



# Feed the Future Innovation Lab For Food Security Policy

WORKPLAN

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### List of Acronyms

CAADP	Comprehensive Africa Agriculture Development Programme
CGE	computable general equilibrium
CILSS	Comité permanent Inter-Etats de Lutte contre la Sécheresse dans le Sahel
CPS	Cellule de Planification et de Statistique. Mali
DAPS	Ministry of Agriculture, Directorate for Analysis, Forecasting and Statistics. Senegal
DARD	Directorate of Agriculture and Rural Development, ECOWAS
ECOSIM	ECOWAS Simulation Model
ECOWAS	Economic Community of West African States
ECOWAP	ECOWAS Investment Plan
ESA	Eastern and Southern Africa
FSP	Feed The Future Innovation Lab for Food Security Policy
FTF	Feed the Future
GISAIA	Guiding Investments in Sustainable Agricultural Intensification in Africa
GoT	Government of Tanzania
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IER	Institut d'Economie Rurale. Mali
IFPRI	International Food Policy Research Institute
INSTAT	Institut national de la statistique. Mali
IPR	Institut Polytechnique Rural. Mali
IRs	Intermediate results
ISRA	Institute for Agricultural Research. Senegal
JSR	joint sector review
LGA	Local Government Authority
LGAF	Land Governance Accountability Framework
M&E	Monitoring and Evaluation
MAFS	Modernizing African Food Systems
MaSSP	Malawi Strategy Support Program
MDRI	Myanmar Development Research Institute
MLFRD	Ministry of Livestock, Fisheries, and Rural Development (Burma)
MSU	Michigan State University
NAIP	National Agriculture Investment Plans
RAIP	Regional Agriculture Investment Plan
ReNAPRI	Regional Network of Agricultural Policy Research Institutes
ReSAKSS	Regional Strategic Analysis and Knowledge Support System
SAKSS	Strategic Analysis and Knowledge Support System
UP	University of Pretoria
USAID	United States Agency for International Development
WA	West Africa

### 1. Introduction

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

#### **FSP Goal and Objectives**

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

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

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

#### FSP Workplan Structure, 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.

Given that significant funding to support FSP country-level work has been provided from USAID missions in Burma, Mali, Malawi, Nigeria, Senegal and Tanzania, and is expected from Zambia during the course of Year 3, global research engagement and policy system capacity building themes (C3 and C4) will be even more closely integrated with country activities.

The growth in the number and complexity of Associate Awards requires strengthening of the FSP management team. Oyinkan Tasie and Steve Longabaugh will support the FSP Program Director in Associate Award management and ensure compliance with open access data requirements. Additionally a part-time position within the FSP management team will provide dedicated support to assist country

teams in policy implementation strategy using emerging lessons and tools from C3. Professor Mywish Maredia will take over from Duncan Boughton as Program Director effective January 1, 2016 with the latter's move to Burma as Chief of Party.

# 2. Components 1/2: Collaborative Policy Research, Analysis and Capacity Building for West Africa

#### 2.1. Introduction

Resources for regional activities under this component come from FSP Core funds and a USAID/WA buyin. The USAID/WA buyin to FSP includes three major activities that MSU and IFPRI will undertake during 2015/16:

- MSU Joint Sector Review (JSR) Support on Regional Input Policies. (Principal Investigator: Boubacar Diallo, MSU)
- Case Studies of Uneven Implementation of Regional Input Policies. (Principal Investigator: Steven Haggblade, MSU)
- ECO-SIM Model Updating and Application to Regional Rice Policy. (Principal Investigator: Ousmane Badiane)

FSP core support will also complement an expected five-year USAID Mali funded Associate Award to address key evidence and analytical gaps in five priority areas identified in the USAID policy matrix. The implementation strategy will simultaneously build up long-term local capacity for policy-relevant research and engagement through collaborative research with professional colleagues at local institutions such as the Institut d'Economie Rurale (IER), Institut Polytechnique Rural (IPR) and Cellule de Planification et de Statistique du Secteur Développement Rural (CPS/SDR). A three year Associate Award was funded by USAID Senegal in July 2015 to increase the level of public and private agricultural investments in the country by helping the government to strengthen the policy and enabling environment for agricultural sector investments. Another Associate Award from USAID/Nigeria is expected in the first quarter of FY 16. None of the C1/2 core funds are budgeted to support these two Associate Awards. However, FSP core support is budgeted under C4 and the management components towards these Associate Awards, and this support is noted under those sections.

#### 2.2. Summary of Year 2 workplan accomplishments

### Activity 1: Modeling the impact of regional rice policy. Description:

• Rice is the most widely traded food staple in West Africa. Given long-standing structural deficits, rice imports contribute roughly half of regional rice consumption. In order to boost regional production, ECOWAP, the ECOWAS agricultural policy, has designated rice as one of five priority commodities. FSP has worked to support policymakers in West Africa to track the impact of various production and trade initiatives on local production, domestic and regional trade and consumption. This is done through establishing national rice accounts for ECOWAS countries using national agricultural surveys to disaggregate data on rice production, consumption, and trade. The disaggregated data on rice accounts will continue to be fed into the ECOWAS Simulation Model (ECOSIM) in order to simulate the impact of the regional rice self-sufficiency policy on intra- and extra- regional trade (imports and exports), agricultural growth, overall growth, employment, poverty, and food security (rice and overall food consumption).

#### **Achievements:**

 The team made has significant progress on establishing the rice accounts for five additional ECOWAS countries (Burkina Faso, Cote d'Ivoire, Niger, Nigeria, and Togo). These accounts, together with those that have already been compiled for Guinea and Senegal, mean that detailed information on rice production is now available for seven West African countries. The Ebola crisis in West Africa also prompted the team to use the agriculture-focused SAM for Guinea to assess Ebola-related food security threats, the results of which were shared with Guinea's Ministry of Agriculture. This assessment will also be relevant for the agriculture joint sector review (JSR) process in Guinea as it will help inform the establishment of baselines for key indicators to be monitored through the JSR and thus provide a better understanding of the impact of the crisis in evaluating agricultural sector performance in Guinea.

- Capacity Building:
- Workshops in Benin and Senegal trained members of the respective national statistics institutes on
  the economic modeling of agriculture at farm, national, and regional levels, especially focusing on
  the use of SAMs and computable general equilibrium (CGE) models for agriculture, building
  participants' capacity to utilize ECOSIM. Additional trainings on "Data, Tools, and Models for Food
  Policy Analysis" were also provided to members of Senegal's Ministry of Agriculture, Directorate for
  Analysis, Forecasting and Statistics (DAPS), the Senegalese Institute for Agricultural Research (ISRA),
  and the University Cheikh Anta Diop of Dakar.

#### **Lessons Learned:**

- The results of the regional simulation for rice showed that total and per capita consumption is expected to increase and estimates that the annual increase in production (8 percent) would need to be twice that of consumption (4 percent) in order to achieve the goal of regional self-sufficiency by 2025. The model projects that the rice sector average annual value added growth rate will double, from 6 percent to 12 percent, helping to reduce the region's dependence on rice imports, contribute to GDP growth, and improve food security.
- The study of the Ebola-related food security threat in Guinea used economic modeling techniques to test the sensitivity of Guinea's economy and households' well-being to various transmission channels of the epidemic such as agricultural labor force and production, and domestic and international trade. Results of the study showed that food consumption is seriously affected by the disruption of trade transactions between rural and urban markets, and national and international markets. In addition, farmers pay a heavy price when confronted by the Ebola crisis.

### Activity 2: Policy research and analytical support in Mali. Description:

• This activity provides policy research and analytical support in Mali focused on fertilizer and seed system reviews and implementing a national farm household survey.

#### **Achievements:**

- 1. Preliminary seed system review. This review summarizes available evidence on the structure and performance of Mali's seed supply systems. It relies on existing studies by IER, ICRISAT and others, complemented by qualitative field interviews with key actors in the seed system. Though qualitative in nature, this review identifies key data and analytical gaps that will form the focus of careful empirical field studies at the farm level and in the distribution system in coming years.
- 2. Preliminary fertilizer system review. This paper provides a parallel overview of available evidence on the structure and performance of Mali's fertilizer supply system, based primarily on existing studies supplemented by qualitative field interviews.
- 3. Farm-level survey on input use and farm production. Building on the IER/GISAIA/MSU survey currently being planned for Mali's sorghum producing zones, the FSP team has worked with relevant government offices (IER, INSTAT, CPS) in designing and piloting a multiple-visit farm household survey for scaled-up implementation during the first year of the 5-year associate award. This survey

focuses on input access, utilization, pricing, subsidy costs and productivity impacts at the farm level. During 2014/15, activities focused on designing and piloting a four-visit survey in dryland sorghum producing zones in collaboration with ongoing work already underway under MSU's GISAIA project with IER. In coming years, funding permitting, the team hopes to scale up survey work to cover Mali's major agro-ecological production zones.

4. Student research program at IPR. In order to expand opportunities for male and female student and faculty research at IPR and integrate them into ongoing policy debates, the FSP team worked with IPR faculty to design and pilot a research grants schemes and mentorship system that will allow IPR students to conduct policy-relevant research for the end-of-degree field project. In 2014/15, MSU and local partners at CSP and IER mentored 3 students in the study of fertilizer use in horticulture production. The experience of this pilot program will be used as an input in the design of an expanded student research program for the coming years.

#### **Capacity Building:**

 Work on the Mali farm household survey has included an IPR student research pilot program, under which three students conducted field research on related topics related to horticultural markets.
 This pilot student research program served as a testing platform for continued involvement of IPR students in policy relevant research in coming years.

# Activity 3: Support to ECOWAS's Regional Joint Sector Review and Regional Monitoring and Evaluation System (funded by USAID-WA) Description:

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

#### Achievements:

- IFPRI and ReSAKSS helped ECOWAS to map out clear next steps in establishing a regional JSR process and in setting up a regional M&E working group to support the M&E work of ECOWAS's Directorate of Agriculture and Rural Development (DARD). This was a key outcome of a regional technical workshop that was held from June 11–12, 2015 in Lomé, Togo, where participants included representatives from ECOWAS and technical experts from the Comité permanent Inter-Etats de Lutte contre la Sécheresse dans le Sahel (CILSS), IFPRI, MSU, ReSAKSS, and experts from regional think thanks and universities. IFPRI and ReSAKSS held consultations with ECOWAS on the need to post a ReSAKSS Advisor to ECOWAS's DARD in Abuja, Nigeria. The ReSAKSS expert, Mr. Manson Nwafor, joined the DARD office in Abuja in September 2015.
- IFPRI and ReSAKSS provided technical support to ECOWAS to organize a regional JSR and M&E inception workshop in Abidjan, Côte d'Ivoire, from July 27 to 30, 2015. Participants considered and adopted 60 indicators to be used on an interim basis to monitor the implementation of the ECOWAP and CAADP in West Africa. These indicators were developed using the results of the earlier Lomé

meeting and took into account the Malabo Declaration, the CAADP Results Framework, and emerging issues in the sector. Pending the production of the 2015–2025 ECOWAP strategic plan, these indicators will guide reporting on the ECOWAP. Participants at the July workshop included country representatives from 13 ECOWAS member states, representatives from civil society, research and technical organizations such as ReSAKSS, and USAID. With the support of ReSAKSS, detailed updates on the implementation of country NAIPs and the nature of the M&E systems in each country were developed for the 13 countries that participated in the meeting. This will provide very useful information for deepening ECOWAS M&E activities in the region.

- Earlier in 2015, the ECOWAS requested ReSAKSS and IFPRI to conduct a regional JSR assessment to review ECOWAP/CAADP implementation. In response, a regional JSR assessment, modelled after the country level assessments, is being finalized and is expected to be finalized in October. A draft report of the assessment was presented at the ECOWAP + 10 preparatory meeting held on October 7-9, 2015. The assessment will produce an action plan on how ECOWAS can establish and operate a regional JSR. Final results of the assessment are expected to be presented at the ECOWAP + 10 conference planned for November, 2015.
- Included in this is a review of ECOWAS regional seed, fertilizer, pesticide and veterinary drug policies
  took place between June and October 2015. The team participated in a series of technical meetings
  in July, September and October with the ECOWAS JSR team. Two consultant reports were drafted in
  September and are currently under review. A synthesis summarizing the findings was finalized in
  late October 2015. These findings will be incorporated in the JSR report and presented at the
  ECOWAP +10- Conference in Dakar on November 17-19, 2015.

### 2.3. Proposed Year 3 activities

Year 2 Activities Carrying Over to Year 3

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

- Following requests from ECOWAS and IFPRI, MSU is providing technical support on regional input
  policies to the ECOWOP JSR process led by IFPRI. Boubacar Diallo of MSU is leading the MSU effort,
  along with support from John Staatz, Tasie Oyinkan, Steven Haggblade and three local West African
  consultants. The three consultants are specialists in seeds, fertilizer, pesticides and veterinary
  products.
- This work began in June 2015. Despite difficulties obtaining the necessary policy documents from ECOWAS, two of the three consultants (fertilizer and pesticides-veterinary products) have submitted draft reports for discussion at the JSR October 1-3 planning meeting in Lomé. Based on feedback received, the consultants will revise their reports in October. MSU will summarize findings to be included in the regional JSR report and presented at the ECOWAP+10 Conference, currently scheduled for November 17-19 in Dakar.

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

- This work originated in response to concerns expressed by ECOWAS Agricultural Commissioner,
   Marc Atouga, to USAID/WA about uneven rates of country implementation of regional policies.
   Research under this activity aims to understand why some countries move rapidly to implement
   agreed-upon regional policies, while others move slowly or not at all. Ultimately, this understanding
   aims to help identify key factors favoring country-level implementation of regionally agreed-upon
   agricultural policies.
- To clearly identify the key factors affecting policy implementation (or non-implementation), this
  work applies a political economy model of policy change developed and field tested by the FSP

Innovation Lab team between October 2014 and December 2015. Led by Steven Haggblade, selected francophone members of the FSP C3 will begin field work in the final calendar quarter of 2015, following completion of the initial six Kaleidoscope case studies by the C3 team.

In October 2014, Haggblade and Diallo conducted seed and fertilizer stakeholder interviews as part of an initial scoping assessment to identify key hypotheses about reasons for differential rates of regional input policy implementation. JSR work under way between June and November 2015 on regional input policies for seed, fertilizer, herbicides and veterinary products (Activity 1 above) will help the team to select a final set of informative, contrasting country case studies for review. The case study work will take place during the first half of calendar year 2016.

#### Year 3 New Activities, Milestones and Outcomes

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

This aims to monitor and evaluate the ECOWAS Agricultural Policy (ECOWAP) and National Agricultural Investment Plans (NAIPS) through a regular and comprehensive regional JSR. In efforts to assist ECOWAS in strengthening the ECOWAP/CAADP M&E unit, core tasks in the last quarter of 2015 include posting a staff member at the ECOWAS Directorate for Agriculture and Rural Development in Abuja, Nigeria, as well as evaluating the status of implementation of the M&E unit described in the ECOWAP operational plan. This evaluation will produce a report with recommendations to strengthen the unit. Another task in the final quarter of 2015 focuses on contributing to the 2015 regional JSR assessment by organizing a regional technical meeting on M&E, and drafting a monitoring plan for JSR recommendations. Tasks in the second quarter of 2016 aim to support the implementation of the ECOWAP/CAADP M&E systems at the national and regional levels. Specific activities include supporting ECOWAS to assess the current ECOWAS/CAADP M&E Framework and updating it following the emerging issues, supporting the regional workshop for the validation of the new ECOWAP M&E Framework, helping to produce a regional M&E report, and supporting ECOWAS to organize an annual workshop on the Regional Agricultural Investment Plan (RAIP) and NAIP progress. Deliverables from these activities include a revised draft ECOWAP M&E framework, a workshop report and final framework, an outline for the ECOWAP 2016 M&E report, and a concept note for the 2016 regional workshop. The final task to be completed in 2016 is a contribution to the 2016 ECOWAS JSR preparation by helping to produce a concept note for the JSR and disseminating the African Union (AU) JSR guidelines to stakeholders at the 2016 JSR meeting. MSU's contribution to this activity is funded under a USAID/WA Buy-In, while's IFPRI's support is through the USAID/WA funds channeled through CGIAR Window 3 funding.

#### **Activity 5: Support to national programs: Mali**

Recent democratic elections in Mali, followed by a cabinet reshuffling, open many opportunities for productive policy discussion within the new Malian government and administration. Agriculture remains a strategic economic sector for Mali and the backbone of a national strategy for achieving food security and poverty reduction. The recently adopted Politique de Développement Agricole (PDA), which outlines a program aimed at making Mali a regional agricultural power, will require a revised investment plan (PNISA) for the period 2015 – 2019. As a result, both GOM and donors share a common interest in building an enabling environment for agribusiness development and

- sustainable productivity growth to encourage youth employment in farming and post-farm agricultural value added enterprises.
- Despite this common interest, weak national agricultural statistics and limited analytical capacity for policy analysis and investment planning constrain efforts to improve the agricultural policy environment. In spite of large agricultural public sector budget expenditures (half of them on fertilizer subsidies), information on the effectiveness of these expenditures remains similarly weak. GOM budget allocations identify implicit priorities, suggesting that improved farm productivity via increased fertilizer and improved seed access remain the top agricultural concerns of the Malian government. In its 2014/15 budget, input subsidies account for single largest expenditure item in the agricultural portfolio, accounting for 50% of agricultural spending or \$70 million (35 billion CFAF) per year.

#### Proposed Deliverables to be co-funded with FSP core support

**Theme 1. Raising farm productivity** (Policy Matrix 1.1 Seed, 1.2 Regional seed, 1.3 Fertilizer)

- Deliverable 1. Productivity and gender impact of improved sorghum seeds in the high-potential sorghum zones (Koutiala Plateau) of Mali
- Deliverable 2. Productivity and gender impact of fertilizer use on sorghum and competing cereal crops in the high-potential sorghum zones (Koutiala Plateau) of Mali
- Deliverable 3. The emerging herbicide revolution: adoption, labor market implications and productivity impact of herbicides in Mali's high-potential sorghum zone (Koutiala Plateau)
- Deliverable 4. Sampling plan and research design for Year 2 farm household survey in 2-3 additional AEZs.

Theme 2. Gender (Policy Matrix 3.2)

• Note that deliverables 1, 2 and 3 all integrate gender specifically into the analysis

**Theme 3. Trade (**Policy Matrix 2.1. Domestic trade barriers, 2.2. Cross-border trade)

• Deliverable 5. Estimate the impact of domestic trade barriers on urban consumer prices for staple foods

Theme 4. Agribusiness investment (Policy Matrix 2.3)

• Research activities deferred to year 2 given late signing of award

Theme 5. Policy capacity: data, analysis and outreach (Policy Matrix 3.1)

- Deliverable 6. Catalog, document and safeguard existing data sets at IER
- Deliverable 7. Inventory current statistical staffing, responsibilities and information needs of policy makers
- Deliverable 8. Support student research on priority policy-relevant research topics for 25 students at IPR (minimum of 5 per year over five years)
- Deliverable 9. Institutional support -- including focused short-term training in key research skill areas, computer equipment and software, vehicles and research support -- to improve capacity for research, student support and data management at IER, IPR and CPS.

### 3. Component C1/C2 Asia

#### 3.1. Introduction

FSP core support in Asia is focused on Burma. Major activities in Burma in FY2015 were carried out using funding from an Associate Award from USAID/Burma. The Associate Award was signed in September 2014. Implementation of the workplan formally began in February 2015. FSP core funds support capacity building dimensions through two activities. The first is the implementation of a rural livelihoods household survey in Mon State to provide an empirical foundation for a state level rural development strategy. The second activity consists of providing capacity support to civil society engagement (e.g., the Food Security Working Group) on how best to target their efforts to engage in the policy process.

#### 3.2. Summary of Year 2 workplan accomplishments

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

• Implementation of a rural livelihoods household survey in Mon State to provide an empirical foundation for a state level rural development strategy was the first large-scale household survey undertaken by MDRI researchers and involved a heavy emphasis on capacity building for all stages.

#### **Achievements:**

- The rural livelihoods survey in Mon State was initiated in February with initial questionnaire design and sample frame preparations. During April and May final pre-testing and implementation of the household survey was undertaken for in collaboration with researchers from MDRI-CESD. Data collection was completed in June with the exception of a few enumeration areas where security concerns prevented access and data entry for the survey was initiated. Preliminary analysis began in September and will continue throughout the fall with significant involvement of MDRI-CESD staff who have been trained in Stata.
- In July, two IFPRI researchers provided a 10 day "Quantitative Analysis" training course to MDRI-CESD staff. The goal of the training was to provide attendees with a strong enough foundation in Stata that they could begin to work on basic cleaning and conducting basic descriptive statistical analysis at course end. Throughout the training, instructors integrated hands on activities using polls taken in class or data related to the project in order to provide a real-world understanding of the software and its applications.

## Activity 2: Capacity Building for CSOs Description:

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

#### **Achievements:**

- Members of the FSP project team (Adam Kennedy (IFPRI), Suresh Babu (IFPRI), and Oyinkan Tasie (MSU) visited the Food Security Working group in December 2014 for the first time to initiate the capacity assessment. During the visit the team spoke with nearly all staff of FSWG and several of the member organizations to get a sense of their mandate, capacity and the role that the FSWG plays in the policy process. In total the FSP team met with more than 40 individuals from 15 different member organizations and with most of the officers at FSWG. Additionally, a policy communication training was conducted presenting some of the research done under Component 3 (the Kaleidoscope Model) and lessons from other countries on how CSO organizations and networks can take part and influence policy discussions.
- In order to reach more members to better understand their capacity needs, a draft questionnaire was prepared and reviewed by FSWG staff. A follow-up meeting and training took place in July 2015 to discuss strengthening capacity of the NGOs in Myanmar and conducting a needs assessment for capacity development. In addition a two-day workshop was conducted for 45 participants on July 27-28, 2015 entitled "Strengthening Policy System through Policy Communications and Advocacy". Participants representing various NGOs working on food security policies and program in Myanmar attended the event. USAID mission colleagues were briefed on the process and outcomes of the training workshop.
- A key lesson working with the Food Security Working Group in Myanmar is that, nurturing the civil
  society networks in countries in transition such as Myanmar can help to bring them to the
  mainstream policy process to make the design, and implementation of food security policies more
  participatory, inclusive and locally owned.

#### 3.3. Proposed Year 3 activities

Year 3 proposed activities reflect the anticipated high demand for policy analysis and capacity building following the landmark elections held November 8, 2015.

#### Year 2 Activities Carrying Over to Year

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

FSP core support will be extended to provide hands on training in data analysis using the Stata statistical analysis package in December 2016.

#### **Activity 2: Capacity Building for CSOs**

Additional capacity building for civil society engagement in food security and agricultural policies has been requested by USAID Burma. Next steps will be mapped out, in collaboration with USAID Burma, following the appointment of a successor to the outgoing FSWG director.

#### Year 3 New Activities, Milestones and Outcomes

With the formation of a new government in the first calendar quarter of 2016, and the appointment of a new Minister of Agriculture, FSP will need to be flexible in responding to the new government's priorities for assistance.

#### Activity 3: Agriculture Component of Burma Economic Development Strategy

USAID Burma is financing the preparation of an economic development strategy through Nathan Associates. FSP will contribute to the agricultural and rural development components of the strategy, which include priority policy reform and public expenditure priorities in support of agricultural transformation.

### 4. Component C1/C2 Eastern and Southern Africa – Malawi

#### 4.1. Introduction

The activities in Malawi in FY2015 were carried out using funding from 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 light of the NAPAS: Malawi associate award, only limited core resources from the global FSP project will be needed to support FSP activities in Malawi. The principal activities with a Malawi focus requiring such support is training for journalists.

#### 4.2. Proposed Year 3 activities

Year 2 Activities Carrying Over to Year 3

#### Journalist training activities

- Journalist training: This activity entails the capacity building of senior and junior journalists in the reporting of policy messages in a manner that is neutral and unbiased. Training will be provided for journalists in Malawi.
- A scoping mission in 2014 identified that journalism is a particularly sensitive topic. Although there
  is an expressed need for improved reporting by journalists, there are some concerns regarding the
  response of government to critical reporting. Media in Malawi is viewed as a mouth-piece for
  government and private sector. In terms of the training content, respondents expressed the need
  for technical knowledge on food security and nutrition, technical writing and improved
  communication.
- O A one week training workshop will be conducted in the first calendar quarter of the year, with at least one more follow-up session in the third quarter. Participants will be accredited for the modules to increase participation incentives. Fifteen journalists will be trained in sessions with technical experts from Malawi universities to build local capacity to support the journalists long-term. Experts from outside Malawi will also be used especially in the early training sessions.
- O Due to the sensitivity involved in engaging journalists, this activity will initially engage participants on low key cross-cutting issues including gender and climate change amongst others. In-country trainers will be identified and play a key role in terms of providing in-country support to participants. The training will be carried out in partnership the communications division of the Ministry of Agriculture and will support a broader and more ambitious plan to establish a network of journalists to support the agriculture sector in Malawi.

### 5. Component C1/C2 Eastern and Southern Africa – Tanzania

#### 5.1. Introduction

Beginning in November 2013, FSP began applied policy research and policy process engagement in Tanzania (referred to as FSP/Tanzania hereafter) 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. D.Nyange provides support to DPP/MAFC in ag policy analysis and policy advice, capacity building and policy coordination activities to meet MAFC-driven research and capacity building priorities.

In Year 1 of FSP, D.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-C1/2-Tanzania (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 (referred to hereafter as "FSP-Tanzania") and funds from USAID/Tanzania (referred to hereafter as the "Tanzania Buy-in"). Activities 2 to 7 below are all activities that have been driven by MAFC and GoT agricultural policy priorities. Like the LGA crop cess study in 2014/15, these activities are jointly funded by GISAIA/Tanzania, FSP-Tanzania and/or the Tanzania Buy-in.

With the exception of Activity 3 & 4 (which did not begin in 2014/15), each of the activities proposed below began in FY 2014/15 and have been completed already or will be completed in FY 2015/16. In addition, each activity below involves not simply FSP faculty/staff but also engages local analysts (faculty from Sokoine University of Agriculture (SUA) and/or analysts or staff from MAFC) so that each activity not only produces the specified research or institution/capacity-building outcome, but also serves as an opportunity for capacity building of local public sector researchers and analysts.

#### 5.2. Summary of Year 2 accomplishments

## Activity 1: Deepen the existing institutional architecture assessment of agricultural policy in Tanzania (FSP-Tanzania / Status: ON-GOING)

• At the request of the USAID mission in Tanzania, an FSP team (led by Dr. David Mather, a member of the C3 team) began a study in Year 2 to deepen the existing institutional architecture (IA) assessment of agricultural policy. The current deepening study uses policy process tools developed by the FSP-C3 team (policy process mapping; stakeholder mapping) and applies them to two of the highest-profile policy areas of interest to the USAID, the Tanzanian Ministry of Agriculture, many private and CSO stakeholders, etc – agricultural input policy and agricultural trade policy. Once completed, the study will include (for each specific policy domain): i) a stakeholder inventory; ii) policy process map; iii) identification of gaps in stakeholder capacity and coordination mechanisms that constrain inclusivity and generation of, access to and use of solid evidence in the policy process.

#### Milestones completed:

• In Q4, David Mather (MSU), working with Dr. Daniel Ndyetabula (Sokoine University of Agriculture) and Dr. David Nyange (MSU), completed review of background documents/studies and conducted most of the key informant interviews needed for this study.

# Activity 2: Study of the economics and political economy of local government authority (LGA) levies in Tanzania (FSP-Tanzania & GISAIA-Tanzania / Status: COMPLETED) Milestones completed:

- A draft of the LGA crop cess (tax) study was completed in April 2014, and Dr. David Nyange spent
  much of June/July 2014 engaging in policy outreach with individual stakeholder groups. In these
  one-on-one stakeholder meetings, he presented the key study results, responded to any questions
  they had, proposed alternative policy reform scenarios, and worked to find and build consensus
  among the various stakeholder groups on a common policy reform position.
- At the beginning of Year 2 (30 October 2014), D.Nyange and the FSP study team presented the LGA Crop Cess study publicly for the first time, at a stakeholder event convened by MAFC and the Prime Minister's Office of Local & Regional Government (PMO-RALG). At this workshop, the key stakeholders publicly agreed to a common reform to LGA crop cess levels and administration. This included commitment to reform by the previous opponents of any reform: PMO-RALG and LGA officials.
- D.Nyange and the FSP team finalized the LGA crop cess study in Dec 2014, and submitted it to an inter-ministerial committee.

#### **Emerging and achieved policy reform success**

- The LGA crop cess study & policy outreach directly informed the development of an official GoT 'white paper' on LGA crop cess reform that began in an inter-ministerial committee in December 2014, and during 2014/15 made its way from one approval step to the next until it reached the President's cabinet in Q3, where it was held up due to more pressing matters in Parliament. When passed and implemented, the proposed LGA crop cess reforms should result in the following outcomes/benefits:
  - O Lowering local crop tax levels should result in farmers receiving higher prices for their food and cash crop sales and thus enjoying higher farmer incomes (because at present, the traders who pay these taxes pass on the cost to farmers in the form of lower farm-gate sale prices).
  - Harmonizing tax levels across districts (and over time) should reduce the current price (incentive) distortions to production and marketing of food and cash crops, and thus increase farmer & agribusiness investments in those activities.
- While reform of LGA crop tax levels have not yet been implemented, the executive branch has already issued a directive to the Prime Minister's for Local and Regional Government (PMO-RALG) stating that each of the country's 166 LGAs should move to adopt an e-payment platform for collection/administration of the LGA crop tax, once sufficient testing of the on-going pilot LGA crop tax e-payment platform (which is being piloted right now thanks to GISAIA/FSP support to D.Nyange) enables the platform to be successfully scaled-up for all LGAs.
  - O When e-payment system is adopted, this should theoretically improve tax compliance, which the LGA crop cess study estimated to only currently achieve about 25% of crop taxes owed. Because current tax compliance is relatively low, if higher tax compliance is achieved, this should more than compensate for lower revenue due to lower rates, thus resulting in higher LGA revenue from LGA crop taxes. This in turn should result in higher spending on local public goods that are largely financed by LGAs (rural roads, schools, clinics, extension workers, etc)

Activity 5: Coordinate the development of a e-payment (mobile phone) platform for collection and monitoring of LGA crop cess payments and revenue (FSP-Tanzania & GISAIA-Tanzania / Status: COMPLETED)

- Dr. Nyange engaged with Judy Payne (USAID) and other ICT experts at USAID to learn from USAID's experiences with designing and piloting e-payment platforms.
- D.Nyange then hired a local ICT consultant and coordinated with PMO-RALG and select LGA officials
  to assess how the crop cess is currently paid and the mix of ICT equipment/software and human
  capacity building that would be required to design and implement an pilot e-payment platform for
  collection and monitoring of LGA crop cess payments and revenue
- D.Nyange coordinated interaction between the ICT consultant, a local cell phone company and PMO-RALG and LGA officials in Kilombero district to develop a pilot e-payment platform that will meet the needs of LGA officials to switch from a cash to an e-payment system for LGA crop cess and all other local taxes.

#### **Outcomes:**

• This activity has generated a pilot e-payment platform for the collection and monitoring of LGA crop cess payments (and all other local taxes).

Activity 6: Coordinate a pilot e-payment (mobile phone) platform for collection of LGA crop cess payments and evaluate its performance (Tanzania Buy-in & GISAIA-Tanzania / Status: ON-GOING) Milestones completed:

- D.Nyange worked with an ICT consultant, a local cell company and officials from Kilombero district
  to initiate a pilot e-payment platform that will enable LGA officials to shift from a cash to an epayment-based system of collecting LGA crop cess and other local taxes.
- The pilot began in July 2015, after D.Nyange and leaders of the Kilombero district (of the Morogoro region) organized a workshop involving 121 participants, during which ward leaders and tax administrators in that district were trained to implement the pilot e-payment system for LGA crop cess and all other local taxes.

#### **Outcomes:**

- If the pilot in Kilombero district, is successful, this platform could then be scaled up to more districts next year to be further evaluated under more LGA contexts.
- Successful scaling-up and adoption of an e-payment platform for collection of local taxes across the
  country would contribute significantly towards the GoT New Alliance (NA) Commitment #1 to
  improve the administration of the LGA crop cess, and NA Commitments #2-4 that aim to improve
  the transparency and consistency of the agricultural tax and regulatory system.

Activity 7: Support development and piloting of a Results Tracking System (RTS) for key MAFC investments using a mobile phone platform (Tanzania Buy-in & GISAIA-Tanzania / Status: ON-GOING) Milestones completed:

- Dr. Nyange coordinated with MAFC M&E staff to understand the information that would be most helpful for them to receive via the monthly RTS mobile phone-based surveys of farmers and extension agents in order to improve M&E of on-going investments in 36 rice irrigation schemes, one of the three key Big Results Now (BRN) initiatives of the Presidential Delivery Bureau.
- Dr. Nyange hired an ICT consultant to design the mobile platform for the RTS phone surveys, and he and the M&E team organized a training workshop of extensionists in two separate zones to begin implementation of the mobile-phone based survey system.

Although the RTS began implementation in September, full implementation of the survey questions
is being delayed until after the 25 October election as farmer response rates in September were low
due to pre-election campaign activities throughout the country

#### **Outcomes:**

- The RTS provides the MAFC M&E team with monthly updates on whether or not farmers in BRN-supported irrigation schemes are receiving input, extension, and marketing services as promised by private sector providers and to be alerted as soon as possible to any serious production constraints faced by farmers. This will improve both M&E's ability to address problems in a timely and efficient way and greatly increase their understanding of rice farmer behavior, constraints, challenges, etc from one rice irrigation scheme to the next.
- D.Nyange/MAFC intends to take the existing mobile-phone based RTS e-platform that has been
  developed, and then modify the 'survey questions' used so that it can help improve MAFC M&E of
  other key investments, such as BRN investments in improving the facilities, institutional capacity and
  management of Warehouse Receipt Systems across the country (targeted to maize & rice
  producers).

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

• Although Tanzania has experienced rapid growth in demand for processed and perishable foods in Tanzania due to a combination of urbanization and income growth, there currently exists an extremely weak knowledge base in Tanzania regarding who (local firms, regional firms, multinationals) is producing processed and perishable food products in Tanzania, where they are produced or processed (in urban areas, peri-urban, nearby rural, or distant rural), and how (with what technology and at what scale). Even less is known about what this implies about needed public policy and investment. Answers to these questions are highly relevant to not only the prices, variety and quality of processed and perishable foods are available to a growing number of urban and other consumers demanding these characteristics from food they consume, but also the potential for large growth in domestic demand for unskilled and skilled labor that will be needed by firms engaged in processing, retailing, and other value-added marketing activities.

#### Milestones completed (Research planning & research):

- In Q1, Dr. David Tschirley, Dr. Tom Reardon and Jason Snyder (MSU) began planning for this study
  via consultation with Dr. David Nyange (MSU), government officials and other stakeholders. In Q2,
  they began analysis of existing secondary data, then visited Dar es Salaam, identified some local
  collaborators, and began conducting initial key informant interviews at various levels of the supply
  chain(s) of interest.
- From July-Sept 2015, J.Snyder and local research collaborators completed most of the intensive work required to build a 'sampling frame' of all processors and retailers of a few chosen commodities in selected cities (Dar es Salaam, Arusha, and Mwanza). This sampling frame will be used to implement a randomized survey of processors and retailers beginning in January 2016.
- The FSP team completed two research report briefs on "Local Response to the Rapid Rise in Demand for Processed and Perishable Foods: Results of an Initial Inventory of Processed Food Products in the Markets of Dar es Salaam, Arusha and Mwanza."
- In July 2015, D.Tschirley, T.Reardon, J.Snyder, D.Nyange (MSU) coordinated and led a stakeholder workshop in Dar es Salaam to introduce the proposed study and elicit feedback on the proposed survey research objectives, methods, etc and to discuss other potential topics/issues related to agrifood system transformation in Tanzania.

### Activity 9: Design and begin implementation of a Tanzania case study under the FSP-C4 Land Access/Use theme (FSP-C4 & Tanzania Buy-in / Status: ON-GOING)

The GoT Presidential Delivery Bureau's Big Results Now (BRN) key activity #1 is to facilitate transfer of land to medium/large scale farmers (25 commercial deals for paddy and sugarcane). In addition, one of the SAGCOT public/private initiative's objectives has been to support similar transfers, and USAID has supported the SAGCOT initiative. The goal of facilitating land access for medium/larger scale farmers is based on several premises that are important and (as of now) under-researched empirical questions in the case of Tanzania. The first is that medium/large holders are relatively more productive than smallholders, thus improving their access to land can help the country increase its domestic production of key staple crops. Second, even if they may be as or less productive than smallholders in some contexts, there may nevertheless be significant positive spillover benefits from medium/large scale cropping activities to adjacent smallholder communities (assuming appropriate institutional arrangements exist or are designed) that may therefore improve the access of these smallholder communities to agricultural technologies, credit, extension and marketing services and thus improve the food security and welfare of smallholders in those communities. Thirdly, medium/large holders may provide a valuable source of off-farm agricultural wage employment (and thus additional income) for an adjacent smallholder community. The proposed study will combine a secondary data with survey of medium-scale farmers in specific zones of Tanzania and focus group discussions to examine these emerging land issues and their policy implication of household welfare.

#### Milestones completed (Research planning & research):

- In Q2 & Q3, Dr. Milu Muyanga (MSU) identified research collaborators from the Department of Agricultural Economics & Agribusiness at Sokoine University of Agriculture (DAEA/SUA), and they began to analyze survey data from the 2007/08 Agricultural Census to better understand the location/type of medium/large-holder farmers at that point in time.
- In Q4, M.Muyanga, Dr. Thom Jayne (MSU) and research collaborators from DAEA/SUA organized a stakeholder inception workshop involving a wide range of public and private sector organizations related to land access in Dar es Salaam. The goal of the workshop was to present the objectives, questions and the proposed approach of the land access study for stakeholder feedback. Based on the stakeholders' suggestions, nine (9) case study topics and respective case study research team leaders were identified.

### Activity 10: Capacity building within the Ministry of Agriculture (and/or other agricultural sector-related Ministries) (FSP-Tanzania & GISAIA-Tanzania: ON-GOING)

Beginning in December 2013, Dr. Nyange began coordinating and/or leading a capacity building
workshops under the GISAIA/Tanzania project, targeted to analysts and policymakers from various
directorates within the Ministry of Agriculture (MAFC) and other ag sector-line ministries. These
workshops are related to emerging issues, tools, concepts, and applications of agricultural policy. In
2014/15, D.Nyange and/or ReSAKSS have led/coordinated near-monthly workshops for GoT ag
sector policymakers and/or analysts.

#### Milestones completed (capacity building)

• FSP/Tanzania funded a refresher course on Statistics and Econometrics for analysts at MAFC and other ag-line ministries in June 2015, led by D.Nyange.

Activity 11: Capacity Building in the use of Partial Equilibrium Modeling to for Policy Analysis and Crop Outlook Modeling at Sokoine University of Agriculture (FSP-Tanzania / Status: ON-GOING)
Milestones completed (research & capacity building):

- In 2013/14, Dr. Ferdi Meyer of BFAP (University of Pretoria) began providing capacity building for Dr. Zena Mpenda of DAEA/SUA to build and apply a partial equilibrium model of maize production, marketing and trade for Tanzania, via funding from BMGF (via ReNAPRI).
- Beginning in 2014/15, FSP funding enabled D.Meyer to continue working with Z.Mpenda (as well as
  a second DAEA faculty member) to train them to build and apply partial equilibrium models for rice
  and wheat, in addition to maize.
- FRP funding also enabled Dr. Meyer and a faculty member from FAPRI/University of Missouri to lead 5-day training course in partial equilibrium modeling at DAEA in Morogoro, Tanzania. The workshop was attended by approximately 15 DAEA faculty and graduate students as well as 5 junior analysts from the Directorate of Policy & Planning (DPP) of the Ministry of Agriculture (MAFC).
- In March most of the basic data on prices, production, consumption and trade that are required to develop a commodity balance sheet were collected.
- In April 2015 Dr Meyer and Ms Traub (funded by the BMGF grant at University of Pretoria) visited DAEA/SU for two days to develop a work plan. During this planning session, a first template for the partial equilibrium model for wheat and rice was identified.
- During the period April to June the first version of the Tanzanian wheat and rice model was developed.
- In order to prepare for the training workshop for government officials as well as SUA research staff,
  Dr Mpenda and Dr Akyoo spent a week at BFAP offices in Pretoria (June 15-June19) to work on the
  first version of the PE model and to prepare basic training files and key research questions for the
  training workshop in Morogoro.
- In the week 6-10 July a 5-day training course in partial equilibrium modeling was led at DAEA in Morogoro, Tanzania by Prof Partick Westhoff from FAPRI at the University of Missouri and Me Tracy Davids from BFAP. The workshop was attended by 15 DAEA faculty members from SUA and representatives from the Directorate of Policy & Planning (DPP) of the Ministry of Agriculture (MAFC).
- The rice and wheat outlook was incorporated in the ReNAPRI outlook booklet, which was
  disseminated and handed out at the ReNAPRI stakeholder meeting on 28&29 October in Maputo
  Mozambique. The meeting was attended by more than one hundred stakeholders from government
  and private sector.

#### 5.3. Proposed Year 3 activities

#### Year 2 Activities Carrying Over to Year 3

Beginning 1 October, 2015, FSP will deepen its applied policy research and policy process engagement in Tanzania, building on activities carried out since November 2013 by FSP-C1/2-Tanzania (referred to as "FSP/Tanzania" hereafter) and since October 2015 by a USAID/Tanzania buy-in to FSP Tanzania (referred to as the "Tanzania Buy-in" hereafter).

# Activity 1: Deepen the existing institutional architecture assessment of agricultural policy in Tanzania (FSP-Tanzania / Status: ON-GOING)

In Q4, D.Mather completed much of the reviewed relevant background documents/studies and key informant interviews for this study, working with Dr. Daniel Ndyetabula (of Sokoine University of Agriculture) and Dr. David Nyange (MSU). The key informants include a range of GoT officials, donors, a number of private sector and CSO actors, etc.

#### Milestones (next steps):

- FSP will produce a report that documents the policy process, stakeholder mapping, and capacity/coordination challenges in two key ag policy domains in Tanzania (ag inputs, ag trade). This report will significantly deepen the existing Institutional Architecture assessment by concentrating on two specific and high-profile policy domains.
- The FSP study team will engage stakeholders in each policy area (ag inputs; ag trade) to ensure that the report is widely disseminated among government, private sector and CSO stakeholders, and will look for opportunities to present the results at stakeholder events.

#### **Outcomes:**

- Improved understanding by GoT, private sector and CSO stakeholders, USAID/Tanzania and other donors of the institutional architecture of the policy process of two specific agricultural policy domains
  - Facilitate discussion among stakeholders about ways to improve the inclusivity, transparency, and predictability of each policy process (for ag inputs, ag trade policy) and increase the access to and use of solid evidence in decision-making.
  - Identification of key gaps in stakeholder capacity and coordination mechanisms that, if addressed, could improve the inclusivity of ag policy processes in Tanzania and increase the generation of local organizations to generate data and empirical analysis and the capacity of stakeholders to use the results from that analysis to improve the use of empirical information the design, implementation, and reform of ag policies.

Activity 2: Study of the economics and political economy of local government authority (LGA) levies in Tanzania (FSP-Tanzania & GISAIA-Tanzania / Status: COMPLETED in FY 2014/15.

# Activity 3: Support the legislative process for reforms of the Local Government Authority crop cess (Tanzania Buy-in; GISAIA/Tanzania / Status: NOT YET STARTED):

- Implementation of LGA crop cess (tax) reforms such as lowering and harmonizing the existing crop
  cess levels and modifying their administration might require amendment of the 1982 Local
  Government Finance Act (see Activity 2 in the 'summary section' for more background). If such an
  amendment is required, resources will be needed to hire experts in public financial management
  and a public governance lawyer and to support a portion of D.Nyange's time to focus on this.
- This activity will be implemented by Dr. David Nyange of MSU, whose LOE on this activity will be shared equally by GISAIA/Tanzania and FSP/Tanzania. Dr. Nyange will hire experts in public financial management and a public governance lawyer. The FSP funding for this activity is derived completely from the funds provided by USAID/Tanzania to FSP/Tanzania core for FY 2014/15 & FY 2015/16.

#### Milestones (next steps):

- FSP will coordinate the provision of guidance from an expert in public financial management and/or a public governance lawyer in order to help the GoT to:
  - 1) Determine whether implementation of proposed reforms to the existing LGA crop cess tax levels and administration 1982 Local Government Finance Act requires amendment of that act
  - 2) Provide legal assistance to the President's office and/or Parliament to modify the proposed LGA crop cess reform legislation or directive as needed for it to be either considered by Parliament or approved by the President's office as a directive

#### **Outcomes:**

o Same as for Activity 2 in the 'Summary of Year 2 accomplishments section' above.

### Activity 4: Broaden the scope of the LGA crop cess study to include other agricultural taxes & regulatory fees (FSP-Buy-in & FSP-Tanzania & GISAIA/Tanzania / Status: NOT YET STARTED)

- In late 2013, the PMO (Prime Minister's Office), MAFC and USAID/Tanzania all requested Dr. Nyange to lead a team to produce a study as soon as possible to specifically address empirical questions related to the LGA crop cess. From the beginning of the LGA crop cess study (Activity 3) that started in November 2013, the LGA study team (led by Dr. Nyange) recognized that there were more regulatory fees, taxes, etc related to crop production and marketing beyond just the LGA crop cess that would needed to be studied. In fact, there is a wide range of issues of concern to stakeholders in agriculture with regard to agricultural taxation and the regulatory environment. For example, GOT New Alliance commitments #2 to #4 all involve improving incentives for private sector investment in the agricultural sector by not only reducing taxes they face, but also increasing the transparency and consistency of the agricultural tax and regulatory system so as to both raise revenue needed by the central and local governments while minimizing distortions to the incentives of actors in the ag sector. Reform of a number of excessive taxes/fees and regulatory hurdles to private sector activity/investment in the agricultural sector is also one of the priority areas identified in the recent Business Enabling Environment (BEE) lab organized under the auspices of the Big Results Now (BRN) initiative of the Presidential Delivery Bureau's Agricultural A Division.
- Given the context above and the GoT New Alliance commitment to improve the enabling environment for private sector investment/activity in the agricultural sector, FSP requested funding from USAID/Tanzania to be able to implement Activity 4 (beginning in late 2014/15) and this funding was included in the Tanzania Buy-in. However, within the past few months, D.Nyange learned of three on-going studies that are already addressing most if not all of these additional agricultural sector taxes/fees/regulations. The first is a study by the World Bank's Doing Business office that is producing a set of indicators of the 'ease of doing business' in Tanzania's agricultural sector (similar to those that Doing Business produces for the economy at large). The second study is being led by the USAID-funded SERA policy project, and is a much more in-depth analysis of a range of taxes, fees and regulations faced by actors throughout several major crop value chains in Tanzania. The third is a World Bank-led study of 'agricultural sector taxation' that is separate from the 'Doing Business Ag Sector' study.
- Given that these on-going studies address the issues intended for Activity 4, FSP has recently
  proposed to USAID/Tanzania that we use the resources budgeted for that activity to address a
  recent request from the Chief Secretary (head Permanent Secretary of all PSs, who sits in the
  President's Office), the Ministry of Finance, and MAFC for MSU to coordinate and/or lead a study to
  assess the feasibility of GoT crop and livestock board reform and/or consolidation.
- <u>Background</u>: In the mid-1990s, Tanzania privatized their crop board parastatal organizations, leaving the crop boards with a minimal mandate (that varies by crop) of regulation related to the production and marketing of that crop. In 2002, the World Bank produced a study that recommended separation of private and public function of the crop boards (i.e. production, marketing, transportation, storage, processing and input supply activities should be left to the private sector, while regulation, data collection, and extension should be done by the Government). Some of the recommendations from the World Bank study were implemented under the 2009 Crops Laws (Miscellaneous Amendments) Act, which amended the Acts that apply to seven crop subsectors (and their boards including coffee, cotton, tea, tobacco, sisal, sugar, pyrethrum). Among other things, the 2009 Crops Laws act <u>abolished crop board levies charged to producers</u> and clearly stated the Crop Boards public function in regulating and promoting commodities they represent.
- <u>Current debate</u>: The expectation was that the central government would compensate the crop boards for their lost revenue through the Ministry of Agriculture (which oversees the boards).

However, several crop boards have recently requested authority to re-instate crop board taxes on producers as they claim that the GoT is not providing them with sufficient funding. Yet, perhaps due to several recent cases of gross mismanagement by some of the boards, and also the example of recent crop board consolidation by neighboring Kenya, the Ministry of Finance replied to the crop boards' complaint that the MOF believe that Tanzania should consolidate their large number of crop and livestock boards into one or two boards, which they believe would result in efficiency gains that would be more than enough to avoid having to re-instate crop board fees. For example, the MOF notes that there is inefficient expenditure across the boards: not every board needs their own 'board of directors', administration and procurement offices, etc.

- The MOF and MAFC have recently approached D.Nyange to see if MSU could coordinate a feasibility study of potential crop & livestock board reform/consolidation. This study would include at least four key components, each related to the feasibility of that aspect in the event of crop board reform or consolidation:
  - 1) Legal feasibility
    - a. What laws/acts would need to be modified to reform and/or consolidate crop boards;
  - 2) Public finance implications
    - a. What does assessment of the boards' current financial/asset balances suggest about the financial status of the boards were they to be consolidated;
  - 3) Public Sector Reform implications
    - a. What are the likely institutional, organizational, and managerial implications of consolidation, what would the new organizational structure look like, and what is the pathway from the status quo to the new structure?
  - 4) Agricultural Market Performance implications
    - a. What are the current goals of the crop boards in regulating their respective value chains, to what extent are the boards successful in maximizing the welfare of supply chain actors and consumers currently, and what would be the implications of consolidation on the ability of the new organization to maintain or improve upon the current board performance?
- Status of FSP thinking on this potential study: While Hal Carey supports the proposed shift of Tanzania Buy-in resources from a study on agricultural taxation to one on the feasibility of crop board reform, FSP/MSU is still in the process of internal discussion regarding what role is most appropriate for FSP/MSU to play in the proposed feasibility study as well as engagement with the World Bank to assess how best to address this request. In short, FSP is waiting to hear whether or not the World Bank is willing/able to take a lead role in several of the key technical aspects of the feasibility study.

# Activity 5: Coordinate the development of a e-payment (mobile phone) platform for collection and monitoring of LGA crop cess payments and revenue

(Tanzania Buy-in & GISAIA/Tanzania / Status: COMPLETED)

Activity 6: Coordinate a pilot e-payment (mobile phone) platform for collection of LGA crop cess payments and evaluate its performance (Tanzania Buy-in & GISAIA/Tanzania / Status: ON-GOING)

 As noted above, D.Nyange has worked with an ICT consultant, a local cell company and officials from Kilombero district to initiate a pilot e-payment platform that will enable LGA officials in that district to shift completely from a cash to an e-payment system for administration/payment of all local taxes.

#### Milestones (Next steps):

- PMO-RALG had originally planned to hold a workshop in Dodoma (the capital of Tanzania) in early September 2016 for district executive leaders from all 166 LGAs in order to introduce the pilot epayment platform for LGA crop cess (and other local taxes) to them.
  - a) However, PMO-RALG was asked by various high-ranking political leaders to postpone this workshop until after the Presidential and Parliamentary elections on 25 October 2015. The reason for this request was because LGA officials are tasked with ensuring that elections are properly planned for and supervised. Thus, this workshop will instead be held in January 2016.
  - b) Prior to the January 2016 workshop, D.Nyange and Kilombero district officials will assess the performance of the pilot e-payment system to date (in terms of administrative performance, revenue generated between Aug-Dec 2015 as compared with the same time period under the old system in Aug-Dec 2014; etc) in order to provide workshop attendees with not only an introduction to the e-payment platform, but also to share initial indications of its potential effects on LGA tax compliance and revenue generation.
  - c) The January workshop has the following goals
    - Enable Kilombero officials, ICT experts who helped design and implement the e-payment platform, and D.Nyange to demonstrate to leaders of LGAs across the country how the pilot system is currently working in Kilombero
    - ii. Present and discuss reasons why the system can help to reduce the costs of tax collection and potentially increase revenues
    - iii. Discuss potential modifications of the Kilombero e-platform that could be needed for districts with different characteristics
- PMO-RALG's plan for further piloting of the e-payment platform for LGA crop cess is as follows:
  - a) Evaluate the performance of the Kilombero pilot e-platform, and adapt/modify/improve the e-payment platform and its administration as needed
  - b) Expand the pilot to a number of new LGAs that will begin implementation just prior to next year's main season harvest (i.e. by June 2016 in some areas)
    - i. Ensure that the expanded number of pilot LGAs are heterogeneous with respect to the types of crops grown, share of LGA revenue collected by the cess, etc.
  - c) After evaluating those additional pilots and learning from them, PMO-RALG will then decide where else (and how quickly) to begin scaling-up e-payment of the LGA crop cess to all 166 LGAs
  - d) To be clear, FSP/Tanzania has only proposed to help provide coordination for the round or two of pilot e-payment systems, as scaling up a successful pilot e-platform to the regional or country level is a task better handled by other organizations. D.Nyange has begun talking with Abt Associates about this as Abt recently won a large grant from USAID/Tanzania for LGA capacity building.

#### **Outcomes:**

- A successful pilot LGA crop cess e-payment program that is scaled-up to additional districts should greatly improve the transparency of LGA crop cess payments and revenue generation and reduce the time and transaction costs of local tax payment. This in turn should:
  - Reduce the actual costs of paying the tax and building stakeholder confidence in the integrity of crop cess administration should thus improve taxpayer compliance (and thus increase tax revenue)
  - o Increase the information collected by LGAs about the sources of the payments received each quarter/year, thus enabling LGAs to better predict their revenue each year

Activity 7: Support development and piloting of a Results Tracking System (RTS) for key MAFC investments using a mobile phone platform (Tanzania Buy-in & GISAIA-Tanzania / Status: ON-GOING) Update:

• Actual RTS implementation started in Q4, as mobile-phone based texts with survey questions began being sent to participating farmers and extensionists in 36 rice irrigation schemes.

#### Milestones (next steps):

- Post-pilot evaluation: After the final round of RTS questions have been sent to participating farmers
  and extensionists, and responses have been received and processed, Dr. Nyange and officials from
  the Ministry of Agriculture's Monitoring & Evaluation Directorate will coordinate several activities to
  assess the performance of the pilot RTS with regard to various criteria and for various purposes, as
  follows:
  - O A statistician from the National Bureau of Statistics will work with the M&E team to assess the extent to which the respondent sample (for each monthly survey) is representative of the general irrigation scheme farm population. If they find that the sample is not representative, the statistician/MSU can use information about the actual sample and the underlying population to adjust (weight) statistics generated from the sample so that they are closer to those that would be observed had the sample been representative.
- The M&E team will review the quality and usefulness of the data collected relative to M&E objectives
  - o The M&E team will consult with local irrigation system officials, extension agents, and farmer groups to get feedback on their experience in participating in the RTS, and to obtain any suggestions they may have on how to improve the RTS (and any other M&E activities) so as to improve the performance of the irrigation system itself.
  - Assess the overall performance of the RTS for use with the 36 rice irrigation schemes where it was piloted, so as to make any necessary modifications before piloting it again in 2015/16
- After assessing the performance of the RTS and lessons learned, D.Nyange and the MAFC M&E
  division plan to modify the existing e-platform to help improve M&E for another key Ministry of
  Agriculture & Big Results Now initiative -- investments in improving infrastructure and management
  of Warehouse Receipt Systems (WRS) for rice and maize across the country.

#### **Outcomes**

- This activity will take advantage of the availability of ICT access by many irrigation scheme farmers (and all extension agents) to implement a RTS that will provide MAFC with real-time M&E information each month so as to provide much more timely and efficient/effective MAFC/BRN resources to help alleviate problems that develop during implementation of the BRN effort to improve irrigation scheme service provision and rice productivity of scheme participants.
- Development of a mobile-phone based RTS that can be modified so as to improve MAFC M&E of other key investments, such as the BRN investments in improving the facilities, institutional capacity and management of Warehouse Receipt Systems across the country

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

Milestones (next steps):

- Implementation of survey of small/medium/large scale processors and retailers in select crop supply chains in Dar es Salaam, Arusha and Mwanza beginning in January 2016
- Present draft report at 'end-of-study' stakeholder workshop
- Incorporate feedback from stakeholder workshop into final report, which will include recommendations for policies/investments that can help promote:

- A favorable enabling environment for local processing/retail firms to compete with imports, which will not only benefit consumers (via lower prices) but also increase demand for local skilled and less-skilled labor
- A favorable enabling environment for such firms to be as labor-intensive as possible (at this stage in Tanzania's development) so as to maximize the local job-creation potential of this rapidly growing segment of the agri-food system in Tanzania

## Activity 9: Design and begin implementation of a Tanzania case study under the FSP-C4 Land Access/Use theme (FSP-C4 & Tanzania Buy-in / Status: ON-GOING)

• Based on the feedback from the stakeholders' inception workshop, the following case studies were proposed for work in Tanzania under the FSP-C4 theme:

	T
Study title	Study objectives
Study #1: Agricultural land	The objective of this study is to understand the rate of land expansion of
access and policy	medium- and large-scale farms and to consider the policy implications of
implications in rural	consequent changes in farm structure and the concentration of food
Tanzania	production and marketed output.
Study #2: Land access and	This study will assess the degree to which land access for youth is a
rural youth livelihood	problem; examine the effects of land constraints for rural youths on
opportunities in Tanzania.	youth migration in particular and other behavioral responses more
	generally; and finally, will determine the net impact on livelihood
	strategies and consider options that the Government of Tanzania and
	other agricultural sector stakeholders may wish to consider resulting
	from our findings.
Study #3: Small, medium	This study will firstly do mapping of large, medium and small scale
and large scale farmers'	farmers in the SAGCOT area. Secondly, will assess the spillover effects in
synergy in the SAGCOT.	terms of investment, technology and incomes to the envisaged
	beneficiaries, considering who lose and who win. Thirdly, determine the
	synergies among large, medium and small scale farmers. Finally, will
	determine the net impact on livelihood strategies and consider options
	that the Government of Tanzania and other agricultural sector
	stakeholders may wish to consider when implementing similar initiatives.
Study #4: Revisiting the	This study revisits the inverse farm size – productivity relationship (IR)
inverse relationship	hypothesis. This is important especially in the context of changing farm
between farm size and	structure that has witnessed a rising proportion of cultivated cropland in
productivity/efficiency.	Africa being under the control of medium-scale farms. Who is more
	productive/efficient between small-scale and larger-scale farms? And if
	productivity is indeed associated with farming scales that are larger than
	most smallholder farms, what should be the focus of land institutions
	and policies to accelerate agricultural development and poverty
	reduction in a continent where over 70 percent of the farmers are
	currently smallholders? Tests of the inverse farm size – productivity
	relationship (IR) hypothesis in Africa covering a wide range of farm scales
	take on even greater policy importance in light of recent studies
	questioning the viability and even the objectives of promoting small-
	scale agriculture in Africa (e.g., Collier and Dercon, 2014; Dercon and
	Gollin, 2014).
	/ - /

The primary aim of this study is to investigate the role of social networks on land access. The study will focus on the changing socio-economic realities in respect of land access of individuals and households living in the rural and urban areas of Tanzania. Specifically the following questions will be answered:  - What are the types of social networks exist and how can facilitate land access?  - What are the mechanisms and social networks of migration, e.g. with respect to village origins, social and family networks, modes of travel, and migration types?
Most of the land in Tanzania is under village land (customary) tenure
system. Customary land rights have for long been seen as a hindrance to
economic development. Protecting customary rights is now seen as one of the most important keys to ensuring security of tenure, particularly for the poor. This study examines the characteristics of the CCROs beneficiaries. Who are they age, gender, socio-economic, etc.)? Do CCROs have influence on investment on land? What is the impact of CCROs on farm productivity? The FSP team works in close coordination with USAID-Mission funded E3 land partner on this work.
As Deininger et al. (2015) noted, there is a real discrepancy between
reports of renting in and renting out land in Tanzania. This study aims at investigating the factors explaining that discrepancy from the demand and supply sides of the market.
Land prices and rental rates are observed to be skyrocketing in recent
years in Kagera and other parts of Tanzania. This study will use panel
survey data to identify the various causes of changing land prices (e.g. is
it driven by in-migration and increasing land market activity, changes in
agricultural productivity, changes in market access conditions, and/or
changes in food price levels), and then to identify the impacts of changes in factor price ratios on changes in agricultural production technologies and practices.
Many studies of the gender dimensions of evolving property rights focus
on either female-headed households <i>or</i> the intra-household distribution
of power between husband and wife (wives). However, there is a subset
of women who, upon becoming divorced/ abandoned/widowed, find
themselves absorbed into larger households where they are not the head or spouse. These women are unable to survive the distress of a
husband's departure or the experience of having their property seized by
in-laws. The welfare of these women, and the extent to which customary
systems care for their needs, is poorly understood. A descriptive study of
their land rights within the household and/or a longitudinal study of
their welfare in a survey that tracks migrants may be a useful
contribution to our understanding of strategies for reducing poverty and promoting agricultural productivity.

#### Milestones

o Implementation of a survey of medium-scale farmers in three regions (Kilimanjaro, Morogoro, Njombe), including focus group interviews with smallholder farmers in adjacent communities,

beginning in November 2015. The questionnaire will be designed to address several empirical research questions.

- 1) First, how rapidly is medium/large-scale farmland being brought into production, where did their land come from, who is accessing the land, and how is it being used?
- 2) Second, are formal and informal institutions making it possible for the youth starting families to access agricultural land and to settle into farming either in or outside the regions where they were born?
- 3) Third, where medium/large-holders are operating adjacent to smallholder communities, what is the nature and extent of links between the activities of medium/large-holders and smallholders i.e. is there transfer of technology in the form of learning, improved access to credit/extension/marketing services, etc.?
- 4) Fourth, what is the productivity of medium/large-holders relative to adjacent smallholders growing the same crops?
- 5) Fifth, what is the relative importance of rural-to-urban migration vs. rural-to-rural migration in Tanzania, and the factors influence decisions regarding whether and where to migrate?
- Analysis of the primary survey and focus group discussion data as well as secondary survey data to address studies 1, 2, 4 and 5.
- Studies 3, 6-9 are proposed CONDITIONAL UPON identification of additional funding required to fund the associated household-level surveys, focus group discussions and key informant interviews necessary to address the specific research questions of each study

#### **Outputs:**

- o Each of the four case studies for which funding is expected to be available will produce one working paper, one policy brief, and at least one journal article.
- o Mutual capacity strengthening of SUA, MSU and Ministry of Agriculture collaborators
- o Formation and strengthening of the Land Policy Stakeholders Group (LPSG) in Tanzania.
- Consideration of policy findings to guide land allocation and land investments by the Government of Tanzania

#### Year 3 New Activities, Milestones and Outcomes

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

### a. Tanzania: Sokoine University of Agriculture

### Milestones:

- Strengthen capacity at Sokoine University of Agriculture in the maintenance of the wheat and rice
  PE model and support additional research to incorporate more salient market features into the PE
  model.
  - o The first version of the rice and wheat PE model was developed under the key milestones set for year 2 of the FSP funding. The overall objective for year 3 is to strengthen the capabilities of SUA to internalize the skills that were taught in the training workshop by undertaking more practical research and analysis on the PE system. The proposed year 3 activities include:
    - The maintenance of the modelling system in order to generate the market outlook that will be presented at the third ReNAPRI stakeholder meeting in Nairobi, Kenya in the last week of October 2016. The maintenance will be undertaken by Dr Zena Mpenda with the support from Dr Ferdi Meyer and Me Tracy Davids from BFAP.

- 2. Dr Mpenda and Dr Akyoo will attend the summer course in June/July 2016 on policy and market modelling, presented by FAPRI at the University of Missouri.
- 3. Once a first basic version of a model has been developed, the majority of research is spent on understanding and internalizing some of the salient market features and structures into a modelling framework and analysis. Researchers from BFAP will support Dr Mpenda and Dr Akyoo to gain a deeper understanding on the relevant policies and structures of the wheat and rice markets and how these will have an impact of the potential future outcomes of production, consumption, trade flow and prices. The value chain for the rice and wheat market will be unpacked (structure, conduct and performance)
- 4. The objective for this activity to establishing closer collaboration with other proposed activities taking place in Tanzania under FSP, especially the proposed activities 8 (Agri-food System Transformation study) and 9 (Land Access). The information and evidence that will be generated by these activities will be critical to shape the assumptions and consequently the outlook that is generated by the PE models. Ultimately, it is envisaged that this output can tie into the proposed engagement on Global Policy Debates on Food Security that is proposed under C4.
- 5. Sokoine faculty will use skills developed through this activity to contribute content for the ReNAPRI regional policy outreach conference in late 2016.

## b. Mozambique: The Research Centre for Agricultural and Food Policies and Programs (CEPPAG), Eduardo Mondlane University

Under this new activity, it is proposed that a similar training and capacity building program that was initiated at Sokoine in year 2 is extended to CEPPAG at Eduardo Mondlane University. CEPPAG forms part of the Regional Network of National Agricultural Policy Research Institutes (ReNAPRI) and a basic PE model for the maize industry in Mozambique has already been developed in order to simulate the 10-year outlook for the maize in the ReNAPRI region. This 10-year outlook has been presented at the previous two ReNAPRI stakeholder meetings in Lusaka and Maputo where more the 100 private and public sector stakeholders have the opportunity to engage and debate the potential impact of policy and exogenous drivers on the future of the agricultural industry in the region.

The ReNAPRI outlook is the only official outlook that provides a detailed projection (up to 10-years) of the basic fundamentals (supply, demand, trade, price) of regional maize markets. ReNAPRI is also collaborating with colleagues from the FAO to introduce refinements to the OECD-FAO outlook in order to disaggregate between the various coarse grains. The major benefit of this initiative is that it forms part of and strengthens an on-going research activity that informs strategic decision-making a foresighting type of work. The models are updated and ready to deploy when required. A tangible expand is the current drought in the Southern African region. Due to the fact that the PE models for maize were maintained, ReNAPRI institutions could over a short period of time simulate the potential impact on regional prices and trade flows under a combination of scenarios.

Although a basic PE model for the maize industry in Mozambique has been developed with BFAP supporting the existing research capacity at CEPPAG, there are a number of refinements to be undertaken in the model. For example, a clear distinction has to be made between the Northern and the Southern markets since they are trading under vastly different equilibrium conditions. Furthermore, the models need to be expanded to take the wheat and rice markets into consideration, since wheat and rice are major staple markets in Mozambique.

The objective is to strengthen the capacity of CEPPAG in order to:

• Complete the refinements and the expansion of the PE models

- Undertake policy analysis and market outlook projections in national and regional contexts.
- Strengthen the engagement by researchers with regional market outlook analysis efforts through the ReNAPRI network supported by BFAP.

This activity is to be led by Prof Ferdi Meyer, Tracy Davids and Lulama Traub at BFAP and Dr Joao Mutondo at CEPPAG. Dr Mutondo has already received basic training in partial equilibrium modelling and has with the assistance of BFAP produced the 10-year outlook for the maize sector in Mozambique over the past two years. The BFAP model based on the FAPRI partial equilibrium (PE) analysis tool is a middle approach to doing policy analysis and much easier to understand and use (and considerably less data-intensive) relative to CGE modeling. Because PE models are commonly taught as part of MSc-level courses such as agricultural trade and marketing, an applied PE tool can also be integrated by Eduardo Mondlane faculty into their own courses on these topics and/or used in MSc student theses as appropriate, though this first requires capacity building in PE model building and application.

#### Specific milestones to achieve this objective include:

- 1. Expand partial-equilibrium modelling capacity in CEPPAG to refine the existing PE maize model and develop PE crop models for commodities beyond maize. It is proposed that the PE model be expanded to include rice and wheat in 2016. The expansion of the model will include a period of data collection and extensive consultation with industry experts and observation of market features through field work. While the field work is undertaken, the first version of the rice and wheat modules will be developed. The field work, module development and validation of the model results will be undertaken by Dr Joao Mutondo in collaboration with BFAP and FAPRI. Two members from BFAP will travel to CEPPAG for a 2-day technical meeting assisting with the expansion of the model and the first validation of results.
- 2. Dr Mutondo will be accompanied by a second researcher from CEPPAG to attend the summer course in June/July 2016 on policy and market modelling, presented by FAPRI at the University of Missouri, USA.
- 3. PE modelling to policy analysis and regional market outlook projections, and expand the number of analysts capable of PE model building and applications from one to at least two or more, a BFAP and FAPRI faculty member will lead a 3-5 day short course in PE modelling and applications at CEPPAG together with the existing CEPPAG faculty members. This short course will be presented to CEPPAG policy group of approximately 5 researchers. At the time this short course is presented, the first version of the expanded PE model with wheat and rice will be ready in order for the faculty members to receive training on the actual model.
- 4. Following the expansion of the model and the training of faculty members, the forth activity will involve the validation and refinement of modelling results. This includes the development of the 10-year outlook for maize, rice and wheat sectors to be presented at the ReNAPRI Outlook Conference in the last week of October 2016 in Kenya. Two members of staff from CEPPAG will attend the ReNAPRI Outlook Conference in Nairobi in October 2016.

### 6. Component C1/C2 Eastern and Southern Africa – Zambia

#### 6.1. 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 supported the institutional development of Zambia's first think tank dedicated to agricultural policy research and outreach, the Indaba Agricultural Policy Research Institute (IAPRI). Year Three FSP activities in Zambia will be carried out in collaboration with IAPRI to support sustainable improvements in policy systems for agriculture. The four major activities to be carried out during 2015/16 are:

- 1. Grain, oilseed, and livestock market development for smallholders to inform policy prioritization for the new Ministry of Fisheries and Livestock;
- 2. Analysis of land commodification and alienation to inform dialogue on Zambia draft Land Policy
- 3. Feed the Future midline indicator generation and analysis
- 4. Analytical training to IAPRI researchers on experimental economics for policy analysis

#### 6.2. Proposed Year 3 Activities

## Activity 1: Oilseed and livestock market development for smallholders to inform policy prioritization for the new Ministry of Fisheries and Livestock

In 2015 the Ministry of Agriculture and Livestock was split into two Ministries to provide greater budgetary support for the livestock sector. This split has increased the appetite for policy relevant research on the livestock sector in Zambia and associated industries. To help guide new Ministry of Fisheries and Livestock as it develops new policies and investments for the smallholder livestock sector, FSP, working in conjuncture with IAPRI, will undertake two research activities in 2015/16:

- Analysis of smallholder beef markets in Zambia: Cattle rearing is an important livelihoods
  activity for smallholder in many parts of Zambia. Yet despite this, smallholder cattle market
  remain thinly traded, making Zambia a net importer of beef from neighbouring countries. In the
  context of rapid urbanization and urban income growth— which is driving increased demand for
  beef— Zambia's beef deficit is projected to increase without improvements in smallholder beef
  marketing.
  - This research activity will draw on household survey data and qualitative data sources to provide an in-depth understanding of the conduct and performance of smallholder beef markets in Zambia. Key outputs will include a working paper and associated policy brief. These outputs will focus on policy relevant recommendations, which will be provided to the Ministry of Fisheries and Livestock through stakeholder workshops.
- 2. Analysis of emerging trends in Zambia's grain and oilseed market: Improvements in Zambia's grain and oilseed market is seen as a critical element of improving the livestock feed sector. An important element of this sector is the emergence of significant multinational investment in oilseed trading targeting Zambian smallholders. To better guide policy-makers on approaches to effectively leverage this investment interest, FSP will undertake a scoping study of the effects of multinational investments on smallholder grain and oilseed markets. This research project will lead to the drafting of a working paper and policy brief with policy relevant recommendations and highlighting areas for future research.

Activity 2: Analysis of land commodification and alienation to inform Zambia's draft Land Policy

The Government of Zambia is currently drafting a Land Policy. To support this effort, FSP will work in collaboration with IAPRI to carry out research projects to guide the development of this policy to better serve the land access and utilization needs of Zambia's smallholder population. Research outputs generated under this activity will be provided to Zambia's on-going Land Governance Assessment Framework (LGAF) and the Parliamentary Committee on Land. Based on stakeholder consultation, two primary research focal areas have been identified:

- 1. An assessment of the current quantity and quality of customary land in Zambia. For decades policy makers in Zambia have lacked up to date information on how much land is available for smallholder use. To fill this information gap, we propose to utilize available spatial datasets to quantify how much of Zambia's land can be reasonably assumed to be available for smallholders. Using this new map of available customary land, we will then assess the quality of that land for smallholder commercialization, with particular attention to market access conditions and agro-ecological suitability.
- 2. Following on previous research by Sitko and Jaye (2014), which provided evidence of the acquisition of large land holdings in customary land areas by urban-based wage earners, we propose to investigate the spatial dimensions of this phenomenon. In particular, we will examine the geographic relationships between the rapid increase in large land holdings within the smallholder sector and land access conditions, land inequality, and land alienation. We hypothesize that there is a geographic relationship between increases in large land holdings and increases in land alienation and reported smallholder land scarcity. We further posit that this phenomenon is concentrated in high potential agricultural regions.

#### Activity 3: Feed the Future midline indicator generation and analysis

In 2015, the second wave of Zambia's Rural Agricultural Livelihoods Survey (RALS) was completed. This survey is designed to provide representative rural household data in USAID's FtF zone of influence in Zambia. This was done in order to provide the Zambia USAID mission with population-level data on key FtF indicators, including gross margins for key crops and poverty figures. In 2015/16 MSU will support IAPRI to generate indicator data for the USAID Zambia mission, and work with IAPRI researchers to effectively interpret and communicate the data generated. This collaborative activity will help to guide future USAID funding for Zambian agriculture and will enable MSU to support the technical capacity building of IAPRI researchers.

### Activity 4: Technical trainings to IAPRI researchers on modeling agricultural household behavior and technology adoption, and on experimental economics for policy analysis

Through a consultative process, MSU has identified three key areas where the technical capacity of IAPRI researchers can be strengthened to improve the quality of their research outputs and the relevance of their research for policy. These are:

1. Conceptual and empirical modeling of agricultural household behavior and technology adoption: With USAID support for data collection, IAPRI now has high quality, nationally representative panel data on rural livelihoods in Zambia (RALS 2012 and 2015). This creates opportunities to carry out analyses that are significantly better at identifying causal relationships because of the ability to control for unobserved household characteristics using panel data. Under FSRP III, MSU researchers led a series of technical trainings in applied econometrics, and IAPRI researchers' skills in this area have been greatly improved. However, the quality of this empirical

- work would be even higher if it were more strongly linked to conceptual and theoretical models e.g., of agricultural household behavior and of technology adoption. To that end, MSU researchers will conduct a series of technical trainings for IAPRI researchers on conceptual and empirical modeling agricultural household behavior and technology adoption. The first of these technical trainings will be carried out in June 2016, and will be open to IAPRI researchers as well as graduate students at the University of Zambia.
- 2. Experimental economics methods for policy analysis: IAPRI researchers have primarily focused on using household survey data to answer policy relevant research questions. Within IAPRI there is very limited knowledge of alternative methods to answer important policy questions. In particular, experimental economic methods have been identified as an area where MSU can provide significant support. MSU researchers will conduct a series of seminars on the application of experimental economic methods in the context of policy analysis. The first of these technical trainings will be carried out in June or July 2016, and will be open to IAPRI researchers and graduate students at the University of Zambia.

# 7. Component 3: Global Collaborative Research on Policy Process and Capacity

#### 7.1. Introduction

- This component addresses political economy issues, constraints and challenges facing policy makers and stakeholders in the private sector and civil society in translating research into effective agriculture, food security, and nutrition policies. It aims to offer a practical, flexible, empirically-informed model for analyzing policy processes in multiple food security domains in very diverse settings; to integrate theoretical insights from economics, political science, and public administration; to provide a testable framework that simultaneously considers different elements of the policy process and investigates many implicit operational hypotheses of policy change. The primary objective is to understand policy processes that lead to effective policy change, the nature of capacity required for generating evidence, effective policy advocacy, and an institutional architecture which enables transparent and inclusive policy changes. Such an understanding can help policy makers and development partners identify the bottlenecks in the policy process and intervene accordingly to strengthen the policy system. The early outputs from this component feed into the AU efforts on policies and institutions and phase II of Africa LEAD.
- Six case studies of changes in policy processes three for micronutrients and three for fertilizer subsidy policies -- have been initiated in 2015. In addition to completion of the fieldwork for these studies, the C3 team has conducted multiple outreach events describing the conceptual framework, which we call the "Kaleidoscope model" as well as its application in studying the key drivers of change in agriculture and food security policy processes. An additional case study was included to understand the application of the Kaleidoscope model to gender mainstreaming in the policy process.

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

• This activity aims to develop a conceptual framework for the analysis of policy processes for agricultural and rural development, food security, and nutritional improvement. Building on the large body of prior evidence and efforts, the team developed a comprehensive analytical framework to guide the study of policy processes. Key elements of the analytical framework include specification of the key actors, their behavior (motivation, mode of operation and relative effectiveness in influencing policy decisions), the institutional architecture within which they operate, data sources and the credibility of available empirical evidence used in policy debates, environmental factors shaping outcomes, and key triggers enabling policy change.

#### Activity 2: Case studies of policy process and change

In order to field test the Kaleidoscope Model, the C3 team conducted a broad inventory of policy change episodes in food and nutrition policy over the past several decades. From this inventory, the team categorized, classified and selected case studies of policy change in order to gain insights across a diversity of a) arenas of policy change (agricultural input, production and trade policies, food security policies, and nutrition policies), b) triggers which enable policy change (food crises; political transitions; farmer-initiated change; research-induced policy change), and c) institutional architectures.

#### **Activity 3: Inventory of Policy System Reforms.**

• Governments in the developing world increasingly recognize that favorable policy environments facilitate economic growth, while unfavorable policy regimes stymie development outcomes. The

- policy system within which stakeholders interact to formulate and implement policies, therefore, becomes critical to the content and effectiveness of any given policy environment.
- In situations where governments become dissatisfied with agricultural policy outcomes, they can choose to intervene at one of two levels. In some instances, they simply develop new policies using the existing policy architecture. In other cases, they work to strengthen or restructure the policy architecture itself in order to permanently alter the content and shape of policies that emerge over time. This study looks at this latter category of policy reform efforts, the structuralist approaches to policy system reform.

#### 7.2. Summary of Year 2 workplan accomplishments

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

 The resulting conceptual framework – the Kaleidoscope Model -- produced by the C3 team under the leadership of Danielle Resnick, provides a testable empirical framework for evaluating policy decisions and testing key hypotheses about the determinants of various policy processes. The C3 team completed this framework in January 2015 and a policy brief in April 2015.

#### Activity 2: Case studies of policy process and change

- From this constellation of policy change experiences, the team selected 6 case studies showcasing a range of policy processes. This comparative analysis of policy processes aims to help understand how policy change occurs in different component areas of agricultural production, food security and nutrition and what conditions shape outcomes that prove more inclusive, gender-responsive, and transparent. In the long-term, we expect that lessons from the case studies will help produce better policy systems that, in turn, improve food security policy making in developing countries, particularly the FTF countries.
  - The team has completed field work for the following six case studies as well as analysis and write-ups for four of them. We expect completion of the remaining two case study write-ups by mid-November. The following summary reports the current status of each of the six case studies:
  - Ghana fertilizer case study: field work completed; report finalized and shared with USAID colleagues.
  - Zambia fertilizer case study: field work and write-up completed.
  - o Tanzania fertilizer case study: field work completed; write-up expected by end of October 2015.
  - o Zambia micronutrient policy case study: field work and write-up completed.
  - o Malawi micronutrient study: field work completed. Draft report expected end of October 2015.
  - South Africa micronutrient case study: field work nearly completed; write-up expected by mid-November 2015.
  - o Malawi gender case study: filed work nearly completed

#### **Activity 3: Inventory of Policy System Reforms.**

• The inventory prepared for Activity 3 presents a selected inventory of policy system institutional reforms. It categorizes the various structuralist policy system reforms in various ways, identifying the institutional change aimed at, the factors driving such change, and specific examples that could be studied further in detail. From this initial inventory, USAID and the C3 team will together select a set of policy system reform case studies which the team will then conduct in 2015/16 using the Kaleidoscope model.

#### 7.3. Proposed Year 3 activities Year 2 Activities Carrying Over to Year 3

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

- In year three efforts to disseminate the Kaleidoscope model (KM) will continue. In order to validate the Kaleidoscope model, a C3 team workshop will be organized in November 2015 in Washington DC to present the results from the six case studies. The outcome of the validation exercise with help refine the model hypothesis and the variables used to test these hypotheses. It will also help in the refinement of the policy process tools used in the case studies. In the early 2016, the results of the case studies, additional cases studies related to land policy and West Africa case studies will be presented and discussed with USAID. An attempt will be made to discuss this during the partnership workshop in December 2015. Further the proposals for the case studies of the institutional architecture will be presented and discussed to select the countries to work on.
- The KM model will be refined based on the discussion during the validation workshop in Washington, and revised paper will be published as a journal paper. The paper will be submitted to development journal by end of February 2016.

#### Activity 2: Conduct case studies of policy process and change

- In 2015-16, the C3 team will finish the write up of the case studies began in 2014-15. The two sets of case studies under activity 2 will be completed by the second quarter of 2015-16. Among the micronutrient case studies, the Zambia and the Malawi micronutrient policy case studies will be revised and finalized in the first quarter of the 2015-16. They will be available as discussion papers in January 2016. The South African case study will be finished by January 2016. The fertilizer case studies will be finalized by end of January as well. The Ghana case study has been completed and made available for wider audience as a discussion paper. The Zambia case study will be available for internal discussion by end of December 2015. The Tanzanian fertilizer case study will be finished and available for internal discussion by end of January.
- In addition, in the first and second quarter of 2016, two tools papers will be developed for the
  practical application of the KM model. These practitioner's guidebooks will be prepared based on
  the revised tools coming out of the case studies and the revised conceptual paper. One of these tool
  papers will focus on studying the policy process, and the other on facilitating the policy change (see
  more details in the next bullet).
- In order to enhance the strategic linkages between research findings generated by FSP and on-going policy dialogues we propose a multi-pronged strategy to be headed by Nicholas Sitko. The first part of this strategy is to draw together insights generated from C3's work on policy processes and insights from FSP field offices, to develop a range of tools designed to cater for the needs of different stakeholders in domestic and regional policy systems. These include think tanks/research institutions, civil servants, elected officials, donor agencies/project implementers, and private sector firms. These different actor frequently face different sorts of political pressures, have different objectives, and time horizons. As such, it is important that tools be created that are suited for their particular needs and requirements. In addition, tools need to be designed to cater for the range of policy types that stakeholders encounter. Influencing policy in beneficial ways is not only about getting a policy onto a legislative agenda and helping to shepherd it through the policy system, though this is certainly important. Policy actors also often seek to have existing policy retracted or modified in order to improve welfare outcomes. Each of these types of policy types may require different sorts of approaches and tools.

Once an initial set of tools are developed, these tools will be field tested with FSP country offices and other actors. This field testing will serve two purposes. First, field testing will help to put these tools into use, leading to more strategic engagement between research and policy dialogue. Second, the tools will be refined and modified as lessons are learned from their application. The specific countries where field testing will occur is yet to be determined.

Following field testing and tool refinement, the tools will be made widely available via an enhanced FSP website. To promote their use and adoption, the tools will be presented in various regional and country-level forums. Finally, we envision that experiences with these tools and the influence of strategic engagement with policy processes on policy outcomes will be captured in a peer reviewed journal article.

- The next step in the use of the case study results and the practical tools is to engage with the country policy makers and the missions to enable them to better understand the policy process and make effective use of these tools in selected countries. The collaborating institutions will work together with the USAID mission for this purpose.
- The West Africa case studies of uneven implementation of regional policies will be undertaken in first and third quarter of 2016. Two land policy case studies will be conducted in second and third quarter of 2016. These could be budgeted and managed under other components such as C1 /C2. They will be cross listed under C3 for coordination and involvement.
- The gender case study on nutrition policy which began in 2015 will be completed in 2016. A one-day
  workshop will be conducted where beneficiaries will present their community food charter to a
  group of policymakers. One tools paper will be developed, that will integrate gender in the practical
  application of the K-model. The tool will be validated by a panel of gender experts.

#### Milestones:

- Completion of a set of discussion papers from the completed case studies.
- Two subject matter synthesis papers and a K-model journal paper are planned. In addition, Policy
  Briefs summarizing the results of the case studies will be developed. These journal papers and briefs
  will reach wider audience and create public good for countries beyond the case study countries.
  - Development of the practical guidebooks for studying policy process and for facilitating policy change by end of June 2016
  - A toolkit for strategic policy engagement and policy development, and associate country or regional level forums by August 2016
  - The KM model and the case study results will be disseminated in the case study countries in the first and second guarter of 2016.
  - The C3 team work on possible additional cases Land case studies and West Africa case studies.
     This will require discussion with USAID, possibly as early as the December 2015 partners' meeting or in January 2015
  - A one-day workshop with policymakers and beneficiaries on the community food charter, which is a tool for bringing community together to decide on a vision to improve food security (can be done with decision makers).<sup>1</sup>

<sup>1</sup> A community food charter can be a vision statement or set of goals that is drawn up by a community to establish what they want their food system to look like (Dillon Consulting, 2013). The community food charter is a useful technique for encouraging participation and empowering communities to work together on problem-solving. The community food charter exercise provided a reference for policy makers on what the communities are capable of doing for themselves. It was also a reference for community-driven solutions on issues related to food security and nutrition. We used the core principles and adapted it to specifically focus on men's involvement in maternal and child nutrition. <a href="http://myhealthunit.ca/en/resources/Food">http://myhealthunit.ca/en/resources/Food</a> Charter Discussion Paper FINAL Revised March 13 2014.pdf

- A set of papers documenting the gender case study on nutrition will be completed
- o An analytical tool will be developed for assessing gender mainstreaming in nutrition policy

#### **Outcomes:**

- A revised and replicable set of policy process tools applicable to policy process analysis in developing
  countries that go beyond the case studies themes analyzed. The case studies will be made available
  through in country dissemination and engagement with the policy stakeholders and the USAID
  missions.
- The policy process tools will help in the strengthening of the capacity of the local researchers and policy actors to map their policy landscape and identify the constraints to developing effective policy systems
- Land case Studies will help in further validating the Kaleidoscope model. In addition, the West Africa
  case studies will be useful to understand the regional dimension of the policies that are made
  collectively and implemented at the individual country levels.
- Greater understanding of the validity of the Kaleidoscope Model and whether and how it may need to be refined
- The one-day workshop on the community food charter will provide a platform on which policymakers and beneficiaries can exchange ideas on strategies to integrate gender in nutrition policy (particularly strategies to address barriers of men's involvement in maternal and child nutrition)
- The gender mainstreaming tool will strengthen the capacity of policy makers to integrate gender at all levels of policy

#### **Activity 3: Innovations in Policy Architecture: Origins and Impact**

All the three collaborators (MSU, IFPRI, and UP) will implement this activity with funding from FSP.
Country missions and other programs supported by USAID such as IFPRI's ReSAKSS Asia program and
country programs also funded USAID could facilitate in country implementation particularly in
Bangladesh, Ethiopia, and Nigeria. In order to identify the case study countries an inventory of policy
system reforms was prepared by the C3 Team and sent for comments and feedback. These set of
cases studies are planned for second and third quarters of 2016.

#### Milestones:

- A literature review of policy system reforms in FTF countries, with a particular emphasis on those reforms most relevant to food security policy was submitted for review and feedback. This will be further revised and edited.
- Conduct four case studies of policy system changes which highlight different institutional approaches for improving policy formulation and/or implementation. Each of the case study will be conducted in each quarter of 2016. Two of them will be carried out if adequate funding is available.
- Provision of practical recommendations to USAID and partner organizations based on the review
  and inventory, with a potential typology of different institutional designs, examples, and advantages
  and disadvantages thereof.

#### **Outcomes:**

- Improved understanding of the factors contributing to the changes in the institutional architecture of the policy systems in the selected case study countries, using the Kaleidoscope model for guidance.
- Improved knowledge about the effectiveness of past and ongoing reforms in policy systems and lessons learned about how best to support effective policy systems going forward.

- Improved knowledge about the effectiveness of past and ongoing reforms in policy systems and lessons learned about how best to support effective and gender-sensitive policy systems going forward.
- Increased awareness among USAID and other partner organizations about what types of
  institutional reforms simultaneously support goals of inclusivity, accountability, and effectiveness,
  with the recognition that there might be trade-offs among these goals across different institutional
  designs

#### Year 3 New Activities, Milestones and Outcomes

## Activity 4: Conceptualizing Drivers of Food Security Policy Change through the Kaleidoscope Model: Inter-ministerial coordination mechanisms and policy design in CAADP

Achievement of Malabo declaration goals through the second generation CAADP Investment plans will require stronger comprehensive policies and greater attention to inter-sectoral planning, coordination and implementation. This will require a new set of capacities, skills and competencies across governments along with new methodologies, new institutional structures and operations and new tool sets that include greater facilitation, communication and integrated analysis skills. Such skills go beyond current formal education programmes and will require re-tooling of the current cadre of officials. Such skills go beyond current formal education programmes and will require re-tooling of the current cadre of officials. The success of *Feed the Future* investments crucially depend on such skills. In order to improve these skills in the national systems, there is an urgent need for understanding the bottlenecks in the food security and nutrition policy, regulatory and implementation processes in sub-Saharan African countries.

Under Component 3, a new Activity 4 will be initiated in Year 3 that will use the Kaleidoscope Model as a tool for improving the success of second-generation CAADP processes. This activity will be led by UP (Sheryl H. and Nic O.) with participation and input from IFPRI (Suresh B.) and MSU (Oyinkan T. and Flora N.). It will be conducted in close collaboration and coordination with FSP country teams and USAID country offices.

The Kaleidescope model provides a convenient lens to reflect on the first generation CAADP policy and implementation processes as a means to identifying and recommending improvements in the design process to improve the likelihood of the second generation investment plans and their institutional architecture delivering on the Malabo commitments. The proposed study has the following objectives presented in the form of questions to be addressed:

- What actions have been taken to implement the first generation CAADP Country Compacts?
- 2. What *food security and nutrition* policies, legislation, strategies and programs were implemented in the first decade of CAADP?
- 3. What are the characteristics of these food security and nutrition policies, legislation, strategies and programs? Were they primarily agricultural or agricultural with a few
- 4. Is there evidence of genuine comprehensive design, collaboration and implementation in the individual countries? (KM agenda setting, design, adoption and implementation questions)
- 5. Is there evidence of legislative and policy reform to support the implementation of these programs? (KM evaluation and reform questions)
- 6. What institutional architecture changes have occurred (if any) to accommodate inter-sectoral collaboration? (KM evaluation and reform questions)

- 7. What is the fitness for purpose of the current systems for dealing with the complexities of food security and nutrition programs? Here the case study will draw on the methodology adopted by Candel et al.  $(2015)^2$
- 8. What monitoring and evaluation, reporting and intervention mechanisms (structures and systems) have been implemented?

Ultimately, the proposed study will identify how countries can be supported in the design, planning and implementation of the second generation CAADP Investment Plans in terms of genuine comprehensive policy renewal, appropriate regulatory frameworks, program design, related resource allocation (e.g. human, financial, technical and infrastructural), planning and implementation, as well as monitoring and evaluation, reporting and intervention structures and systems.

In Year 3, a pilot case study will be conducted in Malawi, consisting of:

- 1. Drafting and finalization of a detailed implementation plan, including, amongst others of a comprehensive uniform Table of Contents for the to be drafted individual country report;
- 2. Identification, perusal and analysis (by means of a comprehensive desktop review) and drafting of a well-structured country report on the applicable international, African and constitutional framework; the CAADP Country Compact and Investment Plan; policy renewal; appropriate regulatory frameworks; program design; related resource allocation (e.g. human, financial, technical and infrastructural); planning and implementation; as well as monitoring and evaluation, reporting and intervention structures and systems, also with regard to the identification of gaps and the formulation of appropriate implementable options for improvement. This will include, amongst others, the following:
  - a. The identification of changes made with regard to managing, coordinating and monitoring and evaluating inter-sectoral food security and nutrition components of CAADP;
  - b. The identification of gaps and the formulation of appropriate implementable options for improvement;
  - Development of a typology of agriculture, food security and nutrition components in the Investment Plan to indicate the level of understanding of comprehensive food security and nutrition interventions;
  - d. Determination of the composition in terms of the balance and inclusion of agriculture, food security and nutrition components;
  - e. Assessment of whether policy, legislative and institutional changes were made as a response to the implementation of the CAADP Investment Plan and investigation of what motivated these through expert interviews; and
  - Determination of how well equipped the national team driving the CAADP process is to design and implement CAADP Investment Plan.
- 3. On site discussions with key Malawi officials to determine their experiences as regards the factual situation relating to the application of the above frameworks; and
- 4. Carrying out and writing up the Kaleidescope model assessment and lessons for Malawi.

#### **Outputs**

A comprehensive structured country report on the applicable international, African and constitutional framework; the CAADP Country Compact and Investment Plan; policy renewal;

<sup>&</sup>lt;sup>2</sup> Candel, J.J.L., Breeman, G.E. & Termeer, C.J.A.M. (2015) The European Commission's ability to deal with wicked problems: an in-depth case study of the governance of food security, Journal of European Public Policy, DOI: 10.1080/13501763.2015.1068836

appropriate regulatory frameworks; program design; related resource allocation (e.g. human, financial, technical and infrastructural); planning and implementation; as well as monitoring and evaluation, reporting and intervention structures and systems, also with regard to (a) changes made with regard to managing, coordinating and monitoring and evaluating inter-sectoral food security and nutrition components of CAADP and (b) the identification of gaps and the formulation of appropriate implementable options for improvement.

- One report detailing the Kaleidoscope Model hypothesis testing and lessons learn for the model and the CAADP process.
- One report to inform the policy makers at regional and continental levels, administrators in Malawi, CAADP management, donors and the USAID mission on where and how to intervene to expedite the process of implementing the two 2014 *Malabo Declarations*.
- Establishment of a publically accessible comprehensive structured electronic database of all publically accessible documentation obtained in respect of the country concerned.
- One workshop (attended by senior government officials of the country concerned, senior CAADP/NEPAD management, the FSP executive and other key stakeholders) to discuss the findings and recommendations as contained in Outputs 1 and 2.
- At least one academic paper documenting the case investigated.

## 8. Component 4: Engagement on Global Policy Debates on Food Security

# 8.1. 4a. Agrifood System Transformation in the Upstream: Land Dynamics, Land Governance, Fertilizer and Soil Fertility, Mechanization and Implications for Rural Employment

#### 8.1.1. Introduction

Year 3 activities will continue research and policy engagement activities initiated in Year 1 and 2. The topics address in this activity are highly inter-related and we will seek to integrate our topics of changing farmland ownership and use structure, implications of rising land prices in many areas of Africa, shifts in technologies (e.g., mechanization), fertilizer promotion strategies and sustainable intensification issues and market responses to these changing dynamics in a more integrated and holistic way in Year 3. Discussions between IFPRI, MSU and the World Bank are scheduled over the coming weeks to achieve greater coordination in Year 3. With rising interest in structural transformation topics in Africa, we believe that major policy-relevant insights may be obtained by addressing issues of land dynamics, farm technology and rural employment as part of an integrated system.

#### 8.1.2. Summary of Year 2 workplan accomplishments

#### With regard to fertilizer policy:

#### **Achievements:**

• In Ghana an interdisciplinary mission involving IFPRI, AFAP, IFDC, ICRISAT and others guided the Government of Ghana in its efforts to improve the functioning of its fertilizer subsidy program and to develop a holistic and sustainable agricultural productivity strategy at the request of the USAID Ghana Mission. The entire team met with the Minister of Agriculture and his chief economist at the Ministry of Agriculture, the head of the Parliamentary Committee on Agriculture, members of the Ghana Soil Fertility Initiative, local researchers, the private sector and development partners. The team also presented research results to the Mission Director of USAID/Ghana and his agricultural team on agricultural productivity and food security issues facing Ghana. The mission has received broad media coverage with four newspapers and TV stations broadcasting their interviews of the team. The report and a policy brief have been finalized. The IFPRI and Ag. Sector Policy Support Program are now conducting outreach activities in the various regions of Ghana, drawing on the analysis in the joint ASPS, FSP, IFPRI, AFAP, IFDC report.

#### **Lessons Learned**:

• A holistic strategy going beyond greater application of inorganic fertilizer alone is needed to achieve sustainable agricultural productivity growth; and (2) achieving broad-based agricultural productivity growth in Ghana is a long-term undertaking because the local R&D and extension programs to identify best practices for particular soil conditions and work with farmers to adapt these best practices to farmers of different resource constraints are currently not in place. It will take time and sustained funding commitments to help Ghanaian farmers achieve sustainable agricultural productivity growth, but unless the public sector commitment is made now it will only further push into the future the prospects that Ghanaian food production can be competitive or profitable in the next decade.

#### With regard to sustainable agricultural intensification issues:

#### **Achievements:**

- Research insights: MSU presented FSP: C4 analysis on "Toward a Holistic and Sustainable Strategy for Raising Agricultural Productivity in Sub-Saharan Africa" at the Feed The Future Innovative Lab Partners Meeting. Lilongwe, Malawi. April 21, 2015 and at least 6 other research and policy engagement meetings in Africa in 2015. Our work has started to provide evidence of the relationship between population density, changes in farming practices, soil fertility, and sustainable vs. unsustainable forms of land intensification. In particular, the FSP presentation highlighted the fact that inorganic fertilizer application is not clearly profitable for many smallholder farmers given the low crop response rates that they obtain, and that efforts to dramatically raise fertilizer use in much of Africa will depend on enabling farmers to adopt complementary sustainable intensification practices that would allow them to get much higher nitrogen use efficiencies from fertilizer use. We are making progress in identifying the various options by which policy may influence farmers' willingness to adopt sustainable intensification practices. In Tanzania, this work is being undertaken collaboratively with researchers under the Sustainable Intensification Innovation Lab (CIAT, MSU, and Sokoine University of Agriculture) and with CIMMYT (under TAMASA). In Kenya, this work is being undertaken with Tegemeo Institute and the Ministry of Agriculture. And in Malawi, this work is being undertaken again in collaboration with the SIIL team including the Lilongwe University of Agriculture and Natural Resources and the Gates Foundation-funded GISAIA grant. An upcoming LUANAR-organized workshop in Malawi has been set for April 21, 2016 to discuss emerging findings with Ministry of Agriculture officials. We plan to have a multi-country session on this topic to discuss emerging findings and potential actions by governments at the upcoming ReNAPRI conference in October, 2016 in Nairobi.
- In the last month, PIM/IFPRI has agreed to work together with Thom Jayne and others to support FSP's collaboration with Sokoine University of Agriculture on land and sustainable intensification research under C4.
- Earlier in 2015, GCFSI has committed \$250,000 to support the collaborative work of Sieg Snapp, Thom Jayne and others working sustainable intensification issues in Malawi and Tanzania. This GCFSI support will greatly leverage our potential to achieve meaningful impacts for FSP in these two countries. We are thankful to GCFSI for this support.
- The strength of the joint FSP/Africa Rising/GISAIA activities in Malawi allowed us to prepare a winning grant proposal to the Kansas State University Sustainable Intensification Innovation Lab. We were recently informed that the \$1.0m proposal submitted by jointly by MSU/CIAT/SUA and NMAIST was accepted, which will enable FSP to leverage additional resources for the collaborative sustainable intensification work that it is undertaking in Malawi and Tanzania.
- The FSP:C4 analysis has introduced a number of innovations in research methodology that have not been commonly employed previously. These innovations include (i) the collection of detailed soil samples on farmers' fields to provide more meaningful estimates of the crop response to fertilizer conditional on a range of specific soil variables; and (ii) the introduction of 'plot history' modules in farm surveys to better understand how farmers' management practices in prior years affects current productivity and crop responses to inorganic fertilizer. This is based on the recognition that current yields are highly affected by lagged practices and input applications on that field. These research innovations have been carried out in field work in Zambia, Malawi and Kenya to obtain what we believe are more accurate and compelling research evidence to undergird programs designed to support sustainable agricultural intensification in Africa.
- Plot-level farm survey data and soil samples were collected in October and November, together with GISAIA and Africa Rising.

• In Kenya, the team and collaborators at the Ministry of Ag/KALRO (formerly KARI) conducted data collection activities equivalent to those in Malawi.

#### **Capacity Building achievements:**

• FSP:C4 is building a comprehensive program of integrated research on sustainable intensification, land policy, migration and employment shifts, and economic transformation with a number of African partner institutes, including the Sokoine University of Agriculture and the Nelson Mandela University of Science and Technology in Tanzania, the Ministries of Agriculture in Tanzania, Kenya, and Malawi; the Tegemeo Institute in Kenya, the Indaba Agricultural Policy Research Institute in Zambia, and the Lilongwe University of Agriculture and Natural Resources in Malawi. Thanks to the leadership of Milu Muyanga and Isaac Minde, FSP is building a major program of collaborative research and policy outreach with a number of faculty from SUA. We are grateful for the support being provided by other organizations outside of FSP for this capacity building work, including the SERA project in Tanzania, the PIM/IFPRI group, GCFSI, and from Africa Rising and GISAIA.

#### **Lessons Learned:**

• Land prices are rising rapidly in many parts of the region, more rapidly than the cost of labor or capital inputs such as fertilizer and mechanization. As predicted by the induced innovation hypothesis, we find that changes in relative factor prices are having subtle yet very important effects on farmer behavior. Area expansion is largely occurring through increased cropping intensities (using the same fields every year instead of moving on to new fields will fallowing the old ones) due to population pressures and the rising opportunity cost of fallowing land. More intensive use of land would not pose major problems if farmers were restoring soil organic matter and other nutrients and addressing other aspects of soil quality. Yet most smallholder farmers appear unable to adopt such practices. The more intensive use of land without adoption of sustainable intensification practices is contributing to widespread land degradation. The sustainability and productivity of smallholder agriculture will depend on policy makers' recognition of this serious trend and dedicated R&D and extension programs to reverse it. We are also starting to identify specific input and output marketing policy options that could also nudge smallholder behavior in directions that support sustainable forms of land intensification.

#### With regard to land use dynamics in Africa:

#### **Achievements:**

- FSP research in this area was presented over 20 times in 2015 in African policy and stakeholder meetings. Linkages with civil society groups in the countries in which we are operating in progressing, leading to joint outreach work, e.g., with the Kenya and Zambia Land Alliances.
- During the World Bank land conference in March, Dr. Zaw Oo, director of MDRI-CESD and a member of the National Land Resource Administrative Central Committee, visited IFPRI to discuss the opportunities for land governance reform, an issue of high importance to the Burmese government. The FSP team members introduced the Land Governance and Assessment Framework (LGAF) to Dr. Zaw Oo, who immediately saw its value in initiating possible policy dialogues, increasing transparency of current land policy, and eventually applying this framework for monitoring and evaluating land policy in Burma. Dialogue between the government of Burma and the World Bank LGAF technical team is on-going on the feasibility and timing of implementing the LGAF in the country.
- Progress has been made in discussing with the AU-LPI to collaborate on at least one of the 10 pilot countries (most likely, Mozambique) where they are engaged in helping AU member states in the design of land policy reforms and generating quantifiable indicators to monitor progress.

 Dr. Klaus Deininger of the World Bank has invited MSU/UP/IFPRI to collaborate with the Bank on land-related activities in Africa. Based on several discussions in 2015, MSU/FSP and the World Bank are developing a Memorandum of Understanding regarding (i) joint capacity building support for African governments' national statistical units to accurately measure the number of medium/largescale farms in their country and the area under cultivation accounted for by such farmers; and (ii) joint data collection and analysis of land issues in selected FSP countries, e.g., Tanzania and Nigeria.

#### **Capacity Building:**

- 7- day training on gender-disaggregated land tenure specific survey instruments 60 enumerators (from 7 northern provinces), staffs from MinAg head quarter and the province of Nampula
- 5-day technical training on Computer Assisted Personal Interview (CAPI) to 60 enumerators (from 7 northern provinces), staffs from MinAg head quarter and the province of Nampula
- MSU's activities in each country in which land studies are done is to collaborate with the local national agricultural policy research network of ReNAPRI. In Malawi, Mozambique and Tanzania (the 3 countries in which FSP:C4 land work have been implemented so far), the partner organizations have been Lilongwe University of Agriculture and Natural Resources, CEPPAG, and Sokoine University of Ag. We believe that this approach, putting the national institutes first is helping to build local experience and expertise in carrying out solid empirical studies involving survey work and coordinated outreach activities.

#### **Lessons Learned:** Several major lessons are emerging from this strand of C4 work:

- The fastest growing segment of the family farm sector in Sub-Saharan Africa is medium-scale farms between 10 and 100 hectares. Such enterprises now control more land than foreign and domestic large-scale farms in all countries examined. Under de facto land policies, this group will continue to grow rapidly.
- The productivity of youth labor (and rural labor in general) employed in both farming and non-farm sectors is significantly influenced by local farmland distribution patterns (through rural expenditure patterns and multiplier effects), which is itself influenced by land policies with regard to land rights and the rate of conversion from customary to statutory tenure.
- Reviving the study of agrarian structure by agricultural economists would facilitate our understanding of how rapidly changing land distribution patterns are affecting the relationship between agricultural growth, employment patterns, and poverty reduction in Africa.
- The current institutional systems and methodological approaches for collection of data on SSA's
  farm sectors are systematically missing the most dynamic portion of this sector: the emergent
  farmers. Redressing this will require new kinds of sampling and data collection methods. Correcting
  this informational blind spot is critical for assessing what is happening in African countries'
  agricultural sectors, and why, as well as the viability of alternative agricultural development
  strategies.

### With regard to C4 activities on mechanization and agricultural transformation: Achievements:

• Preparations for the study tours are underway. Agricultural mechanization issues in selected African countries as well as specific issues on small-scale tractors have been compiled, and shared with some of the government officials with the aim of assisting them in identifying key questions to be investigated during the study tour. Draft TORs have also been developed and shared with collaborators who will lead the Asian study tour and write diagnostic report. Letters requesting the nominations for participating officials have been sent for Ethiopia, Ghana, Nigeria, and Kenya. Bangladesh and India have been selected for the study tour based on their similar agro-ecological environment and IFPRI's presence in those countries. The development of designs of study tours in

each country (institutions, agents to be visited, timelines etc.) have been initiated. Additionally, literature reviews have been initiated, with the aim of developing an outline for the writing of a diagnostic report of Ghanaian agricultural mechanization sector by selected Asian mechanization experts. On-going research examining the effect of tractor rentals on the returns to scale in farming, using Nepal Household Survey Data, has been completed and the writing of a draft paper is in progress. The finding will be presented to the Nepali audience at the workshop later August.

#### **Lessons Learned:**

 Preliminary results using Nigerian Household Survey Data indicate that rural shadow wages may be considerably different from labor market wages, while land fragmentation may have mixed effects on the use of tractors.

#### With regards to employment and structural transformation issues:

#### **Achievements:**

• Fieldwork was conducted in Kenya, Malawi and Zambia and the data was analyzed in order to prepare a number of reports and presentations. To follow up on the study's preliminary findings, Hichaambwa visited the Masansa area of Zambia to understand the dynamics between non-farm and farm income growth in this area, which is considered a success story in terms of rural non-farm employment growth.

#### **Lessons Learned:**

• Results indicate that household labor productivity in agriculture (value added per worker) and employment in agriculture are significantly related to the inequality of land distribution at localized levels. Rural-urban migration rates also appear to be related to landholding concentrations. Relatedly, the share of the labor force in the downstream stages of the food system is currently around 6 to 10 percent in the countries analyzed so far, and may reach 15 to 20 percent by 2025, reinforcing earlier analysis by Tschirley, Reardon and others. By contrast, farming will continue to be the single most important source of primary employment in most African countries over the next decade. There are also important lead/lag effects between agricultural and non-farm growth.

#### 8.1.3. Proposed Year 3 activities

#### Year 2 Activities Carrying Over to Year 3

- Land analysis and preparation of reports and briefs from the field work conducted in Mozambique in Year 2, led by CEPPAG and University of Pretoria and MSU.
- Documentation of data sets from Malawi and Mozambique to meet open access data policy.
- Continued outreach work on the megatrends and drivers of food systems transformation initiated in Year 2, with a focus on land dynamics, rapidly rising labor force driven by the "youth bulge", land degradation, urbanization, climate change, drivers and costs of land tenure insecurity.
- Fertilizer policy briefs
- Structural transformation / land policy brief
- Nigeria
- With the objective of identifying the divers of tenure insecurity in Nigeria, the outstanding tasks of the impact evaluation of the pilot systematic land tenure regularization (SLTR) program activity will be carried out. These include field work, analysis, and presentation of findings.
- As part of the activity on assessment of land service delivery system in Nigeria and in collaboration with Nigerian PhD student from Hohenheim university (Germany), FSP-IFPRI has conducted a survey questionnaire of 426 stakeholders involved in land

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

#### Ethiopia:

Finalizing the analysis and write up of a report and policy brief on "Second-stage land certification: perceptions and early lessons learnt" to be published as IFPRI DP (during Q-2) and will be presented at a national symposium on "Transformation and vulnerability in rural Ethiopia" May 27, 2016 organized jointly by the Ethiopian Development Research Institute (EDRI) and IFPRI in Addis Ababa, Ethiopia.

#### Ghana:

o Finalize a draft report on "Agricultural transformation and the Fate of Customary Tenure System in Africa: the case of Ghana" to be submitted for consideration at the 5th African Association of Agricultural Economists (AAAE) Conference to be held in Addis Ababa, Ethiopia, 23 - 26 September 2016. A revised version of the report is to be submitted for publication as IFPRI DP during the 3rd quarter.

#### Partnership:

The United Nations Economic Commission, the German Federal Ministry for Economic Cooperation and Development (BMZ) and the World Bank have established a new Network of Excellence on Land Governance in Africa (NELGA). Given FSP's excellence in research and capacity building activities on land governance issues, FSP (C4 team) will continue the dialogue to strengthen the partnership with the AU-LPI as the establishment of the network generates a new window of opportunity for engagement.

#### Year 3 New Activities, Milestones and Outcomes

Because of increasing convergence between the work under Activity 1 (Fertilizer Policy) and Activity 2 (Sustainable Intensification), we propose to merge the reporting of these activities in the next FSP progress report (and thereafter) as one consolidated activity. It will continue to focus on fertilizer policy issues but will also draw upon the range of actions needed to make fertilizer use more profitable for smallholder farms connected with the adoption of sustainable intensification practices, climate-smart and market-smart actions by government, etc. We feel that this approach will produce more holistically treated and comprehensive set of policy actions for promoting sustainable agricultural productivity growth

#### **Activity 1: Fertilizer Policy**

• Many governments continue to seek technical support to help re-design their subsidy programs. MSU and IFPRI will continue research on input subsidy programs and other strategies for promoting fertilizer use by African farmers and seek to provide policy guidance to interested African governments attempting to improve the effectiveness of their fertilizer subsidy programs. The specific focus of Year 3 activities is being considered in light of recent discussions with public sector officials and development partners at the Addis ReSAKSS meeting, September 1-4, 2015, at the ReNAPRI Annual Conference in Maputo, October 27-29, 2015, and at the BFS Policy Partners meeting Dec 2015 at which it was decided by fertilizer partners to work more closely together in specific promising country, combining analytical approaches of FSP, IFDC and MAFAP with private

sector vision (that has achieved some specific policy traction in COMESA and some of its member states) of AFAP. .

#### **Intended Outcomes**

Based on discussion at the Dec 15 Policy partners' meeting in Washington DC, a group of organizations led by IFDC, NEPAD, AFAP, MSU and USAID have initiated a process to coordinate activities in 2016 focused on providing concrete proposals to policy makers, and seeking the engagement and buy-in of a diverse set of private sector actors (including SME agrodealers, wholesales, and distributors) to reduce the costs by which farmers obtain fertilizer. The objectives of this multi-actor process are:

- Greater consensus among African governments, development partners, and African researchers about how input subsidy programs can be re-designed to more effectively contribute to important national policy objectives
- Attempts by African governments to carefully consider the proposals of our study, and in some
  cases to incorporate these proposals into their own policy documents and the modalities of their
  input subsidy programs and broader efforts to stimulate commercial fertilizer use by African
  farmers.

#### Milestones for Year 3

- Formal collaboration with at least two African governments on fertilizer policy issues based on opportunities identified by C1/C2 activities in FSP countries of operation.
- One report
- · One policy brief

## Activity 2: Toward a Holistic Sustainable Intensification Strategy for Smallholder Farmers in Increasingly Densely Populated Areas of Africa

Building on Year 2 activities, and new support from the Kansas State University Sustainable
Intensification Innovation Lab as well as GCFSI, we will use resources mainly from these sources to
undertake new data collection activities in Tanzania and Malawi. This work will also draw upon and
be linked to activities under Activity 1 on Input Subsidy programs.

#### Milestones for Year 3

- Formal collaboration with at least one African government on sustainable intensification policy issues based on opportunities identified by C1/C2 activities in FSP countries of operation.
- One report
- One policy brief
- Participation in African and international outreach fora

#### **Intended Outcomes**

- Greater consensus among African governments, development partners, and African researchers that
  sustainable agricultural productivity growth in Africa will require a more holistic approach (going
  beyond prescriptions that focus only on inorganic fertilizer as the main priority) that takes account
  of programs to raise soil fertility as a necessary condition for enabling farmers to use inorganic
  fertilizer more profitably and in turn to seek to use it in greater quantities.
- Attempts by African governments to carefully consider the proposals of our study, and in some
  cases to incorporate these proposals into their own policy documents, extension system messages,
  and agricultural budget priorities.

#### **Activity 3: Land Dynamics and Land Policy**

• "Land dynamics" is defined here as changes in the uses, tenure type, control and transfer of land. Year 3 activities will deepen earlier work on the causes and consequences of land dynamics in Africa.

- We also plan to expand our coverage to include Tanzania, Senegal and Nigeria in 2016. Tanzania, Senegal and Nigeria work will be closely coordinated with FSP C1/C2 activities and the Associate Awards in the three countries.
- We will also continue activities initiated in Mozambique in Year 2. We will document and analyze the trends and impacts of the changing structure of farming and land ownership in these two countries, with a particular focus on the growth of emergent and medium-scale farmers as well as understand the drivers and costs of tenure insecurity and plan outreach activities to be led by CEPPAG. There are several specific research objectives: (1) to understand the rate of land expansion of medium- and large-scale farms and to consider the policy implications of consequent changes in farm structure and the concentration of food production and marketed output; (2) to consider the implications of the rise of medium/large scale farms on both countries' agricultural development path and the consequent downstream employment impacts; (3) to understand the relationship between farm size and efficiency, including the range of factors and policies that might condition this relationship; (4) to examine the impacts of large commercial agricultural operations on the welfare of rural communities around them; and (5) to understand the drivers and costs of tenure insecurity at community, household and individual levels with proper emphasis on age and gender-disaggregated analyses. These are also the basic research issues to be examined in Nigeria, Senegal, Tanzania, and Ethiopia. Because primary data collection will be required in each country, only one or two of the expected many analysis will be completed in 2016. University of Pretoria (UP) and CIRAD-Senegal together with a local partner, ISRA-BAME, will lead the Senegal study, with MSU as a supporting partner.. The purpose of this study is to document and analyze the growth of emergent farmers in Senegal. More specifically, there are several related research objectives: (1) to understand the rate of land expansion of medium- and large-scale farms in Senegal and to consider the policy implications of consequent changes in farm structure and the concentration of food production and marketed output; (2) to consider the implications of the rise of medium/large scale farms on Senegal's agricultural development path and the consequent downstream employment impacts; (3) to understand the relationship between farm size and efficiency in Senegal, including the range of factors that might condition this relationship; and (4) to specifically examine the impacts of large commercial agricultural operations on the welfare of rural communities around them. A farm-level field survey of emergent farmers is planned in several areas of the country (to be determined). We plan to survey roughly 300 farmers in each of these areas, stratifying across different levels of market access. The working definition of emergent farmers is those farms with 5 or more hectares of controlled land (whether or not such land is actively operated). Of note is the fact that we are designing the survey frame in such a way that our research will be aligned with the medium scale household survey conducted in Zambia, Malawi, Mozambique, Kenya, and Ghana. This will enable us to pool our observations on key variables with those from the earlier surveys, thus enabling comparative analyses and broader generalizations.
- The Tanzania study will be implemented by MSU, Sokoine University of Agriculture, and the Ministry of Agriculture in Tanzania, with possible involvement of the World Bank and PIM. The study will start in June/July 2015, and will be jointly funded by FSP-core and FSP-USAID/Tanzania Buy-in, such that the study will be integrated with other FSP-C1/C2 activities in Tanzania in close consultation with the FSP-Tanzania team. The Nigeria study will be implemented by a local partner organization to be identified and MSU/FSP.

#### Milestones for Year 3:

Two research/policy reports for Mozambique jointly prepared and released by CEPPAG, UP and MSU
by November, 2016, and one similar policy report for Tanzania. Both reports will document (among
other issues specified in the description above) (i) trends in land use and ownership by farm size
category, (ii) explore the opportunities of the two countries' governments to formulate their land

policies in a way that effectively contribute to national agricultural, employment, and poverty reduction objectives; (iii) assess whether or not land allocation/transfer trends are constituting a transfer of land out of customary tenure systems that would have otherwise been accessible to local rural people, and/or whether they are raising the productivity of land use with dynamic benefits and employment linkage benefits for local rural people; (iv) explicitly address how women and men in different socio-economic conditions (mainly current and former smallholders and the rural landless) may be benefitting or losing from the acquisition of land by medium & large holdings and (v) explore the gender and age differentiated impact of economic and social changes might have on household perceived tenure (in)security.

- Two policy briefs for Mozambique
- Consultations and policy engagement activities with government representatives and development partners in Tanzania, Mozambique and Ethiopia throughout the process, culminating in national consultative meetings when the research is sufficiently advanced to warrant such meetings.
- Two working papers on gender-differentiated demand for land rights regularization in Tanzania and Mozambique to be finalized and shared with government stakeholders and development partners by end 2016.
- One working paper and a journal article on the Senegal study.
- Working paper on cross-country analysis on drivers of tenure insecurity and demand for land tenure regularization (Ethiopia, Mozambique, Nigeria and Ghana) to be finalized and shared with AU-LPI as part of the IFPRI technical support to the AU-CADDP process.
- A session on land issues in African agriculture is being organized by the African Association of Agricultural Economics for their triennial meeting in September 2016, and MSU has been invited to develop this session in consultation with AAAE organizers. We will feature government policy makers from several countries and invite many of our stakeholders from FSP countries to participate in this event.
- More presentations from both the current and previous case studies at the World Bank Land and Poverty Conference, Washington, DC, March 2016
- Undertaking intensive multi-country analysis for a comprehensive report on land and structural transformation in Africa to be finalized in Year 4.

#### **Outcomes:**

- Greater consensus among African governments, development partners, and African researchers that land policy in Africa will require greater integration and consistency with existing agricultural policy, food security, and poverty reduction objectives.
- Greater specificity in African policy documents as to land allocation policies and the next generation
  of smallholder farmers are expected to acquire land for agriculture how a more holistic approach
  (going beyond prescriptions that focus only on inorganic fertilizer as the main priority) that takes
  account of programs to raise soil fertility as a necessary condition for enabling farmers to use
  inorganic fertilizer more profitably and in turn to seek to use it in greater quantities.
- Attempts by African governments to carefully consider the proposals based on our studies, and in some cases to incorporate these proposals into their own policy documents, extension system messages, and agricultural budget priorities.
- Coordination of C1/C2 outreach opportunities in Malawi, Tanzania, Senegal, Zambia and Nigeria with the FSP Associate Awards in those countries will be undertaken to the extent possible.

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

- Trends in land dynamics studied under Activity 3, together with the 'megatrends' identified under FSP-C4 in Year 1 define some key characteristics of Africa's recent agricultural as well as broad economic transformation. In this process, there is an important trend that has drawn less attention in the development study is agricultural mechanization, which has been rapidly emerging in Africa. This emerging issue also leads to a need for understanding policy options which will have obvious implication for the region's agricultural intensification particularly smallholder agriculture. For example, will labor and land availability have different mechanization outcomes, and what will be the potential effect on wage differentials between men and women and in different geographic locations within a country? What will be the implications of the emerging mechanization trends, in combination with land dynamics, for appropriate policy options?
- In addressing these important issues, much can be learned by African countries from Asia's mechanization experiences. As parts of existing research activities early research on this topic has been initiated by the IFPRI team members under different funding mechanisms. Such activities include an international conference on "Mechanization and agricultural transformation in Asia and Africa Sharing development experiences" held in Beijing in 2014, and jointly funded by CGIRA Research Program on Policy Institution and Markets (PIM) and IFPRI's ReSAKSS-Asia. Many international and Asian national experts in the fields of agricultural engineering and agricultural economics specialized on mechanization together with government officials and private sector representatives from African countries were invited for the conference. The Asian experts (from Bangladesh, China, India, Nepal, Pakistan and Thailand) are willingness to continue their engagement with African counterparts to strengthen south-south dialogue and learning in this field. Some of these Asian experts will be part of the core team for this activity.
- On the African side, this activity explores economic issues in mechanization in selected African countries with the aim of encouraging public policies and private sector investment at the appropriate scale and through appropriate market approaches that explicitly benefit Africa's smallholders.
- The activity relies on two main components: (1) the empirical case studies on smallholder
  mechanization that will be conducted in selected African countries (including Ghana, Nigeria) as well
  as comparable low-income Asian countries with low but growing smallholder mechanization (such
  as Nepal); and (2) facilitation of south-south expert dialogues, bilateral/trilateral country visits, and
  knowledge exchanges on mechanization strategies and policies.
- Policy engagement of Component (1) of this activity is to be carried over through IFPRI's country programs in Ghana, Nigeria, and Nepal. Based on the past experiences, an effective way for incountry policy engagement is through frequent dialogues in the studied countries with the key government officials who are in charge of mechanization policy making or implementing. Research findings will be reported to the government in the early stage, and sensitive policy issues as well as policy recommendations will be discussed with the government officials and get their feedbacks.
- Component (2) of this activity is designed as a policy engagement activity. Specifically, the south-south knowledge exchange will engage Asian and Africa experts to undertake diagnostic analyses of African countries' mechanization policy issues. Policy review and consultation as well as South-South knowledge exchanges are aimed to examine (i) lessons how to include women and men in developing and implementing mechanization processes; and (ii) developing policies that promote widely affordable and accessible technologies and include women and men as potential consumers. Specifically, field visits in a selected African country by Asian experts will be arranged as well as selected Asian countries visited by African government officials and the private sector representatives. The visits will be designed around a particular policy topic, paying particularly attention to policies facilitating the development of private sector led mechanization supply chains

to the smallholders. In 2015, four African officials visited Bangladesh for one week and wrote study tour reports, while two Asian experts will visit Ghana for two weeks in late 2015 and write a diagnostic report of Ghanaian mechanization sector. In 2016, similar arrangements for a different set of countries may be envisaged (for example, African officials' visit to India and Asian experts' visits to Ethiopia). Depending on the funding situation, in addition to documenting the findings of each visit, a small workshop or seminar will be organized in either an Asian or African country to target broad audience and inform national policy debates.

• This activity will be implemented by IFPRI with funding from FSP and CGIAR Research Program on Policy Institution and Markets (PIM).

#### Milestones:

- 1-2 trips of Asian experts visiting 1-2 African countries
- 1-2 trips of African government officials and private representatives visiting 1-2 Asian countries
- Diagnostic report produced to assess at least one African country's mechanization policy or relevant issues by Asian experts
- 1-2 policy briefs
- 1 in-country workshop/seminar

#### **Outcomes:**

- Influencing the new thinking of African governments on facilitating the leadership role of the private sector in mechanization supply chain development
- Recommendations and policy options of Asian experts seriously considered by African government authorities

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

- Based on initial analysis identifying a few key "megatrends" that are driving the region's recent economic growth, as well the land dynamics work under Activity 3 of this workplan discussed above, this activity will focus on a set of "big picture" issues in Africa's rural transformation by addressing the following questions: (1) What will be the employment implications of the trends identified in the land dynamics activities? (2) What is the relationship between such land dynamics and rural economic and employment structural change? (3) What will be the outcomes of such structural transformation for income distribution, and gender, poverty and food security? (4) What are policy and public investment priorities for Africa's state government and development partners to facilitate inclusiveness and sustainability in rural structural transformation?
- Addressing these questions needs broad and collaborative efforts within the FSP team and between FSP team and other partner institutions. Under this workplan, we plan to work with ReNAPRI to produce a set of policy briefs on the role of land policy in facilitating poverty-reducing structural transformation in Africa, to be presented at the upcoming AAAE triennial professional meetings in September 2016. Under this activity, we will also use cross-country African data to assess the relationship between the initial distribution of landholdings, patterns of employment and structural transformation, and changes in the distribution of income (including various measures of income poverty, disaggregated by gender). LSMS/ISA-type survey data and recently created African sectoral employment databases will be used to categorize countries according to certain typologies, with the main variables being initial concentration of landholdings (e.g., gini coefficients or other measures of asset inequality), rate of agricultural growth, changes in employment patterns and value added per worker in various sectors, and changes in the distribution of income (including measures of poverty). We will not only test the hypothesis that lagged inequality of landholdings leads to slower agricultural growth and less poverty reduction, we will also examine how the shifts in employment

- and value added per worker (disaggregated by gender) are correlated with growth and productivity trends. We then plan to use cross-country data over time to estimate the extent to which changes in agricultural and non-farm sector growth and employment over time are influenced by lagged measures of farmland concentration.
- The findings of this analysis can be of immense importance in guiding governments' future land policies, including policies affecting youth access to land. Our analysis will help the governments for at least two additional criteria in considering the setting of land policy frameworks. First which scale of farming generates greater employment, particularly employment of rural youth? Second, which scale of farming produces more rapid growth in non-farm employment, value added per worker and more rapid rural structural transformation? Our study addresses both of these questions by linking sectoral employment and value added data (disaggregated by age and gender) with multiple nationally representative LSMS/ISA-type surveys. We will also address (to the extent possible) which kinds of people (disaggregated by sex, age, education, location, and primary livelihood strategy) are most capitalizing on sectoral growth and shifts in employment. In so doing, we aim to test whether (and to what extent) Johnston and Mellor's immensely important findings about the economic transformational consequences of bi-modal and uni-modal agricultural systems in Asia and Latin America also apply to Africa as well.

#### Milestones:

- Research report on 'megatrends' and their implication for Africa's future transformation, produced by July, 2016
- Policy Brief based on this report produced by August, 2016
- Presentation of the study at the Association of African Agricultural Economists meetings in Addis Ababa, September, 2016.
- A modified version of the study (to be updated between September and October 2015) will be contained in the Third Annual ReNAPRI Policy Outlook Report and presented at the 2<sup>nd</sup> Annual ReNAPRI Regional Conference, November 2016 in Nairobi.
- Jayne (MSU), Derek Byerlee (Georgetown Univ.), Were Omamo (IFAD) and Jordan Chamberlin (CIMMYT) have been invited by the managing editors of the Journal of Development Studies to prepare a special issue on Economic Transformation in Africa. This special issue is geared to synthesize research from many organizations to better understand how the process of transformation is occurring in Africa and to identify the appropriate mix of policies and programs (most likely somewhat different across African countries) to rapidly reduce poverty and raise living standards. Several members of the FSP IL team have been invited to submit contributions to this special issue (SI). This SI is intended to be completed with all articles released by the end of 2016.
- Opportunities for policy engagement with governments, development partners and African research institutes will also be pursued over the coming months. We expect to hold consultations on the findings with USAID missions in Ghana, Zambia, Kenya, Malawi, Ethiopia, and others to be determined.
- Other outreach opportunities to be considered and explored later in 2016.

#### **Outcomes:**

- Greater consensus among African governments, development partners, and African researchers about the future trends coming down the pike that will need to be anticipated and responded to in future African agricultural development strategies, whether it be CAADP or its successor programs.
- The incorporation of these research findings into major African initiatives, commissioned studies, and program priorities (including the MasterCard Foundation's youth employment programs in Nigeria, Tanzania and Rwanda; ReNAPRI's outreach activities in 2016, the 2016 AGRA Annual Agricultural Sector Report and AGRF conference to which FSP researchers are contributing, the

- Gates Foundation's new agricultural markets program, and the activities of FSP buy-ins/associate awards in Zambia and Tanzania).
- ReNAPRI will adopt into its own work plan the preparation of similar "Mega-Trends" studies of future forces shaping African agricultural systems on a bi-annual basis.
- Policy engagement opportunities: This activity is intended to generate new insights about pro-poor development processes in African settings, and is not necessarily geared to produce concrete policy options in this first round of work (Year 2). We intend that more specific policy options for consideration by policy makers will be developed in Year
- This FSP-C4 research work and policy options seriously considered by government authorities in various African countries

## 8.2. 4b: Agrifood System Transformation in the Downstream and Implications for Linkages to the Upstream

#### 8.2.1. Introduction

The overall focus of C4-AFST (agrifood system transformation) work is on understanding the unfolding transformations taking place in African agrifood systems, driven by rapid income growth and urbanization. Work during Year 1 highlighted at continental level in Africa and Asia the dramatic penetration, broadly across the income distribution and in both rural and urban areas, of processed and perishable foods in household consumption patterns. It also shows exceptionally high expenditure elasticities of demand for these foods, suggesting very strong growth in demand for them over the coming decades, with profound implications for agrifood system transformation, employment, and nutrition.

The work during year 1 left key knowledge gaps. Specifically, while continental trends are clear there exists an extremely weak knowledge base at country level on who (local firms, regional firms, multinationals) is producing what products, where (in urban areas, peri-urban, nearby rural, or distant rural), and how (with what technology and at what scale). Even less is known about how this mix of who / what / where / how has evolved in recent years, how it is likely to change in the coming five- to ten years, and what this implies about needed public policy and investment. These information gaps make it difficult to determine what steps government and development agencies need to take to ensure robust and equitable growth in this sector that serves the needs of consumers for a safe, nutritious, and high quality food supply while assisting local entrepreneurs to respond vigorously and competitively to these opportunities.

Work during year 2 was designed to begin filling these gaps in five countries of Africa: Senegal, Nigeria, Ethiopia, Tanzania, and Mozambique. The work was to feature a combination, with different relative emphases depending on the country, of processed food mapping at retail and selection of one value chain that features substantial processing for more in-depth study. The work was envisaged as taking place over two years – years 2 and 3 of FSP. The focus was on two cross-cutting policy questions addressed in all countries, and on nutrition questions specific to three- of the five countries.

The cross-cutting research questions to be addressed in all countries were:

- 1. What is the distribution of market share by size of processing firm (including poultry firms in Mozambique and Nigeria) in these chains? How do gender of owner and employment footprint vary by firm size? How do other firm characteristics, including levels of education and training (of owner and any employees) and access to business services and credit, vary by gender of owner? How competitive are the SMEs at present, and what policies and programs might enhance this?
- 2. What is the market share of chain- and small-format supermarkets? Do their current and evolving procurement practices imply any competitive disadvantage for SME processors? If so, what steps can be taken to enhance SME access to these retail market types?

The nutrition questions to be addressed were as follows. In *Tanzania*, what is the market share of whole- and blended meals compared to refined maize meal and own-produced maize meal? What are the nutritional implications of the rise of whole- and blended meals? What if any barriers exist to

continued growth in demand / supply of these more healthy products? In *Ethiopia*, what are the nutritional implications of observed trends in overall diet change? In *Senegal*, what is the market share of processed millet products in overall consumption of grains in urban areas? What are the nutritional implications of their rise in urban markets? What if any barriers exist to continued growth in demand / supply of these more healthy products?

Year 2 has involved planning, designing, and initiating new field work to address these questions.

#### 8.2.2. Summary of Year 2 workplan accomplishments

**Activities during Year 2:** Activities carried out during year two were:

- Processed food inventories in three cities each of Tanzania (Dar es Salaam, Arusha, and Mwanza) and Mozambique (Maputo, Chimoio, and Nampula).
- Planning of retail surveys in each Mozambique, Tanzania, and Ethiopia. In Mozambique and
  Tanzania, the absence of sampling frames designed for retail outlet surveys meant that at least eight
  person-months of time of local researchers and research assistants went in to preparing frames to
  ensure statistically appropriate sample design. In Ethiopia, the team was able to take advantage of
  previously developed sample frames in the planning of their work.
- Together with the preparation of the retail survey, preparation of a teff milling survey in Ethiopia (teff mills are now the primary retail outlet for teff and teff products in Addis Ababa).
- In Nigeria, a scoping study of poultry and key grain value chains in and around Ibadan. This study will complement the work planned under the Nigeria Associate Award.
- In Senegal, activities were to be coordinated with FSPC4 but funded by a mission Associate Award. The AA was completed during August, 2015, and the team held its first stakeholder meeting that same month, and began to plan its own fieldwork.

**Written output during Year 2:** Output during Year 2 focused on promoting awareness of the profound changes taking place in African agrifood systems, and engaging decision makers in dialogue regarding appropriate responses. Output specific to countries included:

- 1. Two Policy Research Briefs in Tanzania highlighting the very vigorous response by local micro-, small, and medium-scale processors to emerging market opportunities. The first Policy Research Brief focused on findings from processed foods inventory in Dar es Salaam, while the second brought together inventory data across all three cities and highlighted findings regarding differential levels of transformation and of presence of local firms.
- 2. One Policy Research Brief in Mozambique focusing on results of the processed foods inventory in the three cities and comparing results to those found in Tanzania. This PRB showed dramatically lower response by local companies in Mozambique compared to Tanzania, with the partial exception of the city of Nampula in the north of the country.

Papers that cut across countries during Year 2 and that were funded in full or in part by C4 included the following:

- 1. Reardon, T. 2015. "The Hidden Middle: The Quiet Revolution in the Midstream of Agrifood Value Chains in Developing Countries," Oxford Review of Economic Policy, 31(1), Spring: 45-63.
- 2. Tschirley, D., T. Reardon, M. Dolislager, and J. Snyder. 2015. "The Rise of a Middle Class in Urban and Rural East and Southern Africa: Implications for Food System Transformation," Journal of International Development, 27(5), July: 628-646.

- 3. Tschirley, D, J. Snyder, M. Dolislager, T. Reardon, S. Haggblade, J. Goeb, L. Traub, F. Ejobi, F. Meyer. 2015. "Africa's Unfolding Diet Transformation: Implications for Agrifood System Employment," Journal of Agribusiness in Developing and Emerging Economies, 5(2), September.
- 4. Minde, I. F. Terblanche, B. Bashaasha, C.Madakadze, J. Snyder, A. Mugisha. 2015. "Challenges for Agricultural Education and Training (AET) Institutions in Preparing Growing Student Populations for Productive Careers in the Agri-Food System," Journal of Agribusiness in Developing and Emerging Economies, 5(2), September.
- 5. Reardon, T., D. Boughton, S. Haggblade, D. Tschirley, M. Dolislager, and C. Hu. 2015. "Food security strategies of the rural poor in Africa and Asia in an era of rapid urbanization: Policy and program implications," Brief as background to presentation at the workshop "Partnering to End Extreme Poverty: From vision to practice," May 28-29, 2015, USAID, Washington DC.
- 6. Reardon, T., D. Boughton, D. Tschirley, and S. Haggblade. 2015. "Agrifood system transformation in Africa and Asia: Implications for Poverty and Food Security," Paper presented at the conference "The Economics of Global Poverty" at Gordon College in Wenham, Massachusetts, January 5-7, 2015. Submitted September 2015 by invitation to special issue Faith & Economics.
- 7. Reardon, T., D. Tschirley, B. Minten, S. Haggblade, S. Liverpool-Tasie, M. Dolislager, J. Snyder, C. Ijumba. 2015. "Transformation of African Agrifood Systems in the New Era of Rapid Urbanization and the Emergence of a Middle Class," Paper presented at the ReSAKSS Annual Trends and Outlook Report Conference in Addis, September 2015, and to be published in the ATOR Proceedings. A revised version, including Ousmane Badiane, is being sent to Global Food Security journal at their invitation.
- 8. Dolislager, M., D. Tschirley, and T. Reardon. 2015. Consumption Patterns in Eastern and Southern Africa. Report to United States Agency for International Development. East Lansing, MI, USA: Michigan State University, Innovation Lab for Food Security Policy.
- 9. Liverpool-Tasie, S., S. Adjognon, T. Reardon, D. Tschirley, and M. Dolislager. 2015. "Challenging Conventional Wisdom on Trader-Farmer Interlinked Input-Credit Markets with Evidence from Africa," Paper Presented at the Preconference of the Annual Meeting of the Agricultural and Applied Economics Association, "Rapid Agrifood System Transformation, Globalization, and International Development," July 25, 2015.
- 10. Reardon, T., and C. P. Timmer. 2015. "Transformation of the Agrifood Industry in Developing Countries." In The Oxford Handbook of Food, Politics and Society, edited by Ronald Herring. New York: Oxford University Press.

**Outreach during Year 2:** Research and policy perspectives from this work were presented in five country-level outreach events during Year 2. In *Tanzania*, a stakeholder workshop was held during July 2015 to present results from processed foods inventory in three cities and solicit input from key stakeholders on future work. Around 40 participants attended from government, civil society, donors and cooperating partners, and private sector.

In *Mozambique*, Tschirley made a nationally televised presentation at the MOZEFO forum on agroindustry in Mozambique (<a href="http://www.mozefo.com/en/">http://www.mozefo.com/en/</a> conferences/agro-industry-in-mozambique/). Roughly 200 participants from all sectors of society participated. Also in Mozambique, a stakeholder workshop was held during July 2015, modeled after the workshop in Tanzania. Around 20 participants attended from government, civil society, donors and cooperating partners, and private sector.

In *Ethiopia*, results were presented and discussed in two events. The conference on "Together for nutrition" took place in Addis on June 15th organized by the IFPRI, with participation of 150 stakeholders (for more information, see: http://www.togetherfornutrition.org/tfn-2015-addis-ababa-

ethiopia/). Recent evidence on a large number of nutritional issues was presented. The paper on changes in food consumption was presented at this meeting (available at: <a href="http://www.slideshare">http://www.slideshare</a>. net/essp2/). The changes in consumption results werenalso presented at the Annual conference of the Ethiopian Economic Association, July 23-25.

Ten cross-cutting outreach presentations were made during the year:

- Presentations of evolving findings by Tschirley at (1) The ReSAKKS meeting to prepare for ATOR, held during December 2014 at IFPR in Washington, D.C.; (2) plenary presentation at The International Food and Agricultural Marketing Association's national conference, held in Minneapolis during June of 2015; and (3) the ReSAKKS ATOR held in Addis Ababa during September, 2015.
- 2. Five individual presentations by (1) Adjognon and Liverpool, (2) Boughton, (3) Minten, (4) Reardon, and (5) Tschirley at the Preconference of the Annual Meeting of the Agricultural and Applied Economics Association, "Rapid Agrifood System Transformation, Globalization, and International Development," July 25, 2015.
- 3. Reardon, T., D. Boughton, D. Tschirley, and S. Haggblade. 2015. "Agrifood system transformation in Africa and Asia: Implications for Poverty and Food Security," Presented at the conference "The Economics of Global Poverty" at Gordon College in Wenham, Massachusetts, January 5-7, 2015.
- 4. Reardon, T., D. Boughton, S. Haggblade, D. Tschirley, M. Dolislager, and C. Hu. 2015. "Food security strategies of the rural poor in Africa and Asia in an era of rapid urbanization: Policy and program implications," Brief as background to presentation at the workshop "Partnering to End Extreme Poverty: From vision to practice," May 28-29, 2015, USAID, Washington DC.

#### 8.2.3. Proposed Year 3 activities

#### Year 2 Activities Carrying Over to Year 3

The retail surveys currently being planned in Ethiopia, Mozambique, and Tanzania, will be completed during Year 3. In addition, surveys will be conducted of milled grain product producers in Tanzania, poultry producers in Mozambique, and teff millers in Ethiopia. Specifically:

- In Tanzania, retail and miller surveys will be conducted first in Dar es Salaam with C4 funds; the surveys will be extended to Arusha and Mwanza contingent on funding from an anticipated Tanzania Associate Award;
- In Mozambique, retail and poultry producer surveys will be conducted in Maputo with C4 funds; expansion of each survey to Chimoio and/or Nampula is contingent on additional funding from the mission;
- In Ethiopia, retail and miller (teff) surveys will be started in December, 2015.

#### Year 3 New Activities, Milestones and Outcomes

In addition to a continuation and wrap-up of data collection efforts underway in Ethiopia, Tanzania, and Mozambique (see previous section), Year 3 will see the launching of data collection activities in Senegal and Nigeria, a series of new papers, and new outreach events in all countries that will be informed by all the empirical work. Specifically:

• In Senegal, Q1FY16 will see an inventory of background information including policy issues, and a rapid reconnaissance of the midstream of the millet and sorghum value chains. Q2FY16 in Senegal will see surveys at retail and midstream (processing and trading). Data cleaning, analysis, and report writing will occur during Q3 and Q4.

- In Nigeria, we propose to conduct a processed food inventory in Ibadan, Oyo state, Nigeria during Q1; poultry producer and feed mill surveys in Ibadan, Oyo State during Q2 & Q3; and a maize trader survey in Northern Nigeria (Q2 & Q3). Data analysis and report writing will occur during Q3 & Q4.
- A paper on policy enabling environment for inclusive growth of the local food processing sector will be prepared for Mozambique during Q1FY16. Preparation of this paper will (a) leverage mission funding, (b) respond to explicit demand from the Mozambican government (and from BFS) for guidance on how to promote local agro-processing in an economically and financially sustainable way, and (c) serve as a basis for a similar paper and presentation for Tanzania. In the latter case, the conceptual approach and guiding principles embodied in the Mozambican paper will be interpreted and applied in Tanzania's specific circumstances.
- At least the following additional papers will be prepared during Year 3:
  - 1. Tschirley, David, B. Cunguara, S. Haggblade, T. Reardon, and M. Kondo (2016a). "Diet Change and the Evolution of Employment in Africa's Agrifood System: A Sectoral, Functional, and Spatial Analysis for East and Southern Africa". The extended abstract for this paper has been accepted for a special issue of Journal of Development Studies. The paper will extend and improve earlier work on the impacts of diet change on employment in four ways. First, it will provide a breakdown of the earlier employment vector by rural/urban and by wage vs. self-employment. Second, it will estimate the impact of diet change on the distribution of labor across farming activities. Third, it will integrate a gender breakdown into each of the first two analyses. Fourth and final, it will add a commodity classification to the processing-by-perishability classification of the earlier work. Together, this work will provide a far richer view of the evolving structure of employment in the region than was possible with the earlier approach, and provide a more solid basis for anticipating skill needs for that emerging workforce.
  - 2. Tschirley, David, B. Cunguara, S. Haggblade, T. Reardon, and M. Kondo (2016b). "Diet change and the intensity and distribution of labor in farming: Policy and programmatic implications for rural Sub-Saharan Africa." This paper will take a detailed view of the implications of diet change for the distribution of farming labor (broken by gender) across 10 cropping and livestock activities, and draw implications for training and technical assistance needs. It will be a more detailed version of the farm-level analysis that will feed into Tschirley et al. (2016a).
  - 3. Dolislager, M., D. Tschirley, T. Reardon (2016). "East & Southern Africa diet diversification originating across intra-poor segments of the population." This paper will be submitted for a special issue of World Development on agricultural transformation in Africa. It will provide a detailed review of the rapidly changing consumption patterns among the poor in this region of Africa. This paper will highlight the fact that, driven by diet transformation among the poor, structural and employment changes are happening very rapidly now. This makes urgent the design of policy responses in the areas of enabling environment, physical marketing infrastructure, and workforce training.
  - 4. Worku, I., M Dereje, and B. Minten (2016). "A decomposition analysis of diet transformation in Ethiopia, with policy- and programmatic implications." Working paper and policy research brief. The brief will be prepared first, to feed into policy dialogue in Ethiopia. The brief and working paper will document the rapid transformations taking place in Ethiopia's food economy, including increased per capita food consumption, shifting patterns of consumption towards perishable and processed foods, and increased reliance on markets for food. Highlighted policy implications will include (a) the continued need for more diet diversification even as total consumption rises, (b) better understanding of markets among policy makers, to reduce distrust and improve enabling environment in light of consumers' increasing dependence on markets, and (c) the continued need for targeted safety nets for the still significant portion of the population not consuming sufficient calories.

- 5. Fall, Abdoulaye, O. Badiane, K. Savadogo, S. Faas, and T. Reardon (2016). "The transformation of the rice value chain in Senegal: implications for policy." Working paper and policy research brief. This paper and brief will document rapid technology change taking place in the rice value chain, and implications for consumers and policy makers.
- 6. Fall, Abdoulaye, O. Badiane, K. Savadogo, S. Faas, and T. Reardon (2016). "The transformation of the millet value chain in Senegal with an emphasis on millet processed/packaged products and women's employment: implications for policy." Working paper and policy research brief. This paper will document the rapid rise of processed and packaged millet products for urban consumers, produced largely by women. Strategies to strengthen the growth of these female-led enterprises will be outlined.
- Policy impact will be pursued during Year 3 in the following ways:
  - 1. In Tanzania, FSP will take up policy advocacy on the initiative, initiated by the SERA project that has since closed, ensure reform in Tanzania's financial regulatory structure for collateralized lending. The objective will be to help enact a new Personal Property Security Act (PPSA) and regulations to support the development of a secured transactions/collateral registry system. We believe that this could drive measureable improvements in the access of small- and medium-size food processing firms to the credit they need to make investments to remain competitive in Tanzania's market place.
  - 2. FSP will make presentations to government and private stakeholders on this same topic, measuring interest and prospects for similar reforms.
  - 3. Results from retail- and processor surveys in Tanzania and Mozambique will be discussed indepth in stakeholder forums during the final quarter of FY16, and concrete policy proposals will be presented, debated, and taken forward out of these forums.
- Synergies between this component of C4 and the upstream component will be pursued as follows:
  - 1. As an outcome of the Cities and Food Security Roundtable held 30 March 2016, leads for both components will collaborate on an agenda-setting article for Science that incorporates results from both streams of work, along with additional perspectives from outside FSP, to identify policy, programmatic, and research implications of rising urbanicity in Africa.

## 9. Component 5: Strategic Analytical Agenda and Support to Donor Policy and Strategy

#### 9.1. Introduction

This component provided 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 team member institutions.

#### 9.2. Summary of Year 2 accomplishments

#### 9.3. Proposed Year 3 activities

FSP will continue to provide on-demand support to USAID BFS through a variety of means. The recommitment to the CAADP principles and the additional commitments to improved mutual accountability, resilience, nutrition, and trade by African Heads of State in the Malabo Declaration elevates the importance of the next round of country investment and policy plans. To advance the Malabo Implementation Strategy and Results Framework (IS&R), USAID Bureau of Food Security (BFS) has requested FSP-C5 assistance with a number of events and technical inputs. In particular, donors, the AU, and the NEPAD Planning and Coordinating Agency (NPCA) have agreed on the need for a series of guidance documents that would be made available to and used by countries and serve as an indicative guide about what questions could be addressed, what analysis and modeling could be done to inform choices and planning, and what inclusive consultation processes could be established in line with the commitments in the Malabo Declaration. Guidance documents are needed for:

- 1. Renewing, updating or completing <u>National Agriculture Investment Plans</u> that can guide implementation to efficiently achieve the Malabo Declaration goals and targets, including multistakeholder engagement and buy-in.
- 2. Establishing and implementing an <u>Accountability Plan</u> to strengthen multi-stakeholder platforms for review, dialogue and debate to ensure mutual accountability and regular peer review to enhance implementation of the NAIP.
- 3. Establishing a NAIP <u>Policy Plan</u> to identify policy and institutional reforms to strengthen the ability of public and private sector agencies to achieve the goals and targets of their NAIP.
- 4. Establishing a <u>Coordination Plan</u> that strengthens local ownership and leadership to champion agriculture, ensure inclusive participation, and create the multi-ministerial and multi-partner coordination to deliver on the country NAIP.

Each of these guidance documents will set standards that can help benchmark the extent to which countries are aligning with the Malabo principles and the IS&R Strategy Actions for system change. Each concept note will reflect and hence need the input of specialized technical knowledge to ensure they build on best practice and the best knowledge available. FSP-C5 is providing technical input into the composition of these documents as well as helping to organize the technical meetings that collect the inputs of a wide variety of stakeholders and experts.

Additionally, FSP-C5 is providing direct assistance to USAID BFS in the form of direct liaison and support services including data analytics and synthesis of research findings, preparation of slides and data trends, and technical reviews and guidance on specific topics. This also includes support in preparation of a number of internal events, presentations, and meetings as well as contributions to a larger Partner's Meeting to take place in Dec 2015.

Requests for FSP-C5 assistance are documented in a request form (ANNEX 2). Tasks are initially discussed with the BFS Policy Unit and are then summarized in the form with expected outputs, dates of completion, and associated costs. The form is reviewed and validated by the BFS Policy Unit task manager to ensure that both USAID and FSP have the same understanding of what is to be done with revisions made if necessary. Once the task is clear and agreed upon, the task begins and forms are stored by the FSP team for future reference and reporting.

## 10. Management Support for Coordination, Communication, Compliance and Impact

This Food Security Policy Innovation Lab is led by a management team at MSU (D. Boughton, M. Maredia, S. Longabaugh, O. Tasie, and N. Sitko to join in April 2016), IFPRI (X. Diao and A. Kennedy) and UP (S. Hendricks, J. Kirsten, 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.

In Year 3, the team plans to continue to provide this supporting role to the Component teams and the FSP Consortium. Specific tasks to be accomplished in Year 3 by the management team are noted below.

#### 10.1. Coordination and Communication

The management team will continue to play a coordination role: a) across FSP workstreams and organizations; 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 will participate and facilitate participation of research teams in USAID organized Policy Partners meetings or meetings organized by regional policy networks (e.g., ReNAPRI) and use such events and platforms to identify opportunities where greater coordination within FSP and across partners could yield significant short term benefits in terms of policy change and capacity building).

A **project partner meeting** (mini-retreat) is planned in East Lansing in March 2016 that will bring together team members across Components, consortium partners, country teams, and USAID to review progress and take a critical look at the program achievements and gaps, brainstorm on filling those gaps, and discuss about strategies to prepare for the external evaluation planned in the first quarter of FY 2017. This event will serve as an opportunity for global and country teams to learn about past accomplishments, and ongoing and planned activities, which will help better coordination of the research demand and supply side within the FSP program. This will also facilitate communication between different Component teams, Country teams, and Consortium partners.

The FSP Innovation Lab also plans to launch a redesigned web page in 2016 with the aim of easy access and viewing of content with notepads and smart phones. The website will be one of the key 'communications' tools that will feature spotlight articles, videos, and policy Briefs related to research, capacity building and outreach achievements by FSP team members. Tools and mechanisms to better communicate the ongoing and planned activities across components and countries by FSP will be developed and made accessible to others for better coordination and communication within FSP and with other partners.

#### 10.2. Compliance with Open Data Management Plan

Management/compliance with USAID/USG open data requirements will be one of the areas to be focused by the management team. Each project component team funded by the FSP Core project will be asked to develop a data management plan that identifies all the datasets and elaborates on the plan for

complying with the open data directives of USAID. Given the multiple partners and the nature of the program, there are many open data access sites available to FSP team members. The goal is to have the data available in the key sites used by professionals in each field, and give highest exposure to the data, in addition to registering these datasets in the USAID Development Data Library (DDL).

#### 10.3. Working towards policy change

To improve the policy impact of FSP investments, Nicholas Sitko will join the management team from April 2016. He will support the application of policy engagement tools to be developed by the C3 team in key countries and thematic areas. This will enable a more strategic approach to identifying policy areas, leading to more focused research and outreach efforts. In addition, this support to policy engagement will foster more visible linkages between FSP country efforts and policy outcomes. Finally, through this applied approach to strategic policy engagement, the tools and lesson developed in other areas of FSP will be more explicitly linked to on-going policy processes, leading to an improvement of the applied tool and greater local visibility of research outputs.

#### 10.4. Competitive grants

As part of year 3 workplan, the management team will explore initiating competitive grant program as envisioned in the program proposal. Ideas on potential themes and types of awards to be given will be explored with the Component team members. The plan is to initiate a small grants program in one country or region, and expand to other countries/themes in years 4 and 5.

#### 10.5. Grant Management, Reporting, and Monitoring and Evaluation

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 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 surveys for the qualitative indicators.

### ANNEX 1: List of Ongoing and Prospective Buy Ins and Associate Awards

Description	Dates	Amount	Status (as of 30 Oct 15)
Modification Buy-In:			
USAID/Mali	Signed: 9/8/2014 – 7/14/2018	\$900,000	Operational
USAID/Tanzania	Signed: 9/8/2014 –	\$500,000	Operational
	7/14/2018		
USAID/West Africa	Signed: 9/8/2014 – 7/14/2018	\$300,000	Operational
Associate Awards:	1 .77		
Food Security Policy	9/24/2014-	Amount: \$7,718,509	Operational
Project (Burma)	9/23/2019	Obligated: \$2,843,307	
Malawi New Alliance	11/24/2014-	Amount: \$3,138,470	Operational
Policy Acceleration	11/24/2017	Obligated: \$1,000,000	
Support (NAPAS)			
Senegal Agricultural	7/27/2015-	Amount: \$6,000,000	Operational
Policy Project (PAPA)	7/26/2018	Obligated: \$1,300,000	
Nigeria Agricultural	7/1/2015-	Amount: \$12,499,999	Operational
Policy Project	6/30/2020	Obligated: \$3,500,000	
African Great Lakes	7/20/2015-	Amount: \$1,800,000	Operational
Coffee	7/19/2018	Obligated: \$750,000	
Tanzania	To Be Determined	To Be Determined	To Be Determined
Mali	To Be Determined	To Be Determined	To Be Determined

### ANNEX 2: FSP Component 5: Request Form

Title		
Individual Requesting		
Summary of Task		
Contribution to BFS Policy Agenda	☐ Institutional Architecture ☐ Enabling Environment for Private Sector ☐ Agricultural Trade ☐ Agricultural Inputs ☐ Land and Natural Resources ☐ Resilience and Agricultural Risk Management ☐ Nutrition	☐ Mutual Accountability ☐ Systems change ☐ Agricultural transformation ☐ Foresighting ☐ CAADP/Malabo support ☐ Overall Policy Team support
Personnel and approx. budget		
Approx. completion date		
Deliverable		