendance were private sector stakeholders and government representatives
 - Nigerian Poultry Industry: Potentials, Reality and Needs by Mr. Wale Ogunleye. Presentation at the NAAE meetings in Abeokuta, October 17, 2017
- Another presentation was made at the Global Food Security Conference in Cape Town, South Africa which had an international reach
 - The Hidden revolution in the midstream of Africa's food systems - Links to food safety and nutrition by Saweda Liverpool-Tasie, Thomas Reardon and Dave Tschirley. Presentation at the Global food security conference December 3, 2017
- For Spring 2018, One of the presentations was in Kaduna and one in Abuja (both listed above). The presentation in Kaduna had more participants from the state level but from all across the poultry value chain (e.g. poultry farmers, poultry retailers, feed millers, vet doctors, maize traders, government

representatives from the ministry of agriculture)

- The presentation in Abuja was hosted by the World Bank office in Nigeria with participants from several departments at the Federal Ministry of Agriculture and other international organizations. There were also representatives from academia and private sector.

Final Push towards Policy Influence (Task 1)

Towards the priority task of giving a final push towards policy influence, in this final year of FSP, C4b team will focus on following three activities building on previous years' efforts, accomplishments, and outputs of Task number 5 (described in Section 2 of this Workplan).

Activity 1.1. Contributions to IFAD Rural Development Report 2019. (Lead: Tschirley, Reardon (Jayne also))

Achievements: During October to March, Tschirley began work as Lead External Author for IFAD's 2019 Rural Development Report, focused on "Investing in Rural Youth". He worked with the IFAD team to finalize the roster of authors of concept notes, review all the concept notes, provide feedback to all authors, and select authors that would prepare full background papers. He led the substantive portions of an authors' workshop held in Rome in March, that brought together all selected authors and refined the conceptual and empirical approaches that would be used in the RDR. During the succeeding period, he will continue working with the IFAD team on (a) drafting of the overall narrative and framing chapter for the RDR, (b) extensive analysis of household datasets across Africa, Asia, and Latin America, to assess current engagement and future prospects for youth under varying circumstances in each region, and (c) review all background papers and build them into the overall report.

Reardon and Jayne were selected to lead the development of two background papers drawing very heavily on research and insights generated under C4a (Jayne, working in collaboration especially with Kwame Yeboah of MSU) and C4b (Reardon, working with Tschirley and C4b-supported graduate students). Tschirley's overall leadership of the effort has drawn heavily on both the diet change and employment work that has been done under C4b.

Activity 1.2. Agrilinks outreach in September or October, 2018. (Lead: Tschirley, Reardon (Jayne also))

Achievement: This event will draw on C4a and C4b work, being brought together under Task 5. It is currently being scheduled in FY 2019.

Activity 1.3. Engagement in Tanzania on 1) oilseeds policy, and 2) agroprocessing strategy. (Lead: Nyange, Tschirley, Olabisi.)

Description: Edible oils are Tanzania's largest single food import, and have been growing at about 10% per year. At the same time, the local sunflower industry has been growing rapidly over the past decade, with small-scale processing growing along with it. This dynamic has generated intense interest among policy makers on how to continue and enhance the growth of the local sector as an alternative to continued high imports of palm oil.

Nyange, Olabisi, and Tschirley engaged intensively on oilseeds policy during the period. First, with leadership from Olabisi, they worked with an FSP-supported graduate student to estimate a QUAIDS model to explore consumer behavior with respect to edible oils and other foods, and with respect to substitution between alternative oils (primarily domestically produced sunflower oil and imported palm oil). A working paper was finalized and a version was submitted for peer review (ongoing at the present time). This paper is now one of the only quantitative empirical evaluations of this topic extant in the literature. It reached important conclusions with strong policy relevance: that tariffs on imported oils, and other price-based measures, would likely be ineffective in shifting local demand towards locally produced sunflower oil. Attention instead needs to be paid to systemic and structural factors in the rapidly growing sunflower sector, to make it more competitive on quality, level of refinement, and distribution.

Second, the team worked intensively with Dalberg to reflect these findings in a policy brief that was delivered by the Policy Analysis Group to the Minister of Agriculture and the Parliament (these issues then received major attention and vigorous debate during the Parliamentary budgetary sessions held during May).

Finally, Nyange engaged routinely 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.

Outputs

Publication:

- Michael Olabisi, David L. Tschirley, David Nyange, and Titus Awokuse, 2018. The Challenge of Substituting Sunflower Oil for Imported Palm Oil: Evidence from Tanzania. *Feed the Future Innovation Lab for Food Security Policy Research Paper 99*. East Lansing: Michigan State University.

Abstract: This paper presents the estimates of own-price, cross-price, and expenditure elasticities of demand for palm, sunflower, and other edible oils in Tanzania. It applies a QUAIDS model to detailed household level data-focusing on palm and sunflower oil, because for the most part, palm oil is imported and sunflower is domestically produced. The main finding is a surprisingly low level of substitution between the domestic and imported edible oils. Simulated budget shares from the estimates suggest that a 10% tariff increase on palm oil leads to less than a 0.06% change in the budget share of domestically produced sunflower oil. Paper identifies other potential policy implications and highlight steps for further research.

Data Management Update

	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	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 outlets (Supermarket chains, independents, traditional shops, market vendors and street vendors).	March 2018	March 2019	No
2	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	No
3	Seed Value Chain/Local Market Data	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.	June 2018	March 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 inter-agency partners in developing indicators and a tool to select focus countries for the new 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.

#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.

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, micro-nutrient 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 in the final stages of completion and will be presented at the IFPRI-FAO conference in Bangkok in November 2018. The working paper and brief will be 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 at the end of May and is under examination. 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, Africa 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.

Outputs:

Meetings:

- Participation and input in the NAIP clinic in Saly Senegal. 2017
- Meeting with Chair of the National Planning Commission in Malawi. 2017. Invited the team to provide inputs in forthcoming Malawi Growth and Development Strategy

- Meeting with the CAADP focal point in Malawi. 2017. Invited the team to provide inputs in the latest draft of the NAIP
- Meeting with director in the Ministry of economic planning and development in Malawi. 2017. Requested researchers to provide recommendations on a coordination structure for domestication and reporting on international, Africa and regional commitments and obligations.
- Participated in planning meeting for the gender and nutrition NAIP workshop. 2017. Request from FAO to include database as part of NEPAD's knowledge hub
- Meeting with embedded staff in Department of Agriculture. 2017. Discussion of the rollout of the approved process for the formulation and finalization of Malawi's NAIP 2
- Meeting with director in the Ministry of Justice and Constitutional Affairs. 2017. Discussion relating to the focus and content of Malawi's draft Food Security Bill
- Meeting with director in the Ministry of Finance, Economic Planning and Development in Malawi. 2017. Discussion relating to the making of arrangements with key Malawi government officials involved in the NAIP 2 formulation process, food security matters and Malawi's international, African and regional FSN-related obligations and commitments
- Meeting with director in the Office of the President and Cabinet (in Malawi). 2017. Requested information on the possible architecture of a coordinating entity (e.g. Council) for food security
- Meeting with official in the Ministry of Foreign Affairs and International Cooperation in Malawi. 2017. Discussion relating to the identification of Malawi's international, African and regional food security obligations and commitments, and identification of various departments responsible for implementation and compliance
- Meeting with official in the Ministry of Industry, Trade and Tourism in Malawi. 2017. Discussion relating to the international, African and regional food security obligations and commitments relating to food security and nutrition, that are administered by the Ministry
- Meeting with official in the Ministry of Information and Communication Technology. 2017. Requested information on contents of database of FSN-related international, African and regional obligations and commitments as well as the Malawi domestic FSN-related constitutional, policy, statutory, administrative and programme frameworks
- Meeting with official 1 in the Department of Agriculture in Malawi. 2017. Requested provision of inputs on governance matters as well as on Nutrition and gender for purposes of the next version of Malawi's NAIP
- Meeting with official 2 in the Department of Agriculture in Malawi. 2017. Requested provision of inputs on international, African and regional food security obligations and commitments relating to food security and nutrition as well as on an appropriate coordination mechanism for the next version of Malawi's NAIP 2

Policy Briefs:

- Hendriks SL, Olivier NJJ, Mkandawire E and Olivier NJJ. (2017). Draft methodology for evaluating the effectiveness of development planning in terms of the alignment and linkages of international, African and regional commitments and national transversal development imperatives; the quality of the NAIPs in attaining the Malabo and SDG2 targets related to food security; and nutrition and gender equality. FSP Working Paper.
Presentations:
 - The tools and methodology were presented at the ECOWAS NAIP clinic 9 – 13 October in Saly, Senegal. Fourteen of the 15 ECOWAS countries participated in the workshop. Sheryl Hendriks worked with a young expert trained earlier on the C3 Kaleidoscope model policy analysis and the methodology for the C5 component of FSP. He is one of 24 experts trained to use the tool for assessing the NAIPs. As the 7 draft NAIP 2s from ECOWAS were only received a couple of days prior to the clinic, we did a preliminary analysis of Liberia and Togo's plans as examples to share with the participants.
 - Hendriks SL. (2017). NAIP Appraisal: Guidance for component 4 Food Security and Nutrition. ECOWAS

NAIPs 2.0 appraisal analysis and capacity building workshop, Saly, Senegal, 9 October 2017.

- Sheryl L. Hendriks. (2017). NAIP Component 4: Food security and nutrition. Presentation at the NAIP Clinic, Saly, Senegal, 9 – 13 October 2017.
 - 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.
- Capacity Building
- Sheryl L. Hendriks. (2017). NAIP Component 4: Food security and nutrition. Support to country learning at the NAIP Clinic, Saly, Senegal, 9 – 13 October 2017.
 - Sheryl Hendriks finalized the NAIP toolkit section on component 4 that was published and distributed at the CAADP PP. This draws on the C3 and KM work as well as the current C5 work on indicators and policy reform. Link is: <http://www.resakss.org/node/6515>
 - The work on this activity was integrated into the Collaborative Masters in Agricultural and Applied Economics module on Food Security and Nutrition Analysis
- Working papers
- Hendriks SL, Mabuza N, Hendriks KR, Olivier NJJ, Makhura MN, Mkandawire E, Mkhwanazi N, Mkusa L and Vilakazi N. (2018) An evaluation of the level of integration and alignment of the Malabo commitments, Africa's Agenda 2030 and the SDGs in 10 National Agricultural Food Security Investment Plans. Feed the Future Innovation Lab for Food Security Policy Research Paper 107. East Lansing: Michigan State University.
 - Hendriks SL, Olivier NJJ, Mkandawire E and Olivier NJJ. (2017). Draft methodology for evaluating the effectiveness of development planning in terms of the alignment and linkages of international, African and regional commitments and national transversal development imperatives; the quality of the NAIPs in attaining the Malabo and SDG2 targets related to food security; and nutrition and gender equality. FSP Working Paper.
 - Hendriks SL, Fitaweck W, Mkandawire E and Mkusa L. (2018). Food security and nutrition indicators for 20 priority CAADP countries. Feed the Future Innovation Lab for Food Security Policy Research Paper #96. Michigan State University, University of Pretoria and IFPRI. DOI: 10.13140/RG.2.2.18780.49289.
- Blogs
- Sheryl Hendriks and Nic Olivier. Ensuring Food Security and Nutrition Policy Coherence, Agrilinks June 26, 2018
 - Sheryl Hendriks. Guidance and Capacity Critical to National Agriculture and Food Security Investment Plan (NAIP) Design, Agrilinks, June 15, 2018
 - Hendriks SL, Mkandawire E and Mabuza N (2018). African countries' policies must shift to achieve zero hunger. Conversation Africa Special Edition for World Food Day, 2018 <https://theconversation.com/african-countries-policies-must-shift-to-achieve-zero-hunger-104858>.
- Policy engagement
- The paper 'An evaluation of the level of integration and alignment of the Malabo commitments, Africa's Agenda 2030 and the SDGs in 10 National Agricultural Food Security Investment Plans' and the assessment of Nigeria's National Agriculture Investment Plan was shared with the Nigeria CAADP focal person Fatima Aliyu.
 - The HLPE approved approach of establishing coordinated multi-sectoral, multi-stakeholder entities has been recommended to the President of the Republic of South Africa and the Minister responsible for Mineral Resources as the preferred model to bring about the realization of sustainable development initiatives benefitting mining communities by means of a focused memorandum on proposed improvements on the 2018 mining CAP Charter (31 August, 2018).
 - The paper 'An evaluation of the level of integration and alignment of the Malabo commitments, Africa's Agenda 2030 and the SDGs in 10 National Agricultural Food Security Investment Plans' was shared with South African government officials who went to a meeting with SDG indicators

Evidence of policy impact:

- 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 is in an advanced stage of preparation and will be presented during a side event at the IFPRI-Bangkok 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 is in the final stages of completion and will be presented at the IFPRI-FAO conference in Bangkok in November 2018. The working paper and brief will be sent to ECOWAS, the AU, ReSKASS 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.

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, O. Tasié), 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.

1. 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 will seek 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: M. Maredia followed up with the ASPIRES team and our AOR to identify appropriate partner government colleagues to participate in the AAPC held in early 2018. 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 this year's AAPC. Efforts will be made early on to identify and invite other USAID partners next year.

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: This one-time stakeholder survey will be conducted in FY 2019. The plan is to conduct a electronic or online surveys of stakeholders in few partner countries where we have mission funded AA and buy-ins. More guidance will be sought from USAID on the scope of such surveys before initiating the e-survey.

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: An end of the project reflection meeting is planned in March 2019 to bring together global research teams and leads from each country programs.

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. Efforts to register the dataset will be intensified in 2019 to ensure compliance with the Open Data policy.

3. Grant Management, Reporting, and Monitoring and Evaluation

Description: The management team will also continue 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:

In this reporting period, the management team helped coordinate the process of developing a workplan for the final 18 months of the FSP core funded activities. The workplan was submitted to USAID for review on February 7. In addition, FSP has continued its effort to communicate on the impact of its work through “[outcome stories.](#)” These [stories](#) addressed a variety of topics, from a Feed the Future communication department [interview](#) of two FSP’s scientists on youth employment, to [training local enumerators in Rwanda](#). More details are provided under Task 3 report.

The [web site](#) continues to support the overall project as well as in-country activities. It has seen a surge of activity from Nigeria when the call for visiting scholars was launched. It created a new pool of users, putting the number of new users at 82%. The site recorded 869 users for the period, close to a 25% increase.

With the hiring of a new communication manager for MSU Agricultural, Food and Resources Economics department, more communication coordination has also taken place within MSU.

On M&E front, the Management office coordinated the submission of the Narrative reports and indicator reports to FTFMS in November (Annex J). Data analysis and write up of baseline stakeholder surveys for two qualitative indicators was completed and reports posted on the website for Nigeria, Mali, Zambia and Tanzania. Baseline survey for the two indicators in Senegal was completed in March 2018. A follow-up survey for the two qualitative indicators was completed in Malawi in the first quarter of CY 2018. Report based on this survey was completed in November and shared with the stakeholders. A similar follow-up survey for the two qualitative indicators was completed in Nigeria in August. Data analysis 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 new buy-ins.

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. Team formation: consultations with staff from international organizations and other experts in Venezuela to identify potential national specialists. Selection of the research team consisting of five specialists.
2. Write-ups on macro, trade, and production trends: Collated extensive secondary data on production, trade, and macroeconomic variables (including inflation, exchange rates, oil revenues, and per capita GDP); cleaned the data using official data, FAOSTAT, FEDEAGRO, USDA/PSD, World Bank and IMF databases to create the best and most updated series for the macro, trade and production variables of interest; and generated draft write-ups on “Economic Development and Macroeconomic Background,” “Overall View Of Agricultural Production,” “Analysis by Value Chains,” “Trade developments and revealed comparative advantages.” The analysis of production and trade by value chains will be an input

(with the activities mentioned in 4 and 5) to the identification of what products/value chains may support agricultural development and food security under a new set of policies.

3. Write-up on policy evolution and impact: Conducted a detailed review of policy actions affecting Venezuela's agricultural sector since slightly before the entrance of Hugo Chavez into power; organized the material into a detailed Policy Timeline referencing specific decrees and laws and with extensive sourcing of material; used the policy timeline and other information to develop a write-up of policy actions in five key areas, and their implications for the agricultural sector.
4. Estimation of current production gap that could be filled if proper policies were to be put in place: use of multiple data sources to generate an updated time series of estimated total and per capita consumption of key agricultural products; comparison of consumption to production series described above (rise of imports); establishment of a "base year" of consumption and production of each commodity to serve as a basis for projecting (taking into account population growth) that could potentially occur in each value chain if conducive policies were to be put in place.
5. Private sector interviews for development of recovery plan for priority value chains: a member of the central team made two visits to Venezuela to work with our in-country teams in interviewing several dozen private sector actors. Interviews were focused on eight priority value chains. Interviews focused on current operating circumstances, prospects for continued operation, and key policies that would need to be changed if the companies were to resume more normal production and recover to previous levels of production.
6. By mid-2018, the MSU/IFPRI team with the support from the national specialists completed the full draft Assessment Report, which was shared with USAID colleagues and a revised report based on the feedback was resubmitted. The Assessment as well as the final Pathways Report 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.
7. The final draft of the Pathways report includes 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 programColleagues from USAID have indicated that they do not have further comments and are considering further steps regarding how to help the people and democratic institutions in Venezuela.

Progress report on CDAIS Buy-in

The CDAIS Toolkit development work kicked off in late November 2017 with a meeting between USAID and team members from IFPRI, MSU, WUR, and UoF in Washington, DC. During the meeting, the team developed a workplan to produce a draft toolkit, select case studies, and pilot the toolkit in these case studies, before refining and finalizing it toolkit an open-access online resource by project end.

The team is now finalizing a draft of its "Practitioners' Guidebook," which is designed to help USAID internalize the processes, tools, and resources that can be used to integrate capacity development activities into long-term efforts to strengthen agricultural innovation systems. The Practitioners' Guidebook conveys concepts, methods, and examples that are central to this CDAIS approach, and aims to move practitioners from a narrow project-focused perspective to a broader understanding of how their work in one domain of an

innovation system can be adapted to improve the capacity, performance, and resilience of an entire system. In its layout, the guidebook focuses on (a) describing an approach to capacity development that is grounded in an agricultural innovation systems perspective, (b) presenting an interactive “path” that guides users through a reflective process to map, engage, analyze, refine, design, and monitor projects with CDAIS as a core element, (c) emphasizing approaches to developing both technical and functional capabilities at key points in this process, and (d) providing users with ways of selecting appropriate tools and resources to addressing capacity development challenges along this path.

While the guidebook was initially designed to support USAID mission personnel and implementation partners in light of the GFSS Technical Guidance for Capacity Development, the initial case studies and testing are likely to be pursued with other FTF Innovation Labs which are designing or implementing their own capacity development activities.

The CDAIS team holds frequent virtual meetings to ensure a high level of coordination between MSU, IFPRI, WUR, and UFL, above and beyond daily exchanges of content material. These meetings are also open to participation from the USAID activity manager and other personnel to provide input, feedback, and strategic direction. Both parties agree that the team’s efforts to produce the highest quality product possible will require frequent feedback and participation from USAID, a strong orientation toward the needs of practitioners within the CDAIS team, and close engagement with the FTF Innovation Labs and their various partners.

Progress report on Literature Reviews Buy-in

Draft scope of works were shared by USAID on the two literature reviews to be conducted to address the GFSS learning agenda questions. One on GFSS Policy System (to be led by IFPRI), and the other on market systems (to be led by MSU). FSP team is awaiting further guidance on the scope of work. There is no progress to report in this period.

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 a second revision of the synthesis paper in September 2018 and has circulated it to other team members for comment and review. Based on their feedback, the team expects to complete and present the final synthesis to key stakeholders during the final quarter of 2018.

Outputs:

Team Meetings:

- Team workshop: July 16-17, Washington DC.

Presentations:

- Planned for Q1 2019.

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. Revised draft for comment, September 2018.

Policy Briefs:

- Planned for Jan-Mar 2019.

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 core-funded activities as well as in-country AA and Buy-In projects.

In Year 5, FSP’s communication has particularly focused on the production and dissemination of “stories” that demonstrate the impact of FSP’s work on individuals and institutions. These stories emphasized FSP’s activities in support of policy reforms.

To communicate better 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.

ACTIVITY	USAID/ Feed the Future	In-country policy makers and stakeholders	Peer scientists	General audience
10 Outcome stories with a human face	√			√
7 blogs + 1 webinar in <i>Agrilinks</i> month on “food security policy”	√		√	√
1 blog in <i>Agrilinks</i> month on “Enabling environment” (Youth theme)	√			√
1 article in <i>The Conversation</i>	√			√
3 Exhibits (AAEA conference, World Food Prize and FtF directors’/BIFAD meeting)	√		√	√
123 presentations at in-country and world-wide conferences and workshops	USAID missions	√	√	
1 infographic	√			√
1 project video	√	√		√
59 news articles	√	√	√	√
2 issues of the MSU FSG <i>Quarterly Updates</i>	√	√	√	
2 in-country brochures	√	√		√
Twitter account	√	√	√	√
Web site	√	√	√	√
24 FSP Policy Research Briefs	√	√	√	√
37 FSP Research Papers		√	√	
18 Peer-reviewed articles		√	√	

Achievements

1. Produce “outcome stories with a human face”

The project produced ten “outcome stories.” These are told from the voice of individuals who directly benefited from our work, either through a policy reform or capacity building (see list in Annex B). These story topics were identified by the in-country teams who performed the interviews. These articles have been posted on the web site, and promoted through tweets. They were also posted on *Agrilinks* blogs and featured in *Agrilinks Newsletters*.

These “outcome stories” are challenging to produce on a regular and frequent basis because policy reforms are the results of a lengthy process with possible obstacles and delays. It can take a long time for FSP’s

work to impact individual lives, and the attempt at creating an editorial calendar for 2018 has not been very fruitful.

2. Communication news/articles

In addition to the ten “outcome stories,” FSP much contributed to *Agrilinks* June 2018 theme of food security policy with seven blogs and a webinar (Annex C). For *Agrilinks* “Enabling environment” theme of August, we published one story on youth (“[Creating an Enabling Environment for a Youth-Powered Agrifood System Transformation in Africa](#)”).

62 featured/news stories have been produced (not including the outcome stories), also posted on the web site and tweeted about. These articles promote either a new publication, an event, a presentation, or some institutional/individual achievements (Annex D).

A dissemination piece on one of our research papers about aflatoxin in Nigeria was produced and posted on *Agrilinks*: [Aflatoxins Jeopardize Food Safety and Entrepreneurial Food Processing Opportunities in Nigeria](#).

An [infographic](#) was finalized. It shows the complexity of a value chain, taking the example of aquaculture in Myanmar (also posted on *Agrilinks*: <https://www.agrilinks.org/post/what-value-chain-example-aquaculture>).

An article was published in *The Conversation*: Ben Belton, Let them eat carp: Fish farms are helping to fight hunger, *The Conversation*, March 8, 2018

The MSU Food Security Group *Quarterly Updates*, an e- newsletter sent to 2,400 subscribers worldwide, has been revised (contents and format). The newsletter includes articles about FSP and links to its publications. Two issues were published during this fiscal year (February and May 2018). An average of 32.5% of the subscribers opened the e-newsletter, and 19.5% opened a link to a full article. These numbers are very successful for this type of publication.

The story boarding for the video on the integrated framework for gender analysis has been completed. The next step is to complete the animations and finalise the video.

Dialogue participants from the Ministry of Gender, Children, Disability and Social Welfare and the Department of Nutrition, HIV and AIDS in Malawi have been contacted to provide testimonials from the gendering Malawi’s nutrition policy dialogue. A human-interest story will be developed based on these testimonials. Two short pieces on capacity building have been prepared on Task 4 for the gender case study and the journalist training. Several human interest stories could potentially be developed from these pieces.

3. Plan for developing a comprehensive communication strategy for each AA/Buy-in projects

The planning of in-country communication activities is led by each Chief of Party. The FSP communication manager has come in support of in-country communications officers, and of local project activities. She has contributed to identify, edit and promote news articles about each country research outputs, events, and impact.

The FSP communications manager has also supported individual in-country activities, in particular:

- MALAWI

Support of the creation of NAPAS: Malawi first and second issues of its newsletter *NAPAS Happenings*, sent in March 2018, and in October 2018.

Support for the production of two videos:

- Encouraging and Strengthening Cooperatives, October 2017
- Fertilizer Policy Reform.

Updates of the NAPAS: Malawi in-country brochure --on-going

- MALI

A visit of the FSP Mali Chief of Party to MSU in April 2018 allowed to outline a few goals for the communication of the project in Mali, including the production of a brochure for USAID Mali.

Creation of a brochure for Mali –on-going.

- MYANMAR

The FSP communications manager visited the Myanmar team in February 2018. She participated in the Myanmar project team retreat to elaborate its work plan and to identify communication needs and implementation possibilities. She also attended the launch of a pilot research/extension decentralization activity to increase the impact of research and extension services on farmer incomes and food security. This resulted in a featured story (“One Team” Approach to Accelerating Technology Adoption in Myanmar) on *Agrilinks*.

- NIGERIA

The promotion of the call for applications for Nigerian Visiting Scholars, and the Nigeria Agricultural Policy Project visiting scholars’ program. Note that the most popular pages of the web site are about the visiting scholars’ program.

Support of the “Highlights series” (16 posts)

- TANZANIA

Support of the promotion of the Fourth Annual Conference on Agricultural Policy in Tanzania, co-organized by ASPIRES Tanzania.

4. Social media and Web site

The **Twitter account** is extensively used to disseminate FSP’s research findings and key messages (agrifood system transformations, youth employment, nutrition, gender and climate change in sub-Saharan Africa; Myanmar agri-food development). The **Twitter account** passed the 1,000-follower mark in the Summer of 2018. End of August 2018, it has reached about 1,100 followers, with approximately 650 followers and 650 tweets posted over the year. This volume is comparable to the previous year (see analytics graphs in Annex E).

The **website** that was launched in March 2017, has received a very consistent traffic, with a few spikes around major conference events (see analytics in Annex F). The site serves over 13,000 users. The most visited pages are the ones about the Nigerian Visiting Scholars program and its call for application (30% of the traffic). These pages have also a high exit rate, suggesting that the users come to get specific information on the Visiting Program, and then leave the web site. Visitors from the US represent 20%. Tanzania comes in third place with a strong spike of activity around the ASPIRES Annual Conference.

The website is the repository for all FSP news articles, (Annex D), Publications (Annex F) and Presentations (Annex G).

During the Summer 2018, the web site, which has approximately 1,000 entries, has been migrated to another Content Management System platform. This will ensure the site maintenance at MSU beyond the life of the project. This state-of-the-art system allows for complex multiple-display of the information.

The research outputs have been shared using several social media platforms. These outputs have been tracked using the tools available on the various social media platforms to capture the reach (see Annex H).

5. Exhibition table and Project video

FSP exhibited, in conjunction with MSU AFRE Department, at the World Food Prize 2017 and at the AAEA Annual Conference (August 5–7, Washington, DC). FSP was also engaged at the Feed the Future Innovation Labs Directors’ meeting and the BIFAD meeting (September 11–12, 2018, Washington, DC). In addition to having documents on display, the project produced a three-minute video explaining the goals of FSP, taking the Zambia e-voucher policy reform as an example of its impact. The video has also been posted on *Agrilinks* and MSU YouTube, and announced on the FSP Twitter account. As of end of September, it has been viewed 74 times on the FSP site. In addition, MSU AFRE department Facebook post received 144 views and 4 shares.

6. Miscellaneous

During his visit at MSU, Dr. Akin Adesina, President of the African Development Bank, held a private meeting with FSP team members. This visit received a lot of visibility on social media.

7. Conclusion

The communication of the project has continued to support the project scientific outputs. It has also contributed to the production and dissemination of project outcomes and impact, and these efforts will continue until the end of the project.

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.

Activities and outputs:

The content of the report will be based on an initial framework paper that will borrow from the existing and currently developed frameworks and three case studies of reviews on in-country capacity strengthening activities during FSP-IL implementation.

The frame works will be developed based on the C3 thematic output such as the Kaleidoscope model, the tools under preparation for the Capacity Development for Agricultural Innovation Systems, and the Institutional Architecture frame work developed by the Africa Lead.

First country will be Malawi where considerable investment has been made to build local capacity for improving policy processes. It will focus on the Ministry of Agriculture and the local university as the centers for capacity building for food and agricultural policy. Malawi presents an example of consistent policy failures due to poor incentives in the policy systems for generation and use of evidence for policy making. The second country will be Myanmar where capacity strengthening efforts has focused on building the capacity of the actors and players of the national food policy system, during and after the period of transition to a democratic government.

In Myanmar, MOALI, YAU, and the Department of Agricultural Research will be the local focal points. Myanmar is still emerging form a long history of military rule and the institutions are still evolving towards using evidence ion policy making.

The third country case will be from Zambia where long term efforts to policy research capacity in the local think tank – IAPRI- will be analyzed. Zambia provides a case study of successful transfer to the responsibilities from an externally driven initiative to the locally owned organization, which currently faces a choice in terms of the business model for its sustainability and maintaining its relevance and credibility. Results from the case studies will feed into the development of capacity needs assessment and tracking tools.

In preparing the overall synthesis paper, the country level case studies will be analyzed in the context of the regional and continental level policy capacity for addressing policy questions and issues at these levels. This will be done both in the African and south Asian context.

Audience: The audience for this report would be country USAID missions and broader audience including the development community interested in capacity development of evidence generation for policy making in developing countries. More importantly, the synthesis paper will be reviewed and discussed with the collaborators and the policy researchers in the national systems for their inputs and feedback. The synthesis report will be useful for local policy research organizations from public, private and NGO sectors.

Dissemination: The report will be widely available on the MSU – FSP website. Further a policy brie will be prepared to reach out policy makers and research leaders. In addition, we envisage a workshop in University of Pretoria where the key collaborators and the researchers of FSP will be brought in to validate the needs

assessment and tracking tools prepared as part of the report. In addition, other regional fora on capacity development issues, such as the planned RENAPRI regional conference in November 2018 will be used for receiving the feedback from the local research and policy community before finalizing the report.

Outputs:

Meeting and Paper:

- A consultative on line meeting was held among the core team to develop an outline for the research paper. Currently, the outline document is being prepared. The main output planned from this T4 group is the Capacity Development Lessons paper. The paper will be finalized and shared with USAID by the end of December

The paper will be enriched by case studies that have been done in several African countries on the Higher education capacity for agriculture in which policy capacity is a key element.

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:

1. 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:
 - a. 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;
 - b. The ways in which youth access to land, youth migration, and youth employment decisions interact, with implications for land and agricultural policy.
 - c. 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;
 - d. 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.
 - e. 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.
2. 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;
3. 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,
4. 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.
5. 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.

Achievements:

On Items 1(a) and (b), background papers have been produced. The team is now working on producing policy briefs before the end of this month.

On items 3a and 3b.iii, commodity balance sheets and PE modelling completed for Zambia (Maize, soybeans), Malawi (maize, soybeans) and Tanzania (maize and sunflower). Draft policy brief/report are completed. The report covers baseline outlook for these countries and sectors. A product flow map, that provides split between smallholders/SME and commercial operations and markets have also been completed. This will assist in linking the PE modelling work and the other components. These results will be presented in the forthcoming ReNAPRI annual conference on November 28 -29, 2018, in Zanzibar, Tanzania.

The grand synthesis report will be completed by February 2019.

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.

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: in progress but behind schedule. Several useful discussions to date with USAID/E3 Land team, IFPRI/Hosaena and MSU/Jayne and Muyanga. This report is in progress. Anticipated completion, January 2019.

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

Status: To be completed after Activity 1, anticipated January 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 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, 2019

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

Status: In-progress - to be completed by February 15, 2019

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 (GENDER, NUTRITION, CLIMATE RESILIENCE, AND YOUTH EMPLOYMENT)

The FSP program has considered gender, nutrition, climate change and youth employment 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 of these 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. This will lead to the writing of four policy research briefs.

Achievement: Two policy briefs synthesizing key findings and identifying policy recommendations regarding gender and nutrition have been completed and will be made available on the FSP-IL website shortly. The policy briefs on the cross-cutting themes of climate change and youth employment are being finalized.

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 the processes of decision-making within farm households and how these affect agricultural outcomes at the International Conference of Agricultural Economists (ICAE) held in Vancouver, Canada.

Outcomes:

The expectation is that these briefs would inform the larger end of project FSP lessons learned and synthesis documents.

The organized session at the ICAE reflected on how the concepts and measurements we choose affect the outcomes we study, and the implications for messages we deliver to policymakers. Insights on how to improve the validity of findings when conducting intrahousehold analysis were discussed.

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

Description	Dates	Amount	Status (as of October 8, 2018)
<i>Food Security Policy Leader Award RC102750</i>	7/15/2013 - 1/14/2020	Amount: \$15,000,000 Obligated: \$14,668,117	Operational
Modification Buy-In:			
USAID/Mali <i>RC104270</i>	9/8/2014 – 1/14/2020	Amount: \$900,000 Obligated: \$900,000	Operational
USAID/Tanzania (ASPIRE) <i>RC106131</i>	7/15/2013 – 1/14/2020	Amount: \$6,000,000 Obligated: \$6,000,000	Operational
USAID/Tanzania <i>RC104271</i>	9/8/2014 – 1/14/2020	Amount: \$500,000 Obligated: \$500,000	Operational
USAID ZAMBIA <i>RC106132</i>	7/15/2013 – 1/14/2020	Amount: \$1,500,168 Obligated: \$900,000	Operational
USAID/West Africa <i>RC104272</i>	9/8/2014 – 1/14/2020	Amount: \$600,000 Obligated: \$600,000	Operational
USAID/CDAIS Toolkit <i>RC107949</i>	1/1/2018 – 1/14/2020	Amount: \$700,000 Obligated \$700,000	Operational
USAID/Venezuela <i>RC107950</i>	1/1/2018 – 1/14/2020	Amount: \$300,601 Obligated: \$300,601	Operational
USAID/Lit review <i>RC107XXX</i>	08/01/2018 – 1/14/2020	Amount: \$130,000 Obligated: \$130,000	Operational
Associate Awards:			
Food Security Policy Project (Myanmar) <i>RC104236</i>	9/24/2014- 9/23/2019	Amount: \$7,718,509 Obligated: \$6,743,307	Operational
Malawi New Alliance Policy Acceleration Support (NAPAS) <i>RC104584</i>	11/24/2014- 11/27/2018	Amount: \$4,002,467 Obligated: \$4,002,467	Operational
Senegal Agricultural Policy Project (PAPA) <i>RC105142</i>	7/27/2015- 7/26/2018	Amount: \$6,000,000 Obligated: \$5,378,962	Operational
Nigeria Agricultural Policy Project <i>RC105214</i>	7/1/2015- 6/30/2020	Amount: \$12,499,999 Obligated: \$8,526,537	Operational
Mali Associate Award <i>RC105885</i>	2/17/2016 – 2/15/2021	Amount: \$4,399,932 Obligated: \$2,800,000	Operational
African Great Lakes Coffee <i>RC105110</i>	7/20/2015- 7/19/2018	Amount: \$1,800,000 Obligated: \$1,390,000	Complete

ANNEX B. LIST OF OUTCOME STORIES

AGLC:

[Coffee Means Cash](#)

[Red Cherries and Farmers Who Do it Right](#)

Mali and West Africa:

[How to Tell Fake from Real? Consequences of Rapid Herbicide Market Growth in Mali and West Africa](#)

[How Big Is my Parcel? – Measuring farm size in Mali](#)

Myanmar:

[“Freedom of Crop Choice” Brings Prosperity to Myanmar’s Farmers](#)

Nigeria:

[From Data Collection to Policy Implementation in Nigeria](#)

Senegal:

[Empowering an Agricultural Policy Research System: The Case of the Network of Local Centers of Expertise in Senegal](#)

Tanzania:

[From Paper to Digital: E-Payment Benefits Tanzanian Local Governments and Taxpayers](#)

[Tax Reforms Benefit Farmers and Traders: A Case of Tea Production and Marketing in Tanzania](#)

Zambia:

[A Policy Reform Boosts Business and Promotes Diversification: The E-Voucher Program in Zambia](#)

ANNEX C: AGRILINKS CONTRIBUTIONS FOR “FOOD SECURITY POLICY MONTH,” JUNE 2018

Ask the Expert: Strengthening National Policy Systems: Bridging the Disconnect between the Evidence and Action for Food Security

AgriLinks hosted a special 30-minute Q&A with Feed the Future IL Food Security Policy researchers [Suresh Chandra Babu](#) (IFPRI) and [Duncan Boughton](#) (MSU) around the connection and disconnect between research findings and the policy process. June 25, 9:30-10:00 am EDT

Gender-responsive Nutrition Policies – A Myth or a Possibility?

June 11, 2018

Elizabeth Mkandawire and Sheryl Hendriks (University of Pretoria)

Policymakers often incorrectly understand gender to mean addressing women’s issues. This interpretation can negatively influence policy outcomes. When it comes to nutrition policies and responsibilities, men have a vested interest in improving maternal and child nutrition.

Building Resilience Through Better Policies

June 15, 2018

Mywish Maredia (MSU) and Xinshen Diao (IFPRI)

How is the Feed the Future Innovation Lab for Food Security Policy ([FSP](#)) addressing resilience through policies? The multi-pronged strategy is illustrated with examples of the Lab’s outputs.

Guidance and Capacity Critical to National Agriculture and Food Security Investment Plan

June 15, 2018

Sheryl Hendriks (University of Pretoria)

Dramatic change has been happening in Africa for at least the past decade. Much of the progress can be attributed to the revived focus on agriculture as a driver of inclusive economic growth through the Comprehensive Africa Agricultural Development Programme (CAADP). Despite some progress, the growth has been unequal and not sufficient to significantly reduce food insecurity, malnutrition, and poverty.

Are Medium-scale Farmers Driving Agricultural Transformation in Africa?

June 21, 2018

Thomas Jayne (MSU)

The rapid change from small-scale farms and medium-scale one has many implications for the agricultural production of developing countries.

Ensuring Food Security and Nutrition Policy Coherence

June 26, 2018

Sheryl Hendriks and Nic Oliver (University of Pretoria)

Food security involves many sectors and partners requiring to make sure that policy is coherent across sectors. How then do governments ensure policy congruence?

Spinning the Kaleidoscope Model

June 22, 2018

Danielle Resnick (IFPRI) and Steve Haggblade (MSU)

The complexity of the policy process can be analyzed with the Kaleidoscope Model that helps identify 16 variables at play during the design and implementation of a policy.

Why the Influence of Agricultural Policy Research in Developing Countries is Probably Greater than We Think

June 29, 2018

Thom Jayne, Tom Reardon, Mywish Maredia, David Tschirley (MSU)

There are at least three categories of impactful policy-oriented research that development organizations should be promoting, even though it may be difficult to track the immediate impact of such research on a policy change.

ANNEX D: FEATURED STORIES/NEWS ARTICLES

1. [Land Pressure and African Agricultural Development](#)
An interview with Thomas Jayne, SciDevNet, 10/30/18
2. [WEBINAR: Do Medium and Large-scale Farms Generate Income Spillovers for Rural Households?](#)
Jayne and J. Chamberlin. October 30, 2018
3. [Government Includes Rice in Subsidy Programme](#)
Paidá Mpaso. October 19, 2018
4. [NAPAS: Malawi Intensely Disseminates Policy Information](#)
Paidá Mpaso. October 18, 2018
5. [The Quiet Revolution in Food Systems in Africa & Asia](#)
Thomas Reardon. October 17, 2018
6. [What Are Some Ways to Apply the "Toggle Switch Idea"](#)
Discussion 3 about writing an article for a peer-reviewed journal (9'34"), T. Reardon and S. Liverpool Tasie. October 13, 2018
7. [How to Get Published in a Peer Reviewed Journal](#)
How to write a successful article: 5 key points in a 1 minute video. Tom Reardon and Saweda Liverpool Tasie. October 13, 2018
8. [What Are Some Ways to Make the Case for your Work's Contributions to the Literature](#)
Discussion 2 about writing an article for a peer-reviewed journal (9'37"), T. Reardon and S. Liverpool Tasie. October 13, 2018
9. [How Could You Sell a Research Idea about Nigeria to a Non-Nigerian Reviewer](#)
Discussion 1 about writing an article for a peer-reviewed journal (9'53"), T. Reardon and S. Liverpool Tasie. October 13, 2018
10. [The Art of Research Discovery and Writing Good Articles - VIDEO](#)
P T. Reardon. October 12, 2018
11. [NAPAS: Malawi Value Chain Studies Inform Selection of Value Chains to Be Developed under the World Bank Agricultural Commercialization Project](#)
Flora Nankhuni and Joseph Kanyamuka October 3, 2018
12. [VIDEO: Malawi National Agriculture Investment Plan](#)
A 3-minute video about NAPAS: Malawi contribution to the Malawi National Agriculture Investment Plan (NAIP). Paidá Mpaso. 10/1/2018
15. [Tax Reforms Benefit Farmers and Traders: A Case of Tea Production and Marketing in Tanzania](#)
How our SPIRES Tanzania team research on crop cess study benefits farmers.
16. [The Transformation of Rural Africa](#)
Edited by T. S. Jayne, Jordan Chamberlin, and Rui Benfca, this collection provides a micro economic foundation for understanding the particular growth processes at work within the region's rural areas.
17. [What's FSP? The answer in a 3-minute video](#)

An overview video explains what we do, with the example of a policy reform in Zambia.

18. [The Farmer Organization Development Strategy \(FODS\) is Validated](#)
Malawi FODS are "an important milestone for the agriculture commercialization objective of the Ministry."
19. [How Big Is my Parcel?](#)
Malian farmers are concerned about being better farmers, and knowing the exact size of the fields they farm is a fundamental change.
20. [Fertilizer Policy Reform in Malawi](#)
This 8-minute video explains Malawi's on-going fertilizer policy reform that includes soil testing and Extension support.
21. [Second Conference of the Feed the Future Nigeria Agricultural Policy Project](#)
"Collaborative Research for Agricultural Policy in Nigeria" Abuja, 14-16 August 2018
22. [On Agrilinks: Creating an Enabling Environment for a Youth in Ag](#)
Recommendations to create an enabling environment to fully harness young people's innovativeness and energies for inclusive agricultural transformation.
23. [T. S. Jayne receives AAEA Fellow award](#)
Video of T. Jayne's AAEA Fellow award speech, Washington DC, August 6, 2018
24. [FSP at AAEA 2018 in DC](#)
FSP team members are honored at AAEA 2018, and present their research (see our schedule). Meet us at our exhibition table.
25. [FSP at ICAE 2018](#)
FSP experts extensively present at ICAE 2018. Find out what, where and when. See you there!
26. [Ministry of Agriculture Directors endorse two drafts: The National Fertilizer Policy and the Agriculture, Food and Nutrition Strategy](#)
27. FSP Napas: Malawi has been responsible for the drafting of the National Fertilizer Policy since 2015, as well as for providing technical and financial support to the Agriculture, Food and Nutrition Strategy.
28. [Stakeholders' Roundtable with the Minister of Livestock and Fisheries in Dodoma](#)
At the request of the Minister of Livestock and Fisheries, ASPIRES and SAGCOT facilitated a roundtable discussion whereby the Minister met with key representatives of the livestock and fisheries sectors.
29. [June Was Food Security Policy Month on Agrilinks](#)
See how we explained and shared our expertise on policy and food security in developing countries, with 7 blogs and 1 webinar.
30. [Why the Influence of Agricultural Policy Research is Probably Greater than We Think](#)
We believe there are at least three categories of impactful policy-oriented research that development organizations should be promoting, even though it may be difficult to track the immediate impact of such research on a policy change.
31. [The Policy Analysis Group Organizes a Seminar with Members of Parliament in Dodoma](#)

PAG presents recommendations for advancing the agricultural sector's contribution towards creating an industrialized economy to Tanzania's Members of Parliament in collaboration with the Ministry of Agriculture.

32. [FSP and IAPRI Technical Training on Applied Econometrics and Stata](#)
FSP in Zambia brings technical support to IAPRI, a think tank on agricultural policy analysis.
33. [Ensuring Food Security and Nutrition Policy Coherence](#)
Food security involves many sectors and partners requiring to make sure that policy is coherent across sectors. How then do governments ensure policy congruence?
34. [Spinning the Kaleidoscope Model](#)
The complexity of the policy process can be analyzed with the Kaleidoscope Model that helps identify 16 variables at play during the design and implementation of a policy.
35. [Are Medium-scale Farmers Driving Agricultural Transformation in Africa?](#)
The rapid change from small-scale farms and medium-scale one has many implications for the agricultural production of developing countries.
36. [Strengthening National Policy Systems: Bridging the Disconnect between the Evidence and Action](#)
AgriLinks "Ask the Experts" on policy process, with FSP's Suresh Babu and Duncan Boughton. Ask your own question, live, June 25, 9:30-10:00 EDT
37. [Guidance and Capacity Critical to National Agriculture and Food Security Investment Plan \(NAIP\) ...](#)
Sheryl Hendriks, *AgriLinks*, June 15, 2018. Dramatic change has been happening in Africa for at least the past decade.
38. [Building Resilience through Better Policies](#)
How is FSP addressing resilience through policies? The multi-pronged strategy is illustrated with examples of the Lab's outputs, in *AgriLinks*, June 15, 2018
39. [NAPAS: Malawi Value Chain Studies at the World Bank's ICABR Conference in DC](#)
NAPAS: Malawi published six value chain studies to inform Malawi's policy makers and investors: Cassava, groundnuts, macadamia, pigeon pea, potato and tea.
40. [Launch of the Malawi National Agriculture Investment Plan](#)
June 13, 2018 - MoAIWD launched the National Agriculture Investment Plan (NAIP) which is the medium-term investment framework for the agricultural sector for the next five years.
41. [ASPIRES Supports Tanzania's Agricultural Sector Development Program II \(ADSP II\)](#)
In Tanzania, agriculture represents 23% of the GDP while employing 70% of the labor force. ASDP II aims at boosting the agricultural sector.
42. [FSP West Africa Expertise on Herbicide Policies at the International Consortium on Applied Bioeconomy](#)
This panel explores the impact of the resulting rapid growth in herbicide use.
43. [Gender-responsive Nutrition Policies – A Myth or a Possibility?](#)
Policymakers often incorrectly understand gender to mean addressing women's issues. E. Mkandawire and S. Hendriks explain in an *AgriLinks* blog.
44. [Climate Change and Food Security: Threats and Hopes for Nigeria](#)

By Laura Schmitt Olabisi and Saweda Liverpool-Tasie: "We've gotten used to the looks on farmers' faces by now—shaking heads, looking to the sky as if for an explanation, frowning worriedly. The rains aren't the same as they used to be, they tell us."

45. [FSG May 2018 Quarterly Updates issue is released](#)
Our latest publications and presentations with a few activity highlights.
46. [FSP's study of the long-term benefits of fertiliser subsidies program in Malawi](#)
Ricker-Gilbert and Jayne article "Estimating the Enduring Effects of Fertiliser Subsidies on Commercial Fertiliser Demand and Maize Production" in the Journal of Agricultural Economics (2017), was one of the journal's top 20 most downloaded recent papers.
47. [MSU CANR Dean Ron Hendrick Visits Tanzania](#)
In an effort to strengthen partnerships with local collaborators, Ron Hendrick, the Dean of the College of Agriculture and Natural Resources (CANR), made an official visit to Tanzania from May 13th to 18th, 2018.
48. ["One Team" Approach to Accelerating Technology Adoption in Myanmar](#)
Combining farmer, research and extension expertise toward a sustainable and profitable agricultural sector in Myanmar
49. [Nigerian Visiting Scholar's Program Hosts Three Faculty on MSU Campus](#)
The chief objectives of the professors' visit was to monitor the progress of their students and to interact with MSU faculty in areas of mutual interest.
50. [Policy Project Supports Development and Collaboration for Nigerian Faculty](#)
AFRE is building further connections with Africa by hosting several Nigerian scholars and students under the USAID funded Nigeria Agricultural Policy Project Policy project led by Dr. Saweda Liverpool-Tasie.
51. [FSG Faculty Meets with Akin Adesina, President of the African Development Bank, 2017 World Food Prize Laureate](#)
"Agriculture is cool, agriculture is sexy." —Dr. Adesina
52. [7 Unmistakable Signs of Agri-food Systems Transformation in Africa](#)
It's happening, and offers many investment opportunities. A seminar by Jayne & Kray, Ministry of Agriculture, Gvt of Tanzania, April 10, 2018
53. [Youth for Growth, Transforming Economies through Agriculture](#)
A Report by Felix Kwame Yeboah, Principal Author (FSP C4a), sponsored by the Chicago Council for Global Affairs
54. [What Is a Value Chain? The Example of Aquaculture](#)
Ben Belton, Mateusz Filipski and Elisabeth Paymal 03/22/2018
55. [Let Them Eat Carp](#)
Ben Belton 03/08/2018
56. [FSP Researchers Lead Special JDS Issue](#)
Thomas Jayne 03/02/2018
57. [The Economist: How the Growth of Cities Changes Farming](#)

Ben Belton and Saweda Liverpool-Tasie 03/01/2018

58. [Aflatoxins Jeopardize Food Safety and Entrepreneurial Food Processing Opportunities in Nigeria](#)
Oyinkansola Tasie, Saweda Liverpool-Tasie, and Elisabeth Paymal 02/16/2018
59. [4th Annual Agricultural Policy Conference in Tanzania](#)
Elisabeth Mwambulukutu and David Nyange 02/16/2018
60. [Malawi Land Symposium video](#)
February 12, 2018 - Author: Flora Nankhuni and Paida Mpasu
61. [Hidden Middle](#)
Tom Reardon. 1/29/2018
62. [Call Deadline Extended and Now Open to All Nigerian Scholars](#)
Nigeria Agricultural Policy Project team 01/25/2018
63. [FSP's Mid-term Performance Evaluation Is Featured on USAID DEC Newsletter](#)
Paymal, Elisabeth 12/21/2017
64. [Malawi's National Agriculture Policy: How a Policy Reform Comes About](#)
Flora Nankhuni and Athur Mabiso 12/20/2017
65. [A Global Food Security Symposium](#)
David Tschirley 12/03/2017
66. [Feed the Future Nigeria Agricultural Policy Project supports Kaduna State Ministry](#)
Oyinkan Tasie and Steve Longabaugh 11/28/2017
67. [Feed the Future Nigeria Agricultural Policy Project Builds Capacity of Young Nigerian Scholars...](#)
Oyinkan Tasie and Steve Longabaugh 11/28/2017
68. [Causes and Consequences of Changing Farm Size Distribution](#)
Paymal, Elisabeth 11/13/2017
69. [Feed the Future Interviews FSP Scientists](#)
Thomas Jayne and Kwame Yeboah 10/31/2017
70. [VIDEO - Encouraging and Strengthening Cooperatives](#)
Paida Mpasu 10/23/2017
71. [Regional Pesticide Policies in West Africa](#)
Steve Haggblade 10/13/2017
72. [AGLC scientists engage with FAO](#)
David Ortega 10/12/2017
73. [Soil Health Issues Dominate Fertilizer Policy Consultations](#)
Paida Mpasu 10/04/2017
74. [Enumerator Training Kicks Off Endline Survey for AGLC in Rwanda](#)
Aniseh Bro 10/03/2017

75. [Diet transformation in South Eastern Africa](#)
David Tschirley 10/03/2017

ANNEX E: TWITTER ACCOUNT ANALYTICS

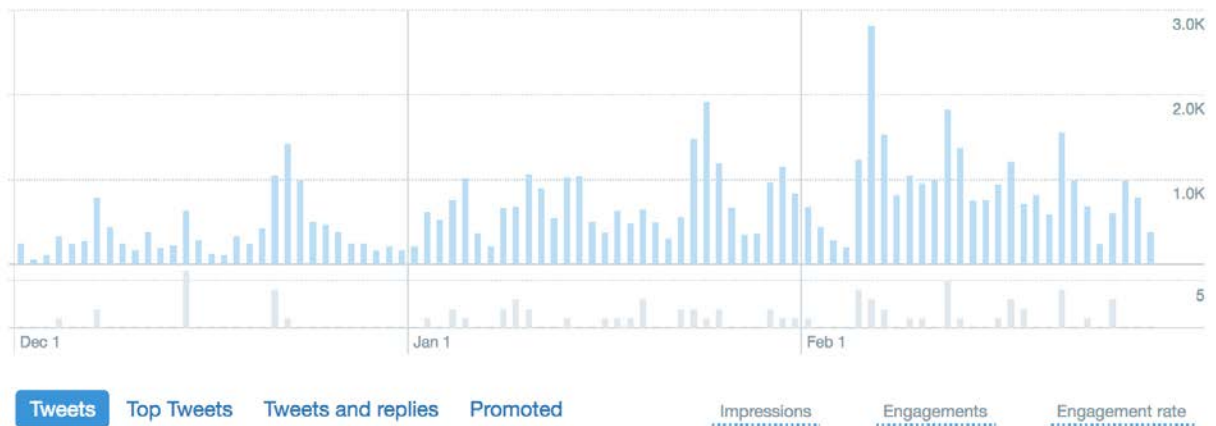
September 1 – November 30, 2017

Your Tweets earned **58.3K impressions** over this **91 day** period



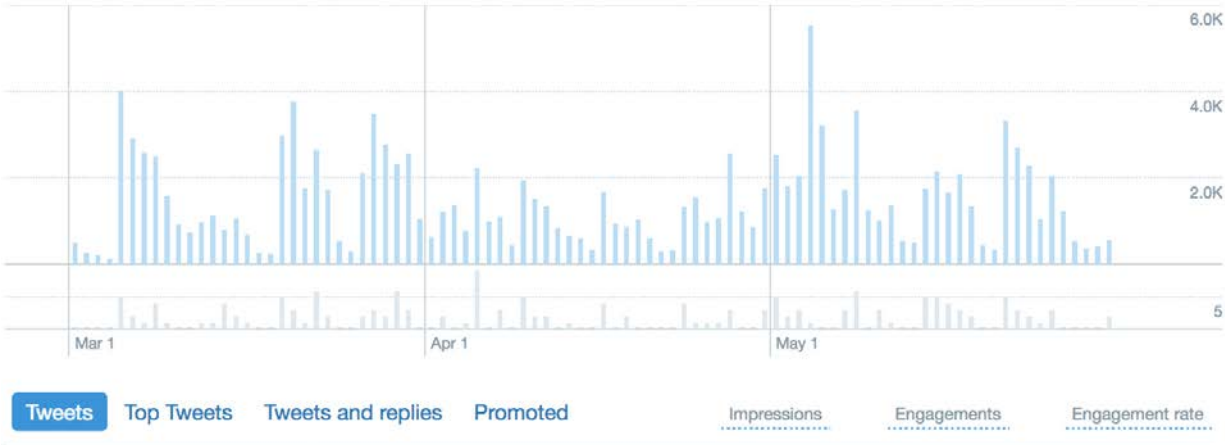
December 1 – February 28, 2018

Your Tweets earned **60.4K impressions** over this **90 day** period



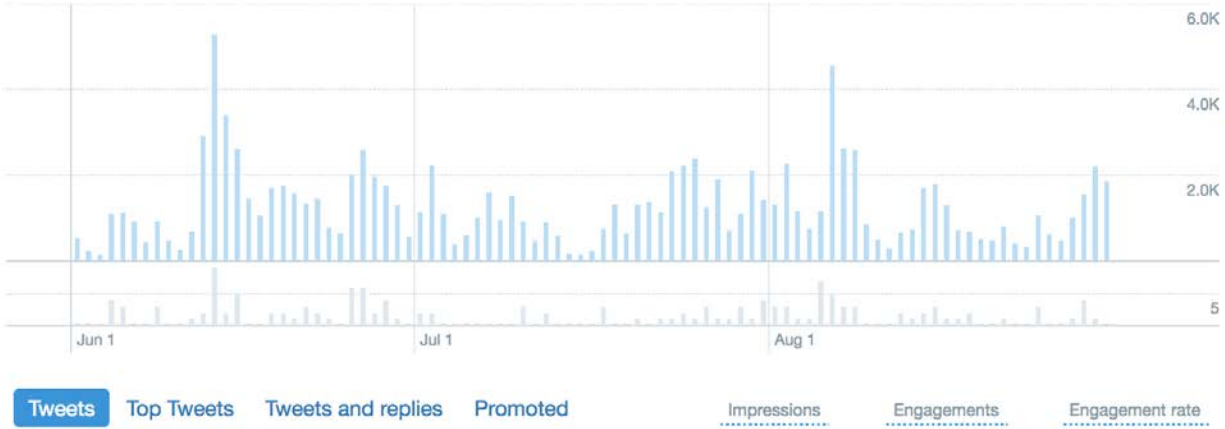
March 1 – May 30, 2018

Your Tweets earned **133.4K impressions** over this **91 day** period

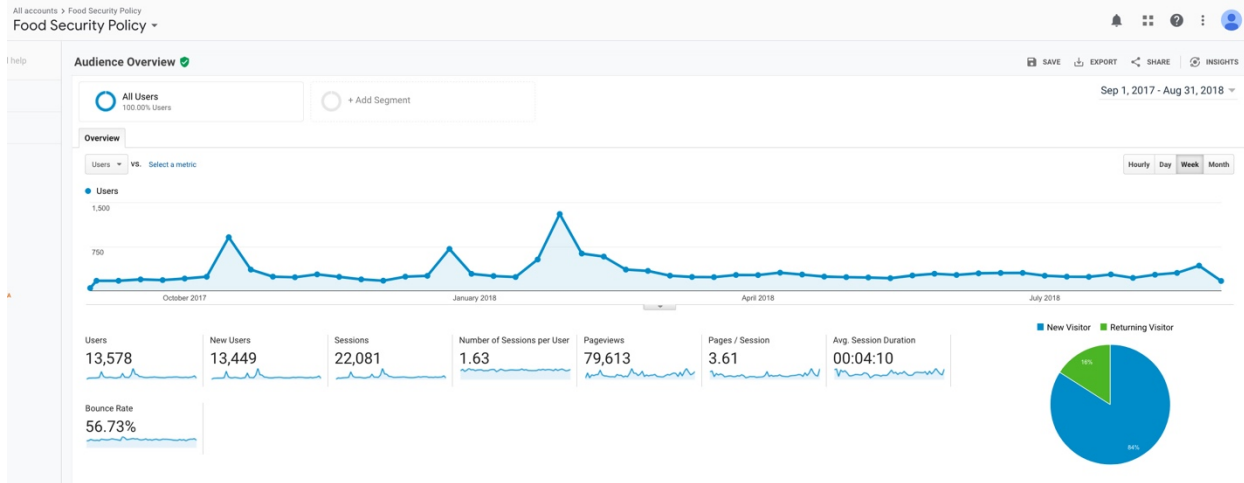


May 30 – August 31, 2018

Your Tweets earned **116.3K impressions** over this **91 day** period



ANNEX F: WEB SITE TRAFFIC



Country	Users	% Users
1. Nigeria	4,250	30.90%
2. United States	2,811	20.44%
3. Tanzania	1,417	10.30%
4. Myanmar (Burma)	512	3.72%
5. Malawi	487	3.54%
6. United Kingdom	404	2.94%
7. Kenya	279	2.03%
8. India	235	1.71%
9. South Africa	225	1.64%
10. Rwanda	212	1.54%

ANNEX G: PUBLICATIONS

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

1. The Occurrence and Co-Occurrence of Aflatoxin and Fumonisin Along the Maize Value Chain in Southwest Nigeria. Lenis Liverpool-Tasie*, Nikita Saha Turna*, Oluwatoyin Ademola, Adewale Obadina, Felicia Wu, 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 120. East Lansing: Michigan State University
2. The Rapid Transformation of the Fish Value Chain in Nigeria: Evidence from Kebbi State. Ayuba Gona, Gwoni Woji, Sunday Norbert, Hajar Muhammad, Lenis S. O. Liverpool-Tasie, Thomas Reardon, Ben Belton, 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 118. East Lansing: Michigan State University
3. Climate Change Adaptation among Poultry Farmers: Evidence from Nigeria. Lenis Saweda O. Liverpool-Tasie, Awa Sanou and Justice A. Tambo, 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 117. East Lansing: Michigan State University
4. The Effect of Processing Practices on Mycotoxin Reduction in Maize Based Products: Evidence from Lactic Acid Fermentation in Southwest Nigeria. Oluwatoyin Ademola, Lenis Saweda O. Liverpool-Tasie, Adewale Obadina, Nikita Saha Turna, Felicia Wu, 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 116. East Lansing: Michigan State University
5. Energy Demand Substitution from Biomass to Imported Kerosene: Evidence from Tanzania. Michael Olabisi, David L. Tschirley, David Nyange and Titus Awokuse. 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 113. East Lansing: Michigan State University
6. Analysis of Distributed Coffee Inputs in Rwanda: Pesticide Access and Fertilizer Volume. Andrew Gerard, Daniel C. Clay, Maria Claudia Lopez, Kathryn Bowman, and Daniel Rukazambuga, 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 112. East Lansing: Michigan State University
7. Understanding and Improving the Price-Quality Relationship in Rwanda's Coffee Sector. Ruth Ann Church, 2018. Understanding and Improving the Price-Quality Relationship in Rwanda's Coffee Sector, Feed the Future Innovation Lab for Food Security Policy Research Paper 111. East Lansing: Michigan State University
8. Mechanization Outsourcing Services in Myanmar's Dry Zone. Ben Belton, Peixun Fang, and Thomas Reardon, 2018. Mechanization Outsourcing Services in Myanmar's Dry Zone, Feed the Future Innovation Lab for Food Security Policy Research Paper 110. East Lansing: Michigan State University
9. The Quality of Agriculture and Food Security Policy Processes at the National Level in Malawi Results from the 2017–18 Malawi Agriculture and Food Security Policy Processes End Line Survey. Todd Benson, Zephania Nyirenda, Flora Nankhuni, and Mywish Maredia, 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 109. East Lansing: Michigan State University
10. An Evaluation of the Level of Integration and Alignment of the Malabo Commitments. S. Hendriks, et al. 2018. An Evaluation of the Level of Integration and Alignment of the Malabo Commitments, ..., Feed the Future Innovation Lab for Food Security Policy Research Paper 107. East Lansing: Michigan State University
11. Identifying Priority Value Chains in Tanzania. James Thurlow, Josee Randriamamonjy and Todd Benson, 2018. Identifying Priority Value Chains in Tanzania, Feed the Future Innovation Lab for Food Security Policy Research Paper 106. East Lansing: Michigan State University

12. The Challenge of Export-led Agricultural Growth with Monopsonistic Markets. Duncan Boughton, Steven Haggblade, and Paul Dorosh, 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 105. East Lansing: Michigan State University
13. Myanmar's Rural Economy: A Case Study in Delayed Transformation. D. Boughton, N. Aung, B. Belton, M. Filipski, D. Mather, E. Payongayong, 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 104. East Lansing: Michigan State University
14. Mechanization and Crop Productivity, Profitability and Labor Use in Myanmar's Dry Zone - RP103. David Mather and Ben Belton, 2018. Mechanization and Crop Productivity, Profitability and Labor Use in Myanmar's Dry Zone, Feed the Future Innovation Lab for Food Security Policy Research Paper 103. East Lansing: Michigan State University
15. Crop Production and Profitability in Myanmar's Dry Zone. David Mather, Nilar Aung, Aime Cho, Zaw Min Naing, Duncan Boughton, Ben Belton, Kyan Htoo, and Ellen Payongayong, 2018. Crop Production and Profitability in Myanmar's Dry Zone. Feed the Future Innovation Lab for Food Security Policy Research Paper 102
16. Agricultural Mechanization in Ghana: Insights from a Recent Field Study. X. Diao, J. Agandin, P. Fang, S. Justice, D. Kufoalor, and H. Takeshima, 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 101. East Lansing: Michigan State University
17. The Challenge to Sustainable Growth in Rwanda's Coffee Sector. Daniel C. Clay and Alfred Bizoza, 2018. The Challenge to Sustainable Growth in Rwanda's Coffee Sector. Feed the Future Innovation Lab for Food Security Policy Research Paper 100. East Lansing: Michigan State University.
18. The Challenge of Substituting Sunflower Oil for Imported Palm Oil: Evidence from Tanzania. Olabisi, Tschirley, Nyange, Awokuse, 2018. The Challenge of Substituting Sunflower Oil for Imported Palm Oil: Evidence from Tanzania. Feed the Future Innovation Lab for Food Security Policy Research Paper 99.
19. An Analysis of Malawi's Pigeon Pea Value Chain. Nathalie M. Me-Nsope and Flora J. Nankhuni, 2018. An Analysis of Malawi's Pigeon Pea Value Chain, Feed the Future Innovation Lab for Food Security Policy Research Paper 98. East Lansing: Michigan State University
20. System Dynamics Modelling of Maize Production under Future Climate Scenarios in Kaduna, Nigeria. Udita Sanga, Laura Schmitt Olabisi, Saweda Liverpool-Tasie. 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 97. Food Security and Nutrition Indicators for 20 Priority CAADP Countries. Sheryl L Hendriks, Wegayehu Fitawek, Elizabeth Mkandawire, and Leonard Mkusa. 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 96.
21. The Devolution Revolution: Implications for Agricultural Service Delivery in Ghana. Danielle Resnick. 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 95.
22. Integrating Climate- and Market-Smartness into Strategies for Sustainable Productivity Growth of African Agri-food Systems. Nicholas J. Sitko and T.S. Jayne. 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 94.
23. Yield Response of Dryland Cereals in Mali to Fertilizer: Insights from Household Survey Data. Hamza Haider, Melinda Smale and Véronique Thériault. 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 92.
24. The Transformation of Value Chains in Africa: Evidence from the First Large Survey of Maize Traders in

- Nigeria. Saweda Liverpool-Tasie, Thomas Reardon, Awa Sanou, Wale Ogunleye, Iredele Ogunbayo, Bolarin T. Omonona. 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 91.
25. Food Safety in the Rapid Transformation of Food Systems in Africa: Aflatoxins along the Maize Value Chain in Nigeria. O. Ademola, S. Liverpool-Tasie and A. Obadina. 2017. Feed the Future Innovation Lab for Food Security Policy Research Paper 90
 26. Assessment of the Quality of Agriculture and Food Security Policy Processes and Institutional Architecture in Tanzania: Results of the 2016 Stakeholder Survey. Edith Lazaro and Mywish K. Maredia. 2017. Feed the Future Innovation Lab for Food Security Policy Research Paper 89.
 27. Prospects for the Sectoral Transformation of the Rural Economy in Tanzania: A Review of the Evidence. Todd Benson, Josee Randriamamonjy, Peixun Fang, David Nyange, James Thurlow, and Xinshen Diao. 2017. Feed the Future Innovation Lab for Food Security Policy Research Paper 88.
 28. Can Input Subsidy Programs Contribute to Climate Smart Agriculture?. T.S. Jayne, Nicholas J. Sitko, and Nicole M. Mason. 2017. Feed the Future Innovation Lab for Food Security Policy Research Paper 87.
 29. Macroeconomic Factor Influence on Agricultural Program Sustainability in Kaduna State, Nigeria. Patrick L. Hatzenbuehler and George Mavrotas. 2017. Feed the Future Innovation Lab for Food Security Policy Research Paper 86.
 30. Constraints for small-scale private irrigation systems in the North Central zone of Nigeria: Insights from a typology analysis and a case study. Hiroyuki Takeshima and Hyacinth Edeh. 2017. Feed the Future Innovation Lab for Food Security Policy Research Paper 85.
 31. Subnational Variation in Policy Implementation: The Case of Nigerian Land Governance Reform. Danielle Resnick and Austen Okumo. 2017. Feed the Future Innovation Lab for Food Security Policy Research Paper 84.
 32. Study of the determinants of chronic malnutrition in Northern Nigeria: Quantitative evidence from the Nigeria Demographic and Health Surveys. Mulubrhan Amare, Todd Benson, Olusegun Fadare, and Motunrayo Oyeyemi. 2017. Feed the Future Innovation Lab for Food Security Policy Research Paper 83.
 33. Study of the Determinants of Chronic Malnutrition in Northern Nigeria: Qualitative Evidence from Kebbi and Bauchi States. Todd Benson, Mulubrhan Amare, Motunrayo Oyeyemi, and Olusegun Fadare. 2017. Feed the Future Innovation Lab for Food Security Policy Research Paper 82.
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 35. Factor Market Activity and the Inverse Farm Size-Productivity Relationship in Tanzania. Ayala Wineman and Thomas S. Jayne. 2017. Feed the Future Innovation Lab for Food Security Policy Research Paper 79.
 36. Are African Farmers Experiencing Improved Incentives to Use Fertilizer?. Lenis Saweda O. Liverpool-Tasie, Thomas Jayne, Milu Muyanga, and Awa Sanou. 2017. Feed the Future Innovation Lab for Food Security Policy Research Paper 78.
 37. Does Farm Structure Matter? The Effects of Farmland Distribution Patterns on Rural Household Incomes in Tanzania - RP 77. Jordan Chamberlin and T. S. Jayne. 2017. Feed the Future Innovation Lab for Food

Security Policy Research Paper 77.

38. A Stakeholder Assessment of Agricultural Policy Processes in Mali: Results of a Baseline Survey. Abdramane Traoré, Amadou Samaké, Ousmane Sanogo, Steven Haggblade and Mywish Maredia. 2017. Feed the Future Innovation Lab for Food Security Policy Research Paper 76 - EN.
39. Résultats de l'Enquête de Base de l'Évaluation du Processus de l'Elaboration des Politiques Agricoles et de Sécurité Alimentaire par les Intervenants au Mali. Abdramane Traoré, Amadou Samaké, Ousmane Sanogo, Steven Haggblade and Mywish Maredia. 2017. Feed the Future Innovation Lab for Food Security Policy Research Paper 76 - FR.
40. Institutional Architecture and Quality of Agriculture and Food Security Processes in Zambia. Hambulo Ngoma, Nicholas J Sitko, Thomas Jayne, Antony Chapoto, and Mywish Maredia. 2017. Feed the Future Innovation Lab for Food Security Policy Research Paper 75.
41. The Quality of Agriculture and Food Security Policy Processes at the Federal and State Level in Nigeria: Results of a Stakeholder Survey. Mywish K. Maredia, John Mazunda, and Oyinkan Tasie. 2017. Feed the Future Innovation Lab for Food Security Policy Research Paper 74.
42. Scrutinizing the Status Quo: Rural Transformation and Land Tenure Security in Nigeria. Hosaena Ghebru and Fikirte Girmachew. October 2017. Feed the Future Innovation Lab for Food Security Policy Research Paper 73.
43. The Role of the Locations of Public Sector Varietal Development Activities on Agricultural Productivity. Hiroyuki Takeshima and Abdullahi Mohammed Nasir. October 2017. Feed the Future Innovation Lab for Food Security Policy Research Paper 72.

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1. Use of Modern Inputs and Complementary Farm Practices in the Nigeria Rice Value Chain: Implications for Policy. Osayanmon Wellington Osawe, 2018. Feed the Future Innovation Lab for Food Security Policy Research Brief 85. East Lansing: Michigan State University
2. The Quality of Agriculture and Food Security Policy Processes at National Level in Malawi Results from the 2017/18 Malawi Agriculture and Food Security Policy Processes Endline Survey. Todd Benson, Zephania Nyirenda, Flora Nankhuni, and Mywish Maredia, 2018. Feed the Future Innovation Lab for Food Security Policy Research Brief 84. East Lansing: Michigan State University
3. The Co-Occurrence of Aflatoxin and Fumonisin Along the Maize Value Chain in Southwest Nigeria. Lenis Liverpool-Tasie, Nikita Saha Turna, Oluwatoyin Ademola Adewale Obadina, Felicia Wu, 2018. Feed the Future Innovation Lab for Food Security Policy Research Brief 83. East Lansing: Michigan State University
4. Opportunities to Enhance the Competitiveness of Malawi's Tea Industry - Policy Brief. Justin du Toit, Flora J. Nankhuni and Joseph S. Kanyamuka, 2018. Feed the Future Innovation Lab for Food Security Policy Research Brief 79. East Lansing: Michigan State University
5. Changing the Fertilizer Conversation in Nigeria: The Need for Site Specific Soil-Crop Fertilizer Use. Blessing Agada, 2018. Feed the Future Innovation Lab for Food Security Policy Research Brief 73. East Lansing: Michigan State University
6. Climate Change Adaptation among Poultry Farmers: Evidence from Nigeria. 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 Brief 72

7. Analysis of the Value Chains for Root and Tuber Crops in Malawi: The Case of Sweet Potato. Joseph S. Kanyamuka, Flora J. Nankhuni and Joseph K. Dzanja, 2018. Analysis of the Value Chains for Root and Tuber Crops in Malawi: The Case of Sweet Potatoes. Feed the Future Innovation Lab for Food Security Policy Research Brief 70.
8. Sustainable Agricultural Data Collection: Insights from the United States of America for Nigeria. Ufedo M. Shaibu and Oluwatoyin M. Ademola, 2018. Sustainable Agricultural Data Collection: Insights from the United States of America for Nigeria. Feed the Future Innovation Lab for Food Security Policy Research Brief 69.
9. Analysis of the Value Chains for Root and Tuber Crops in Malawi: The Case of Cassava. Joseph S. Kanyamuka, Joseph K. Dzanja and Flora J. Nankhuni, 2018. Feed the Future Innovation Lab for Food Security Policy Research Brief 65.
10. Systematic Analysis of Groundnut Production, Processing and Marketing in Malawi. Christone J. Nyondo, Flora J. Nankhuni and Nathalie Me-Nsope, June 2018. Feed the Future Innovation Lab for Food Security Policy Research Brief 64.
11. Mitigating Antestia Bug Damage and the Potato Taste Defect in Rwandan Coffee. Andrew Gerard & Joseph Bigirimana, 2018. Feed the Future Innovation Lab for Food Security Policy Research Brief 63.
12. Is the Future of Malawi's Pigeon Pea Industry at the Mercy of India?. Flora J. Nankhuni and Nathalie M. Me-Nsope, June 2018. Feed the Future Innovation Lab for Food Security Policy Research Brief 62.
13. Conceptualizing Key Drivers of Policy Change: An Introduction to the Kaleidoscope Model. Steven Haggblade and Danielle Resnick. 2018. Feed the Future Innovation Lab for Food Security Policy Research Brief 61.
14. Making Fertilizer Use More Effective and Profitable: The Role of Complementary Interventions. Joseph S. Kanyamuka, Flora J. Nankhuni, Thomas S. Jayne and Moses W. Munthali. May 2018. Feed the Future Innovation Lab for Food Security Policy Research Brief 60.
15. A Review of the Draft Federal Government of Nigeria's National Agriculture Investment Plan - NAIP2. Sheryl L Hendriks. 2018. Feed the Future Innovation Lab for Food Security Policy Research Brief 59.
16. Review of the Draft Liberia Agricultural Sector Investment Plan - LASIP II - for 2018 – 2022 Sheryl L. Hendriks. 2018. Feed the Future Innovation Lab for Food Security Policy Research Brief 58.
17. Demand for Imported-Frozen versus Domestic-Traditionally Processed Fish in Africa: Panel Data Evidence from Nigeria. L.S.O. Liverpool-Tasie, A. Sanou, T. Reardon. 2018. Feed the Future Innovation Lab for Food Security Policy Research Brief 57.
18. The Transformation of Value Chains in Africa: Evidence from the First Large Survey of Maize Traders. Saweda Liverpool-Tasie, Thomas Reardon, Awa Sanou, Wale Ogunleye, Iredele Ogunbayo, Bolarin T. Omonona. 2018. Feed the Future Innovation Lab for Food Security Policy Research Brief 56.
19. Evaluation du processus d'élaboration des politiques agricoles et de sécurité alimentaire par les intervenants au Mali. Abdramane Traoré, Amadou Samaké, Ousmane Sanogo, Steven Haggblade et Mywish Maredia. 2017. Feed the Future Innovation Lab for Food Security Policy Research Brief 55 - FR.

20. Intrahousehold Productivity Differentials and Land Quality in the Sudanian Savanna of Mali. Melinda Smale, Veronique Theriault, Hamza Haider, and Alpha Kergna. 2017. Feed the Future Innovation Lab for Food Security Policy Research Brief 54.
21. The Scope and Scale of Processed Food Retailing in Urban Mali. Véronique Thériault, Ryan Vroegindewey, Amidou Assima, and Naman Keita. 2017. Feed the Future Innovation Lab for Food Security Policy Research Brief 53 - EN.
22. La portée et l'échelle du commerce de détail des aliments transformés en milieu urbain au Mali. Véronique Thériault, Ryan Vroegindewey, Amidou Assima et Naman Keita. 2017. Feed the Future Innovation Lab for Food Security Policy Research Brief 53 - FR.
23. Défis réglementaires en Afrique de l'Ouest: Etablir des réglementations régionales sur les pesticides en période de croissance rapide du marché. Amadou Diarra et Steven Haggblade. 2017. Feed the Future Innovation Lab for Food Security Policy Research Brief 52 - FR.
24. Regulatory Challenges in West Africa: Instituting Regional Pesticide Regulations during a Period of Rapid Market Growth. Amadou Diarra and Steven Haggblade. 2017. Feed the Future Innovation Lab for Food Security Policy Research Brief 52 - EN.
25. Impact de la subvention des engrais sur la productivité du sorgho et du maïs dans la savane soudanienne du Mali. Véronique Thériault, Melinda Smale, and Amidou Assima. 2017. Feed the Future Innovation Lab for Food Security Policy Research Brief 51 - FR.
26. Fertilizer Subsidy Impact on Sorghum and Maize Productivity in the Sudanian Savanna of Mali. Veronique Theriault, Melinda Smale, and Amidou Assima. 2017. Feed the Future Innovation Lab for Food Security Policy Research Brief 51 - EN.
27. Lessons for Effective Development Planning: Evaluation of the Pre-final Version Nic J.J. Olivier, Sheryl L. Hendriks, Elizabeth Mkandawire, Nico J.J. Olivier, and Clara Williams. Feed the Future Innovation Lab for Food Security Policy Research Brief 50.
28. Trends in West African Pesticide Markets. Steven Haggblade and Amadou Diarra. 2017. Feed the Future Innovation Lab for Food Security Policy Research Brief 49.
29. The Role of the Locations of Public Sector Varietal Development Activities on Agricultural Productivity. Hiroyuki Takeshima and Abdullahi Mohammed Nasir. 2017. Feed the Future Innovation Lab for Food Security Policy Research Brief 47.

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

1. Can Conservation Agriculture Save Tropical Forests? The Case of Minimum Tillage in Zambia. Hambulo Ngoma, Arild Angelsen, 2018. Can conservation agriculture save tropical forests? The case of minimum tillage in Zambia. Forest Policy and Economics, Volume 97, December 2018
2. Can Economic and Environmental Benefits Associated with Agricultural Intensification Be Sustained at High population Densities? A Farm Level Empirical Analysis. 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
3. Myanmar's Rural Revolution: Mechanization and Structural Transformation. 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).
4. Myanmar's Fisheries in Transition: Current Status and Opportunities for Policy Reform. 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
 5. Resilience through Risk Management: Cooperative Insurance in Small-holder Aquaculture Systems. James R. Watson, Fredrik Armerin, Dane H.Klinger, Ben Belton, 2018. *Heliyon*
 6. The Transformation of Rural Africa. Edited by T. S. Jayne, Jordan Chamberlin, and Rui Benfica, this collection provides a micro economic foundation for understanding the particular growth processes at work within the region's rural areas.
 7. Emerging Trends in Aquaculture Value Chain Research. Simon R. Busha, Ben Belton, David C. Little, Md Saidul Islam, 2018. Emerging Trends in Aquaculture Value Chain Research, *Aquaculture* 498 (2019) 428–434
 8. The Kaleidoscope Model of Policy Change: Applications to Food Security Policy in Zambia - in "World Development". Danielle Resnick, Steven Haggblade, Suresh Babu, Sheryl L. Hendriks, David Mather. 2018. The Kaleidoscope Model of Policy Change: Applications to Food Security Policy in Zambia, *World Development*, Volume 109, September 2018, Pages 101-120
 9. Give a Man a Fishpond: Modeling the Impacts of Aquaculture in the Rural Economy. Mateusz Filipiński (IFPRI) and Ben Belton (MSU), 2018. Give a Man a Fishpond: Modeling the Impacts of Aquaculture in the Rural Economy, *World Development* 110 (2018) 205–223
 10. Fertilizer Subsidies and the Role of Targeting in Crowding out: Evidence from Kenya. David L. Mather & Thomas S. Jayne. *Food Security*, February 2018
 11. Does Minimum Tillage Improve the Livelihood Outcomes of Smallholder Farmers in Zambia?. Hambulo Ngoma, 2018. Does Minimum Tillage Improve the Livelihood Outcomes of Smallholder Farmers in Zambia? *Food Security*, March 2018.
 12. Retailing of Processed Dairy and Grain Products in Mali: Evidence from a City Retail Outlet Inventory. Theriault, V., Vroegindewey, R, Assima, A., and Keita, N. 2018. Retailing of Processed Dairy and Grain Products in Mali: Evidence from a City Retail Outlet Inventory. *Urban Science*, 2(24)
 13. Africa's Evolving Employment Trends. Yeboah, Kwame, and T. S. Jayne. 2018. Africa's Evolving Employment Trends, *Journal of Development Studies*, 54(5)
 14. Africa's Unfolding Economic Transformation. Thomas S. Jayne, Jordan Chamberlin and Rui Benfica. 2018. Africa's Unfolding Economic Transformation, *Journal of Development Studies*, 54(5)
 15. The Quiet Rise of Large-Scale Traders in East and Southern Africa. Sitko, N., William J. Burke, and Thomas S. Jayne. 2018. The Quiet Rise of Large-Scale Traders in East and Southern Africa, *Journal of Development Studies*, 54(5)
 16. Special Issue of JDS: Economic Transformation in Africa, March 2018. T. S. Jayne, Jordan Chamberlin and Rui Benfica, guest editors, Special Issue of JDS: Economic Transformation in Africa, March 2018, *Journal of Development Studies*, 54(5)

17. Taking Stock of Africa's Second-generation Agricultural Input Subsidy Programs. Thomas S. Jayne, Nicole M. Mason, William J. Burke, Joshua Ariga (2018). *Food Policy*, Volume 75, February 2018
18. Integrating Environmental Considerations in the Agricultural Policy Process: Evidence from Nigeria. Suresh Babu, George Mavrotas, Nilam Prasai, 2018. Integrating Environmental Considerations in the Agricultural Policy Process: Evidence from Nigeria, *Environmental Development* 25 (2018) 111–125
19. Farm Family Effects of Adopting Improved and Hybrid Sorghum Seed in the Sudan Savanna of West Africa. Smale, M., Assima, A., Kergna, A., Theriault, V., and Weltzien, E. 2018. Farm family effects of adopting improved and hybrid sorghum seed in the Sudan Savanna of West Africa. *Food Policy*, 74 (January): 162-171. <https://doi.org/10.1016/j.foodpol.2018.01.001>
20. Rapid Transformation of Food Systems in Developing Regions: Highlighting the Role of Agricultural.... T. Reardon, R. Echeverria, J. Berdegue, B. Minten, S. Liverpool-Tasie, D. Tschirley, D. Zilberman. 2018. *Agricultural Systems*, accepted January 2018.
21. Links among innovation, food system transformation, and technology adoption, with implications for food policy: Overview of a Special Issue. Reardon, T., L. Lu, D. Zilberman. *Food Policy*, October 2017
22. Land Prices Heading Skyward? An Analysis of Farmland Values in Tanzania - Article. Jayne, T., Wineman, A. Land Prices Heading Skyward? An Analysis of Farmland Values in Tanzania, *Applied Economic Perspectives and Policy*, Volume 40, Issue 2 (May 2018), 187-214, October 2017

ANNEX H: OUTREACH

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

1. Megatrends Shaping Rural Transformation in Africa. F. Kwame Yeboah & Thomas S. Jayne, Keynote Address at the Annual Conference of GIZ's Green Innovation Centers Cotonou, Benin September 25, 2018
2. Does Shifting from In-kind Input Distribution to a Flexible E-voucher Approach Improve Input Subsidy Program Outcomes?. Nicole M. Mason, Dagbegnon A. Tossou & Kathy Baylis, Auckland Kuteya and Hambulo Ngoma, IFPRI, Washington, DC, September 20, 2018
3. Understanding Policy Process in Developing Countries: Case Studies and Lessons. Suresh Babu, Policy Dialogue Presentation, September 10, 2018
4. Harnessing the Power of Innovation to Unlock Agribusiness for African Smallholders. Thomas Jayne, African Green Revolution Forum plenary session, September 6, 2018, Kigali, Rwanda.
5. Draft Farmer Organization Development Strategy (FODS). Joseph Kanyamuka, Sunbird Capital, Lilongwe, Malawi, September 6, 2018
6. Are Medium-Scale Farms Driving Agricultural Transformation in Africa?. T.S. Jayne, Milu Muyanga, Kwame Yeboah, Ayala Wineman, Antony Chapoto, Divan Vanderwesthuisen, Norwegian University of Life Sciences, School of Economics and Business, August 28, 2018
7. Economic and Social Dimensions of Aquaculture Growth: Implications for Sustainability. Ben Belton, World Aquaculture Society, Montpellier, France, August 28, 2018
8. The “Quiet Revolution” in Aquaculture Value Chains. Ben Belton, World Aquaculture Society, Montpellier, France, August 27, 2018
9. Update on Agricultural, Nutrition and Food Security Policies in Malawi. Joseph S. Kanyamuka and Flora J. Nankhuni, NRDP Stakeholders Meeting, Lilongwe, August 16, 2018
10. What farmers want: Mapping Zambian smallholders' agricultural policy preferences. Nicole M. Mason, Vincenzina Caputo, Danielle Resnick and Auckland Kuteya, Agricultural & Applied Economics Association Annual Meeting, Washington, D.C., August 7, 2018
11. Does Sustainable Intensification of Maize Production Enhance Child Nutrition? Evidence from Rural Tanzania. Jongwoo Kim, Nicole M. Mason, and Sieglinde Snapp, 2018 Agricultural & Applied Economics Association Annual Meeting, Washington, D.C., August 6, 2018
12. Rising Tractor Use in sub-Saharan Africa: Evidence from Tanzania. D. van der Westhuisen, T.S. Jayne, F.H. Meyer, Agricultural & Applied Economics Association (AAEA) – African Section, Washington, DC, August 5, 2018
13. Are Medium-Scale Farms Driving Agricultural Transformation in Africa?. T.S. Jayne, Milu Muyanga, Kwame Yeboah, Ayala Wineman, Antony Chapoto, Divan Vanderwesthuisen, 30th International Conference of Agricultural Economists, August 1, 2018, Vancouver, BC, Canada
14. Dis-incentivizing Sustainable Intensification? The Case of Zambia's Fertilizer Subsidy Program. Stephen Morgan, Nicole Mason, Kendra Levine and Olipa Zulu-Mbata, 2018 International Conference of Agricultural Economists (ICAE), August 1, 2018

15. Africa's Unfolding Agricultural Transformation. T.S. Jayne, Ousmane Badiane, Xinshen Diao, 30th International Conference of Agricultural Economists, July 30, 2018, Vancouver, BC, Canada
16. Recent Innovations to Zambia's Farmer Input Support Program & Insights on Short-run Effects. Nicole M. Mason, Auckland Kuteya & Hambulo Ngoma, International Conference of Agricultural Economists, Vancouver, Canada, July 30, 2018
17. Does Sustainable Intensification of Maize Production Enhance Child Nutrition? Evidence from Rural Tanzania. Jongwoo Kim, Nicole M. Mason, and Sieglinde Snapp, 30th International Conference of Agricultural Economists (ICAE 2018), Vancouver, Canada, 30 July 2018
18. Anticipating the Evolution of African Oilseed Markets Will Africa Fill the Gap?. Ferdi Meyer, Bureau for Food and Agricultural Policy (BFAP), Vancouver, Canada, July 29, 2018
19. Do Medium-scale Farms Improve Market Access Conditions for Zambian Smallholders?. Thom S. Jayne, William J. Burke, Nicholas J. Sitko, Triennial International Conference of Agricultural Economists, July 29, 2018, Vancouver, B.C., Canada
20. Anticipating the Evolution of African Oilseed Markets: Will Africa Fill the Gap?. Ferdi Meyer, Bureau for Food and Agricultural Policy (BFAP), July 29, 2018, Vancouver, Canada
21. Rising Tractor Use in sub-Saharan Africa: Evidence from Tanzania. D. van der Westhuizen, T.S. Jayne, F.H. Meyer, J. van Niekerk, 30th International Conference of Agricultural Economists (ICAE), July 29, 2018
22. Sustainable Land Management under Rural Transformation in Africa. T. S. Jayne, Frank Place, and Sieglinde Snapp, ICAE pre-conference workshop Rural Transformation in the 21st Century: The Challenges of Low-Income, Late Transforming Countries, July 28, 2018, Vancouver, B.C., Canada
23. Does Farm Structure Matter? The Effects of Farmland Distribution Patterns on Rural Household Incomes in Tanzania. Jordan Chamberlin & T. S. Jayne, Rural Transformation in the 21st Century: The Challenges of Low-Income, Late-Transforming Countries PIM pre-conference workshop International Conference of Agricultural Economists July 28, 2018, Vancouver, BC, Canada
24. Intra-household Productivity Differentials and Land Quality in the Sudan Savanna of Mali. Melinda Smale, Veronique Theriault, Hamza Haider and Alpha Kergna, 30th International Conference of Agricultural Economists (ICAE), Vancouver, BC, Canada, July 28–August 2, 2018
25. Quiet Revolutions in Aquaculture & Poultry Value Chains in Africa & Asia. Tom Reardon, Ben Belton, Saweda Liverpool-Tasie, Ricardo Hernandez. ICAE 2018, Vancouver, BC, July 29, 2018
26. Transformative Innovation in Food Value Chains in Africa & Asia. Tom Reardon, Ben Belton, Saweda Liverpool-Tasie, Ricardo Hernandez, Bart Minten. ICAE 2018, Vancouver, BC, July 29, 2018
27. Pathways for Employment in Sub-Saharan Africa: Trends and Drivers of Change. F. Kwame Yeboah and Thomas S. Jayne, GIZ Expert talk on Empirical Evidence and Impact Measurement for Rural Youth Employment, Bonn, Germany, July 5, 2018
28. Why the Influence of Agricultural Policy Research is Probably Greater than We Think. By T. Jayne, T. Reardon, M. Maredia and D. Tschirley, Agrilinks, June 30, 2018

29. Africa's Agrifood System and Youth Employment: Trends and Drivers of Change. F. Kwame Yeboah and Thomas S. Jayne, GIZ Webinar Series on Agricultural Value Chains, June 26, 2018
30. Rapid Dual Transformation of the "Hidden Middle" of African & Asian Food Systems. Tom Reardon, MSU, FIPP Keynote at IFPRI, Washington, DC, June 26, 2018
31. Ensuring Food Security and Nutrition Policy Coherence. Sheryl Hendriks and Nic Oliver, Agrilinks, June 26, 2018
32. AGLC "Closing Workshop". D. Clay, R. A. Church, A. Gerard, M. C. Lopez, D. Ortega, Team presentation at the "Closing Workshop," Kigali, Rwanda, June 26, 2018
33. Agrilinks: Ask the Expert on Strengthening National Policy Systems. Suresh Babu and Duncan Boughton answer a Q&A webinar, June 25, 2018
34. IAPRI-MSU Technical Training Intro to Applied Econometrics: Basic theory and Stata examples. Nicole Mason, Indaba Agricultural Policy Research Institute, Lusaka, Zambia, June 25, 2018
35. IAPRI-MSU Technical Training Intro to Economic Experiments with a Focus on Framed Field Experiments. Hambulo Ngoma (IAPRI), Nicole Mason (MSU), and Stephen Morgan (MSU), Indaba Agricultural Policy Research Institute, Lusaka, Zambia, June 22, 2018
36. Are Medium-scale Farmers Driving Agricultural Transformation in Africa?. The rapid change from small-scale farms and medium-scale one has many implications for the agricultural production of developing countries.
37. Food Systems Transformation in West Africa: Implications for Jobs and Policy. Tom Reardon and Saweda Liverpool-Tasie, OECD Seminar: Urbanization, Food Economy, Employment, and Women, Paris, France, June 18, 2018
38. Africa's Emerging Herbicide Revolution. Steven Haggblade, World Bank/ICABR Conference, Washington DC, June 14, 2018
39. Regional Pesticide Regulatory Challenges in West Africa. Amadou Diarra, World Bank/ICABR Conference, Washington, DC, June 14, 2018
40. Malawi Potato Value Chain Poster. Presented to the World Bank/ICABR Conference, Washington, DC June 13-14, 2018
41. Malawi Groundnuts Value Chain Poster. Christone Nyondo and Flora Nankhuni, Presented to the World Bank/ICABR Conference, Washington, DC June 13-14, 2018
42. The "Hidden Middle" of Dairy Value Chains: An Organizational Economics Analysis of Processor Strategies in Mali. Ryan Vroegindewey, Veronique Theriault, Robert B. Richardson, Kimberly Chung, poster at the World Bank, Washington, DC, June 13-14, 2018
43. Dual Disruptive Transformation of African & Asian Food Systems. Tom Reardon, Bart Minten, Saweda Liverpool-Tasie, David Tschirley, Ricardo Hernandez, Ben Belton, David Zilberman, ICABR-World Bank, Washington, DC, June 13, 2018
44. Can Malawi Increase its Share of the Global Macadamia Market?. Justin P. du Toit, Dr Flora J. Nankhuni and Joseph S. Kanyamuka, Poster at the World Bank 22nd ICABR Conference, Washington DC, USA,

June 13, 2018

45. Opportunities to Enhance the Competitiveness of Malawi's Tea Industry. Justin P. du Toit, Flora J. Nankhuni, Joseph S. Kanyamuka, Presented at World Bank 22nd ICABR Conference, Washington DC, USA, June 13, 2018
46. Is the Future of Malawi's Pigeon Pea Industry at the Mercy of India? An Analysis of Malawi's Pigeon. Flora Nankhuni, Nathalie Me-Nsope, Joseph Kanyamuka and Christone Nyondo, World Bank 22nd ICABR Conference, Washington DC, USA, June 13, 2018
47. Analysis of the Value Chain for Root and Tuber Crops in Malawi: The Case of Cassava. Joseph S. Kanyamuka, Joseph K. Dzanja, and Flora J. Nankhuni, Presented at World Bank 22nd ICABR Conference, Washington DC, USA, June 13, 2018
48. Africa's Emerging Herbicide Revolution: Farm-level impacts. Melinda Smale, World Bank/ICABR Conference, Washington DC, June 13-14, 2018
49. Agricultural or Food System Transformation in Asia?. Suresh Babu, ICABR Conference on Disruptive Innovations, Value Chains, and Rural Development, The World Bank, Washington DC, June 12–15, 2018
50. Retailing of Processed Foods in Mali: Evidence from a City-retail Outlet Inventory. Veronique Theriault, Ryan Vroegindewey, Amidou Assima, NAREA, June 12, 2018
51. Gender-responsive Nutrition Policies – A Myth or a Possibility?. Elizabeth Mkandawire and Sheryl Hendriks, Agrilinks, June 11, 2018
52. From Aspiration to Transformation: Myanmar Agriculture and the Rural Economy. Duncan Boughton and Ben Belton, Yangon, Myanmar, June 1, 2018
53. Quality Assessment of Herbicides Sold in Mali: Preliminary Laboratory Results. Steven Haggblade and Amadou Diarra, Bamako, Mali, May 22, 2018
54. Research Toward Impact: What, Why, and How Innovation Labs are Designed with Impactful Outcomes in Mind. Mywish K. Maredia, Michigan State University, Feed the Future Innovation Labs Regional Partners Meeting, Kampala, Uganda, May 21–25, 2018
55. Building Resilience through Policies, Institutions, and Capacity Development: Examples from Food Security Policy Innovation Lab. Mywish K. Maredia, Feed the Future Innovation Labs Regional Partners Meeting, Kampala, Uganda, May 21–25, 2018
56. Towards a Definition of Nutrition Research Priorities in Tanzania. David Tschirley, Tumaini Charles, Isaac Minde, and David Nyange. Dar es Salaam, Tanzania, May 21, 2018
57. PODCAST: Land Prices Heading Skyward? An Analysis of Farmland Values in Tanzania. Thomas Jayne and Ayala Wineman. 2018. The Journal Applied Economics Perspectives and Policy (AEPP)
58. Understanding Farm Profitability: Impact of Best Practices. Ruth Ann Church, Michigan State University, Specialty Coffee Association, Seattle, April 20, 2018
59. Thoughts on Priority Research: Topics to Support Agri-food Systems Transformation in Africa. T.S. Jayne, Seminar at Indaba Agricultural Policy Research Institute. Lusaka, Zambia, April 16, 2018

60. Unmistakable Signs of Agri-food Systems Transformation in Africa. T.S. Jayne and Holger Kray, Seminar at the Ministry of Agriculture, Government of Tanzania, Dodoma, Tanzania, April 10, 2018
61. Unmistakable Signs of Agri-food Systems Transformation in Africa - April 9, 2018. T.S. Jayne and Holger Kray, Seminar at the Agricultural Working Group Meeting, Dar es Salaam, Tanzania, April 9, 2018
62. Sunflower Value Chain Development in Tanzania: Policy Brief. By ASPIRES Tanzania and Dalberg, April 2018
63. Youthquake - Chicago Council Panel, March 29, 2018. Panel discussion around the Chicago Council for Global Affairs Report: "Youth for Growth, Transforming Economies through Agriculture," Principal Author Kwame F. Yeboah
64. FG builds capacity for fish farmers..... Nigeria Daily Trust, Mars 24, 2018
65. Land Markets Under the Radar: A Cross-Country Analysis of Market Activity in Sub-Saharan Africa. Ayala Wineman and Thomas Jayne, World Bank Land and Poverty Conference, March 22, 2018
66. Strategic Planning for Irrigation Development in Myanmar. Mark W. Rosegrant, NayPyiTaw, Myanmar, March 20, 2018
67. Framing Elements for the 2019 Rural Development Report. David Tschirley and the IFAD team, IFAD, Rome, Italy, March 15, 2018
68. Youth Access to Land, Migration, and Employment Opportunities. Thomas Jayne, Kwame Yeboah, Milu Muyanga, and Jordan Chamberlin. IFAD Thematic and Framing Workshop, March 15–16, 2018
69. Women in Agricultural Value Chains: Data from 9 African Countries. T.S. Jayne and Felix K. Yeboah, Bonn, Germany, March 8, 2018
70. Difference-in-differences. Nicole M. Mason, IAPRI-MSU Technical Training, Lusaka, Zambia, March 1, 2018
71. Taking Stock of Africa's Second-generation Input Subsidy Programs - Zambia Presentation. Nicole M. Mason, Thomas S. Jayne, William J. Burke, & Joshua Ariga, Lusaka, Zambia, February 27, 2018
72. Myanmar Migration in a Time of Transformation. Mateusz Filipski, Ben Belton, Sithu Kyaw, and Eaindra Theint Thu, Yangon, Myanmar, February 22, 2018
73. Taking Stock of Africa's Second-generation Input Subsidy Programs: Insights from 70 Empirical Studies. Nicole M. Mason, Thomas S. Jayne, William J. Burke, & Joshua Ariga. Jinja, Uganda, February 20, 2018
74. Finding Funding for Research with African Partners and Faculty Networking. T. S. Jayne, Alliance for African Partnership, Michigan State University, February 20, 2018
75. Access to Productive Land and Youth Livelihoods: Factors Influencing Youth Decision to Exit From Far. N.S.Y. Mdoe (SUA), C.G. Magomba (SUA), M. Muyanga (MSU), T.S. Jayne (MSU), I.J. Minde (MSU) and T. Mwisomba, Dodoma, Tanzania, February 14-16, 2018
76. The Changing Farm Structure in Africa: Causes, Consequences and Policy Implications. Milu Muyanga, T.S. Jayne, Isaac Minde, David Nyange, Kwame Yeboah, Jordan Chamberlin, Ayala Wineman, Ward

- Anseeuw, Antony Chapoto, Nicholas Sitko, 2018 AAPC, Dodoma, Tanzania, February 14, 2018
77. The Agricultural Policy Research in Africa APRA. Milu Muyanga, Abeokuta, APRA, Ogun State, Nigeria February 8, 2018
 78. Causes and Consequences of Farm Size Distributions. TS Jayne, M. Muyanga, K. Yeboah, F. Dzanku, N. Mdoe, T. Shonhe, Bellville, South Africa, January 30–31, 2018
 79. Are Local Investor Farmers Making Small-Scale Farmers More Productive and Commercialized? Evidence from Nigeria. TS Jayne, M. Muyanga, S. Liverpool-Tasie, T. Awokuse, A. B. Aromolaran, Bellville, South Africa, January 30, 2018
 80. Africa’s Unfolding Agri-food System Transformation (World Bank, Jan. 2018). T.S. Jayne and Holger Kray, World Bank Senior Leadership, Paris, France, January 25, 2018
 81. Food System Transformation & SDGs1&2: Implications for General & Differentiated Policies. Thomas Reardon, FAO, Rome, January 11, 2018
 82. Implementing Regional Pesticide Policies in West Africa During a Period of Rapid Market Growth. Amadou Diarra and Steven Haggblade, USAID, Washington, DC, December 14, 2017
 83. Food System Transformation and the Smallholder Farmer in Africa: Challenges and Opportunities. David Tschirley, Regional gathering of WFP heads of country programs, Nairobi, Kenya, December 6, 2017
 84. Rise of Medium-Scale Farms in Africa: Causes and Consequences of Changing Farm Size Distributions. T.S. Jayne, Milu Muyanga, Kwame Yeboah, Jordan Chamberlin, Ayala Wineman, Ward Anseeuw, Antony Chapoto, and Nicholas Sitko, Cape Town, South Africa, December 6, 2017
 85. Myanmar’s Rapid Rural Transformation: Evidence from the Delta & Dry Zone. Ben Belton, Mateusz Filipiński, Aung Tun Oo, Aung Tun, Bandung, Indonesia, December 5, 2017
 86. Geographies of Labor on Myanmar’s Marine Resource Frontier. Ben Belton, Melissa Marschke, and Peter Vandergeest, Bandung, Indonesia, December 5, 2017
 87. Domestic and International Migration in Myanmar: Determinants and Consequences. Mateusz Filipiński, Ben Belton, Sithu Kyaw, and Eaindra Theint Thu, Bandung, Indonesia, December 3-5, 2017
 88. Food Safety in the Rapid Transformation of Food Systems in Africa: Aflatoxins along the Maize Value Chain in Nigeria. O. Ademola, S. Liverpool-Tasie and A. Obadina. 2017. Feed the Future Innovation Lab for Food Security Policy Research Paper 90
 89. The Hidden Revolution in the Midstream of Africa’s Food Systems - Links to Food Safety and Nutri. Saweda Liverpool-Tasie, Thomas Reardon, and David Tschirley, 3rd Annual Global Food Security Conference, Cape Town, South Africa, December 3, 2017
 90. Changing Food Systems and Nutrition: Do We Have the Concepts and Data to Understand, Track, and Anticipate the Links?. David Tschirley, 3rd International Conference on Global Food Security: Global Challenges, Local Solutions and Connected Pathways, Cape Town, South Africa, December 3–6, 2017
 91. Toward a Holistic Sustainable Intensification Strategy in Sub-Saharan Africa. T.S. Jayne, Panelist remarks, Invited session on “Sustainable Intensification in Africa: How to make it happen” Global Food Security

Conference, Cape Town, South Africa, December 3, 2017

92. The Rise of Medium-Scale Farms in Africa: Causes and Consequences of Changing Farm Size Distrib.... Milu Muyanga, T. S. Jayne, Felix Kwame Yeboah, Antony Chapoto, Nicholas Sitko, 3rd Annual Global Food Security Conference, Cape Town, South Africa, December 3, 2017
93. The Future of Work in African Agriculture: Trends and Drivers of Change. T.S. Jayne, Felix Kwame Yeboah, and Carla Henry, International Labour Office, Working Paper No. 25, December 2017
94. The 2017 ReNAPRI Outlook on Maize, Wheat, Rice, Soybeans and Sugar. Ferdi Meyer. Presenter: Tracy Davids. ReNAPRI meeting in Cape Town, South Africa, Nov. 30-Dec. 1, 2017
95. Patterns, Drivers and Impacts of Rural-Rural Migration in Zambia. Jordan Chamberlin, Nicholas J. Sitko, T.S. Jayne, Rome, Italy, December 1, 2017
96. Intersection of Youth Livelihoods and Agriculture in Africa. F. Kwame Yeboah, Thomas S. Jayne, Keynote Presentation at the 4th Annual ReNAPRI Stakeholders Conference, Cape Town, South Africa, November 30, 2017
97. Agricultural Transformation in Africa: Role for Parliamentarians. T.S. Jayne and Milu Muyanga, Keynote Address at 4th Annual RENAPRI Stakeholder Conference, Cape Town, South Africa, November 30, 2017
98. Is Small Still Beautiful? The Farm Size-Productivity Relationship Revisited. Milu Muyanga & T.S. Jayne, Kampala, Uganda, November 23, 2017
99. Rise of Medium-Scale Farms in Africa: Causes and Consequences of Changing Farm Size Distributions. T.S. Jayne, Milu Muyanga, Kwame Yeboah, Jordan Chamberlin, Ayala Wineman, Ward Anseeuw, Antony Chapoto, and Nicholas Sitko, Washington, D.C., November 16, 2017
100. The Emerging 'Quiet Revolution' in Myanmar's Aquaculture Value Chain. T.S. Jayne, Milu Muyanga, Kwame Yeboah, Jordan Chamberlin, Ayala Wineman, Ward Anseeuw, Antony Chapoto, and Nicholas Sitko, World Bank, Washington, DC, November 16, 2017
101. Agricultural Input Subsidy Programs in Africa: A Review of Recent Evidence. T.S. Jayne, Nicole Mason, William Burke, Joshua Ariga, Princeton University, November 13, 2017
102. The Rapid Rise of Agricultural Mechanization in Myanmar. Benjamin Belton, Mateusz Filipski, Myat Thida Win, Xiaobo Zhang, South-South Knowledge Sharing on Agricultural Mechanization, IFPRI, CIMMYT, Ethiopian Agricultural Mechanization Forum. Addis Ababa, Ethiopia, November 1, 2017
103. VIDEO - Encouraging and Strengthening Cooperatives. A video to promote the creation of cooperatives
104. Causes, Consequences of Changing Farm Size Distributions in Africa, and Implications on Youth Employment. Milu Muyanga, T.S. Jayne, A. Chapoto, N. Sitko, C. Nkonde, K. Yeboah, J. Chamberlin, A. Wineman, W. Anseeuw, D. Godwin, Lusaka, Zambia, October 19, 2017
105. Process of Developing the Farmer Organization Development Strategy (FODS). Christone Nyondo, Flora Nankhuni, Athur Mabiso. Cooperative Sector Mapping Study Dissemination Conference, October 11, 2017
106. Land Policies and Land Distribution Affect Smallholder Livelihoods and Agricultural Transformation.

Thomas Jayne, Seattle, WA, October 10, 2017

107. Rise of Medium-Scale Farms in Africa: Causes and Consequences of Changing Farm Size Distributions. Milu Muyanga, T.S. Jayne, Kwame Yeboah, Jordan Chamberlin, Ayala Wineman, Ward Anseeuw, Antony Chapoto, Nicholas Sitko, Rome, Italy, October 9, 2017
108. Agriculture Transformation in Africa and Prospects for the Grain Sector: A Case for Tanzania. David Nyange, Milu Muyanga, David Tschirley, Thomas S. Jayne
109. Myanmar's Changing Rural Economy: Evidence from the Delta & Dry Zone. Benjamin Belton, LIFT Donor Retreat, Yangon, October 2, 2017

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

1. June Was Food Security Policy Month on Agrilinks. See how we explained and shared our expertise on policy and food security in developing countries, with 7 blogs and 1 webinar.
2. Why the Influence of Agricultural Policy Research is Probably Greater than We Think. We believe there are at least three categories of impactful policy-oriented research that development organizations should be promoting, even though it may be difficult to track the immediate impact of such research on a policy change.
3. Ensuring Food Security and Nutrition Policy Coherence. Food security involves many sectors and partners requiring to make sure that policy is coherent across sectors. How then do governments ensure policy congruence?
4. Spinning the Kaleidoscope Model. The complexity of the policy process can be analyzed with the Kaleidoscope Model that helps identify 16 variables at play during the design and implementation of a policy.
5. Are Medium-scale Farmers Driving Agricultural Transformation in Africa?. The rapid change from small-scale farms and medium-scale one has many implications for the agricultural production of developing countries.
6. Guidance and Capacity Critical to National Agriculture and Food Security Investment Plan (NAIP) Sheryl Hendriks, Agrilinks, June 15, 2018. Dramatic change has been happening in Africa for at least the past decade.
7. Building Resilience through Better Policies. How is FSP addressing resilience through policies? The multi-pronged strategy is illustrated with examples of the Lab's outputs, in Agrilinks, June 15, 2018
8. Gender-responsive Nutrition Policies – A Myth or a Possibility?. Policymakers often incorrectly understand gender to mean addressing women's issues. E. Mkandawire and S. Hendriks explain in an Agrilinks blog.
9. Climate Change and Food Security: Threats and Hopes for Nigeria. By Laura Schmitt Olabisi and Saweda Liverpool-Tasie: "We've gotten used to the looks on farmers' faces by now—shaking heads, looking to the sky as if for an explanation, frowning worriedly. The rains aren't the same as they used to be, they tell us."
10. PODCAST: Land Prices Heading Skyward? An Analysis of Farmland Values in Tanzania. Thomas Jayne and Ayala Wineman. 2018. The Journal Applied Economics Perspectives and Policy (AEPP).

Policy Tools <https://www.canr.msu.edu/fsp/outreach/policy-tools/>

1. Difference-in-differences. Nicole M. Mason, IAPRI-MSU Technical Training, Lusaka, Zambia, March 1, 2018
2. Policy Diagnostic Tools. This tool is associated with the Practitioner's Guidebook and Toolkit for Agricultural Policy Reform: The P.M.C.A. Approach to Strategic Policy Engagement

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

1. F. Nankhuni on Value Chain Studies. NAPAS: Malawi Chief of Party, Flora Nankhuni explains the impact of value chain studies.
2. USAID Representative Mr. Cullen Hughes speaks of NAPAS: Malawi achievements. USAID

Representative, Mr. Cullen Hughes address agricultural stakeholders, September 27, 2018, Ufulu Gardens, Malawi. What's FSP? The answer in a 3-minute video

3. An overview video explains what we do, with the example of a policy reform in Zambia. Women farmers in field in Malawi.
4. Fertilizer Policy Reform in Malawi. This 8-minute video explains Malawi's on-going fertilizer policy reform that includes soil testing and Extension support.
5. T. S. Jayne receives AAEA Fellow award. Video of T. Jayne's AAEA Fellow award speech, Washington DC, August 6, 2018.
6. Agrilinks: Ask the Expert on Strengthening National Policy Systems. Suresh Babu and Duncan Boughton answer a Q&A webinar, June 25, 2018.
7. VIDEO - Encouraging and Strengthening Cooperatives. A video to promote the creation of cooperatives

ANNEX I: CITATIONS AND SOCIAL MEDIA REACH

Name of article/blog	Bitly downloads	Research gate	Twitter	Facebook	LinkedIn	Citations
Ensuring Food Security and Nutrition Policy Coherence	25		495			
Gender-responsive nutrition policies – a myth or a possibility?	51		240	3	158	
Guidance and Capacity Critical to National Agriculture and Food Security Investment Plan (NAIP) Design	28		130	112		
A gender assessment of Malawi's National Nutrition Policy and Strategic Plan 2007–2012		28	1,824			
A qualitative analysis of men's involvement in maternal and child health as a policy intervention in rural Central Malawi		116				1
Food security and nutrition indicators for 20 priority CAADP countries		106				
A Review of the Draft Federal Government of Nigeria's National Agriculture Investment Plan (NAIP2)	26					
Review of the Draft Liberia Agricultural Sector Investment Plan (LASIP II) for 2018 – 2022 with a Focus on Component 4 of the Malabo CAADP Results Framework	95					
Lessons for Effective Development Planning: Evaluation of the Pre-final Version of the Draft Malawi's Agriculture Investment Plan (NAIP2)	14					

An Evaluation of the Level of Integration and Alignment of the Malabo Commitments, Africa's Agenda 2063 and the SDGs in 10 National Agriculture and Food Security Investment Plans		90				
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ANNEX J: PERFORMANCE INDICATORS REPORT FOR FY2018

#	Indicator ID	Indicator title	Year 1 Beginning of project to Sept 2014		Year 2: Oct 2014-Sept 2015		Year 3: Oct 2015-Sept 2016		Year 4: Oct 2016-Sept 2017		Year 5: Oct 2017-Sept 2018		Oct 2018-end of Project
			Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Targets
1	Custom	Number of policy research and best practice papers generated	13	13	13	23	11	42	17	93	9	28	17
2	Custom	Number of new data sets informing food security policies available for public use	5	5	3	7	3	7	12	2	3	25	1
3	Custom	Number of stakeholder learning forums (national or global) held where findings/best practices are presented	25	25	19	70	15	40	22	58	12	39	6
4	Custom	Number of legal frameworks/Regulations/Administrative Procedures/institutional arrangements reviewed and analyzed	16	16	3	4	0	13	0	19	0	0	0
5	4.5.2-7 see table at right for detail	Number of individuals who have received USG supported short-term agricultural sector productivity or food security training	563	563	68	90	33	101	164	467	33	211	16
6	Custom	Number of institutions where trained individuals are applying new practices	12	12	16	36	11	24	18	58	11	30	33
7	Custom	Number of USAID operating units supported	5	5	13	6	13	6	7	12	13	13	0
8	Custom	Number of private sector and civil society organizations/entities assisted to participate in policy formulation process	10	10	12	8	10	5	2	463	10	5	0
9	Custom	Number of public-private policy and enabling environment consultations held	14	14	7	6	5	4	3	6	4	16	3
10	Custom	Number of engagement events with ministry or heads of government implementing agencies (i.e., departments, directorate, division) held or facilitated through USG support	25	25	14	7	9	10	5	30	8	13	5
11	Custom	Number of engagement events with parliamentary bodies (e.g., agriculture committees) held or facilitated through USG support	3	3	5	1	1	0	2	1	1	4	0
12	Custom	Numbers of new legal frameworks/Regulations/Administrative Procedures/institutional systems developed or existing frameworks/procedures/systems revised to promote policy change agenda	1	1	3	1	0	0	1	4	0	0	0

Actuals for Indicator 5: Short term training. 4.5.2-7				
Type of organization	Male	Female	Undesignated	Total
Civil society	7	3		10
Government	0	0		0
Private sector	0	0		0
Producers	0	0		0
Undesignated			6	6
Total	7	3	0	16

