Michigan State University
In partnership with the
International Food Policy Research Institute

Feed the Future Nigeria Agricultural Policy Project

Associate Cooperative Agreement Number AID-620-LA-15-00001

Quarterly Report

Fourth Quarter and Annual Report: July 1- September 30, 2018

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ACRONYMS

ABU	Ahmadu Bello University
ADAN	Association of Deans of Agricultural Universities in Nigeria
ADB	African Development Bank
ADP	Agricultural Development Programs
AIM	Agripreneurship Incubation and Mentorship Program
AE-FUNAI	Alex Ekwueme Federal University Ndufu Alike Ikwo
AFAN	All Farmers Association of Nigeria
APP	Agricultural Promotion Policy
APRNet	Agricultural Policy Research Network
ARCN	Agriculture Research Council of Nigeria
ASN	Agricultural Society of Nigeria
BMGF	Bill & Melinda Gates Foundation
CAADP	Comprehensive Africa Agriculture Development Program
CAP-F	Country Agribusiness Partnership Framework
CIMMYT	International Maize and Wheat Improvement Center
CLEEN/NOIPolls	Centre for Law Enforcement Education
CAPI	Computer Assisted Personal Interviews
CGE	Computable General Equilibrium
CSPro	Census and Survey Processing System
DC	District of Columbia
DFID	Department for International Development
DHS	Demographic Health Survey
ECOWAS	Economic Community of West Africa States
FAW	Fall Army Worm
FCT	Federal Capital Territory
FDAE	Federal Department of Agricultural Extension
FMARD	Federal Ministry of Agriculture and Rural Development
FMBNP	Federal Ministry of Budget and National Planning
FMH	Federal Ministry of Health
FTF	Feed the Future
FUNAAB	Federal University of Agriculture, Abeokuta
FUT Minna	Federal University of Technology, Minna
FY	Fiscal Year
GHS-Panel	General Household Survey Panel
GFSS	Global Food Security Strategy
HMA	Honorable Minister of Agriculture
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IITA	International Institute of Tropical Agriculture
JSR	Joint Sector Review
IFPRI	International Food Policy Research Institute
KSUST	Kebbi State University of Science and Technology
LGA	Local Government Area

LSMS	Living Standards Measurement Survey
LSMS-ISA	Living Standards Measurement Survey-Integrated Surveys on Agriculture
M&E	Monitoring and Evaluation
MEP	Monitoring and Evaluation Plan
MIS	Nigeria Malaria Indicator Survey
MSU	Michigan State University
MTSS	Medium Term Sector Strategy
NA	Not Applicable
NAN	News Agency of Nigeria
NANTS	National Association of Nigeria Traders
NAAE	Nigerian Association of Agricultural Economics
NAERLS	National Agriculture and Extension Research Liaison Services
NABG	Nigeria Agriculture Business Group
NBS	National Bureau of Statistics
NAIP	National Agriculture Investment Plan
NFCNS	National Food Consumption and Nutrition Survey
NGO	Non-Governmental Organization
NIMET	Nigerian Meteorological Agency
NSSP	Nigeria Strategy Support Program
OIP	Office of International Programmes
PSI	Population Services International
PMP	Performance Management Plan
PCU	Project Coordinating Unit
R&D	Research and Development
SAM	Social Accounting Matrix
TOHFAN	Tractor Owners & Hiring Facilities of Nigeria
UNICEF	United Nations Children's Fund
UI	University of Ibadan
USAID	United States Agency for International Development
USG	United States Government
YISA	Youth Initiative for Sustainable Agriculture

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1. PROGRAM OVERVIEW / SUMMARY

Program Name:	Feed the Future Nigeria Agricultural Policy Project
Activity Start Date and End	July 1, 2015 – June 30, 2020
Name of Prime Implementing: Partner:	Michigan State University (MSU)
[Contract/Agreement] Number:	AID-620-LA-15-00001
Name of Subcontractors/Sub-awardees:	International Food Policy Research Institute (IFPRI)
Major Counterpart Organizations:	Federal Ministry of Agriculture and Rural Development (FMARD)
Geographic Coverage (cities and or countries):	Nigeria
Reporting Period:	July 1, 2018 – September 30, 2018
Project personnel mentioned in this report and their project role:	Dr. Channing Arndt (Senior Research Fellow, IFPRI) Dr. Mulubrhan Amare (Associate Research Fellow, IFPRI) Dr. Suresh Babu (Senior Research Fellow, IFPRI) Dr. Olivier Ecker (Senior Research Fellow, IFPRI) Dr. Hosaena Ghebru (Research Fellow, IFPRI) Dr. Patrick Hatzenbuehler (Associate Research Fellow, IFPRI) Dr. Saweda Liverpool-Tasie (Principal Investigator, MSU) Mr. Steve Longabaugh (Specialist, MSU) Dr. George Mavrotas (Chief of Party, IFPRI) Mr. John Mazunda (Country Program Manager, IFPRI) Dr. Tewodaj Mogues (Senior Research Fellow, IFPRI) Dr. Michael Olabisi (Assistant Professor, MSU) Dr. Tom Reardon (Distinguished Professor, MSU) Dr. Danielle Resnick (Senior Research Fellow, IFPRI) Dr. Laura Schmitt Olabisi (Associate Professor, MSU) Dr. Hiroyuki Takeshima (Senior Research Fellow, IFPRI) Dr. Oyinkan Tasie (Assistant Professor, MSU)

This progress report summarizes the key activities undertaken by the Feed the Future Nigeria Agricultural Policy Project for the 4th quarter (July-September 2018) of fiscal year 2017/18.

1.1 Summary of Results to Date

Project Indicator Title	Annual Target	Q4 Targets				Achievement to date	Annual Performance Achieved to the End of Reporting Period (%)
		Estimated (25% of the Annual Target)	Actual	% Deviation (Estimated – Observed)	Comment (If Deviation > 25% or <-25%)		
1. Number of high quality research reports published ([Annex B](#))	11	2.75	7	155%	This increase came about due to publication of journal articles. A few articles underwent review faster than initially anticipated.	16	145%

2. Number of participants attending project organized research and policy events	765	170	613	261%	A number of seminars were organized during the fourth quarter where participants exceeded the number initially planned by the Project. This was particularly the case where government participation was concerned	1274	152%
3. Number of agricultural and nutritional enabling environment policies analyzed, consulted on, drafted or revised, approved and implemented with USG assistance (RAA)completing the following processes/steps of development as a result of USG assistance in each case: 1. Underwent analysis; 2. Underwent public debate and/or consultation with stakeholders on the proposed new or revised policy; 3. Were newly drafted or revised; Standard Feed the Future (FtF) Indicator EG.3.1-12	3	3			Within range	100%	

4. Number of collaborative policy research work and analysis completed jointly with local partner. (Annex G)	7	1.75	5	186%	Similar to indicator number 1, this also reflects contribution of collaborators to journal articles. In some cases, research teams delivered more than was planned	12	171%
5. Number of individuals who have received USG supported short-term technical training in agricultural sector productivity or food security policy analysis training. Standard Feed the Future (FtF) Indicator EG.3.2-1	850	212.5	214	0.7%	Within range	1085	128%
6. Number of individuals who have received USG supported degree-granting agricultural sector productivity or food security training. Standard Feed the Future (FtF) Indicator EG.3.2-2	8	2	2	0	Within range	7	88%
7. Number of government units or divisions that have received short-term training (USG assistance)	11	2.75	1	-64%	The Project had already reached the target for this indicator by Q3 of Year 3	13	118%

8. Number of agriculture policy communications developed and/or written for stakeholder consumption (Annex E)	18	4.5	17	278%	This is as a result of increased contribution to policy communications by students taking part in the Project's Visiting Scholars program	49	272%
9. Number of public private advocacy dialogues focused on policy that supports private sector investment	4	1	3	200%	Policy dialogues under this indicator were supposed to be delivered each quarter. Due to reasons beyond the Project's control, these were delivered in Q4	3	75%
10. Number of for profit private enterprises, producers' organizations, water users' associations, women's groups, trade and business associations, and community-based organizations (CBOs) receiving USG food security related organizational development assistance Standard Feed the Future Indicator EG3.2-4	30	7.5	27	260%	This is due to increased participation by producer associations in Project activities in Q4 of year 3	41	137%

11. Index (or scorecard) of quality of agriculture and food security policy processes in Nigeria, as measured by stakeholder evaluation to capture level of satisfaction and confidence	1.33	1.44	Based on baseline results and indicator target set for year 3, the Project was supposed to attain a score of 1.33 (see a 10 percent increase from the baseline result of 1.21). The current results represent a 19 percent increase from the baseline value indicating increased satisfaction and confidence in the quality of agriculture and food security policy processes in Nigeria as a result of Project activities	
12. Index (or scorecard) of quality of the institutional architecture for agriculture and food security policy processes in Nigeria, as measured by stakeholder evaluation survey to capture level of satisfaction and confidence	1.48	1.74	Based on baseline results and indicator target set for year 3, the Project was supposed to attain a score of 1.48 (see a 10 percent increase from the baseline result of 1.34). The current results represent a 30 percent increase from the base value and increased satisfaction and confidence in policy processes as a result of the Project	

2. ACTIVITY IMPLEMENTATION PROGRESS

2.1 Progress Narrative

This narrative will highlight progress made on the implementation of the Feed the Future Nigeria Agricultural Policy Project Year 3 revised work plan, which was submitted to United States Agency for International Development (USAID)/Nigeria on October 31, 2017, and approved by USAID/Nigeria on November 13, 2017. The work plan is broken down into three main components: 1) Activities to enhance skills, training, and institutional capacity; 2) Policy driven collaborative research and analysis; and 3) Strengthening evidence-based policy process and promoting impact.

2.2 Implementation Status

Component 1: Enhance skills, training, and institutional capacity

1. Capacity building-training courses organized

The training courses organized by the Nigeria Agricultural Policy Project are demand driven. Consequently, participants for organized training courses are selected by Project partners requesting the training course. The Project encourages particular emphasis on young researchers and gender balance wherever possible. In some cases, training courses are organized to facilitate data collection activities for research work being undertaken by the Project. The training courses can benefit the Project in a number of ways. On the one hand, they directly address capacity building needs. However, they also gradually provide the base to build a sustainable development process in this area by eventually having the current trainees become the trainers in the long term (thus, contributing to the sustainability of the Project activities beyond its life).

Table 1: Indicator #5. Number of individuals who have received USG supported short-term agricultural sector productivity or food security training

Date	Location	Topic	Participants		
			Type	Male	Female
1.1.1 FMARD					
Fourth Quarter					
All planned training courses for FMARD had been finalized for the year and no training was offered for FMARD in the fourth quarter					
1.1.2 National Trainings (universities, think tanks, research institutions, CBOs, NGOs)					
Fourth Quarter					
July 9-20, 2018	Center for Petroleum and Energy Economics,	R Statistical Package	Government Researchers, Faculty, Students, Civil Society	10	9

	University of Ibadan				
July 15, 2018	Ebonyi State	Community Level Adaptation Study in Ebonyi State	Civil Society, Researchers	29	6
July 23-27, 2018	University of Agriculture, Makurdi	Econometrics for policy analysis using Stata	Faculty and students	26	12
September 24-25, 2018	Ebonyi	Groups Dynamics Training for Farmers	AFAN Farmer Group Members and Farmer Groups from the state ADP	24	7
1.2. State trainings and capacity building efforts					
Fourth Quarter					
August 13, 2018	Abuja	Training meeting of the Meso Fish work in Kebbi and Niger	Kebbi and Niger Government Researchers	11	2
3.3.1 Media engagement and training (federal Level)					
Fourth Quarter					
July 30-31	Abuja	Follow-up Policy Communications	Journalists & Senate Press Corps	9	6
3.3.2 Media engagement and training (state level)					
Fourth Quarter					
July 17-18, 2018	Delta	Policy Communications	Journalists	16	3
July 23-24, 2018	Benue	Policy Communications	Journalists	7	8
August 27-28, 2018	Niger	Policy Communications	Farmer groups, CBO's, Extension Agents, and agro-dealers	10	8
August 29-30, 2018	Niger	Policy Communications	Journalists	14	5

Activity 1.1 FMARD/National Trainings

1.1.1 FMARD Capacity Building Activities
Fourth Quarter
All planned training courses for FMARD had been finalized for the year and no training was offered for FMARD in the fourth quarter.

1.1.2 National Trainings (universities, think tanks, research institutions, CBO's NGOs)

Fourth Quarter
On July 9-20, Dr. Michael Olabisi and two project scholars (Mr. Wellington Osawe and Mrs. Blessing Agada) conducted a 10-day training on the R Statistical Package at the Center for Petroleum and Energy Economics at the University of Ibadan. This training was attended by 10 males and 9 females for a total of 19 individuals. These participants were from government (3), civil society (3) and academic institutions (13).

- Innovation #1: None of the participants received any funds from the project. Their institutions provided release time on their own as well as met transportation, per diem and lodging expenses. This shows the value that the individuals and institutions placed on this training.
- Innovation #2: The R Statistical Software is open source and therefore available without cost. This means that after the 10 days of intensive and practical training, the trainees were able to continue using the software without needed additional financing.
- Innovation #3: The 2 project scholars (who had only started learning R earlier in the year at MSU) were able to proficiently provide significant instruction. This capacity building activity not only gave the R trainees a level of proficiency but provided the scholars practical experience in conducting a formal R training.
- Innovation #4: To foster continued interaction amongst the participants - government (3), civil society (3) and academic institutions (13) – a Whatsapp group was created. The group has remained active and serves as a platform of continued engagement on issues of mutual interest revolving around agricultural research, policy and innovation in the agricultural sector.

During this quarter a Community Level Adaptation Study, on understanding how communities in Ebonyi State are adapting to climate change under Activity 2.2.2, was conducted in Ebonyi State. The study was preceded by a training session which built on the initial training conducted by the Project at Michigan State University in April 2018. The training was led by Project collaborator, Dr. Onyeneke along with Project scholar, Mrs. Stella Chude Chiemela. There were 65 study participants (58 male and 7 females) comprising community members categorized under civil society, government personnel, community leaders, private sector and the academia.

As part of efforts towards strengthening Nigeria's capacity for greater evidence-based policy processes in agriculture by increasing the capacity of Nigerian analysts to undertake and make widely available relevant evidence-based policy analysis, on July 23-27, 2018, the project facilitated a training course on "Introduction to Survey Data Analysis using Stata" for 38 (26 males and 12 females) graduate students and faculty of the Federal University of Agriculture, Makurdi, Benue State. As a result of this training, participants' capacity in handling data for evidence-based decision making was expected to be enhanced

On 27-28 August 2018, the project team, including a staff of the National Agricultural Extension Research Liaison Service (NAERLS) held a training on policy communications in Minna, Niger State. The 18 (10 males, 8 females) participants of the training entitled *Policy Communications for Advocacy,* included farmer groups, extension agents, the state's

Agricultural Development Program, agro-dealers and community-based organizations. The topics covered by the training included an introduction to policy communications, the use of social media, as well as sources of information on agriculture. There were also group exercises where participants were challenged to apply their new knowledge to solve problems. As a result of the training, stakeholders have agreed to enhance the use of social media for sharing of information as well as promoting business activities. Components of the current training course were delivered by Dr. Bala Shehu, NAERLS's Zonal Coordinator for the North Central Zone who had recently been trained in Policy Communications. Such an approach ensures that more stakeholders can be reached as those trained are also helping to train others.

On 24-25 September 2018, the Project organized a training for farmer groups, on group dynamics in Ebonyi State. The training, which was opened by Ebonyi State's commissioner for Agriculture, Chief Moses Nome, was attended by 31 participants (24 male and 7 female) all representing 15 farmer groups based in the state. The training was aimed at further empowering Nigeria's farmers to be able to strengthen the ability of their local formal and informal groups to manage their assets, make strategic group decisions and create a balanced level of participation in agriculture. Topics covered in the training included Group Vision and Mission, Working as a Team, Leadership, Communication, Conflict Management and Resolution, Group Decision-making, Group Registration, Mobilizing Resources, Planning and Implementation and Organizing Records. Participants expressed commitment to stepping down the knowledge and skills gained from the training in their various groups.

Activity 1.2 State Trainings and Capacity Building Efforts

1.2.1 Data and policy analysis training/workshop for ministry staff and academics in the 7 FTF states and policy analysis for priority areas as part of research activity 2.2.3
Fourth Quarter
On August 13, 2018, a training meeting on the meso fish work in Kebbi and Niger was held in Abuja. 13 (11 male and 2 female) persons – private sector, Graduate Students and Professors from the Federal University of Technology, Minna and the Kebbi State University of Science and Technology - participated in the training meeting. This training demonstrates the Policy Project research approach that mentors young scholars throughout the research process, providing them training and the opportunity to defend their work through logical arguments combined with economic theory and observations on the field.

Activity 1.3: Nigerian Graduate Student Capacity Building

1.3.1 Project scholars
Fourth Quarter
In the 4th quarter, 4 project scholars arrived to start the fall semester at MSU. 2 of the scholars are PhD candidates who are starting their second and final semester. The other 2 are MS students who will study at MSU for only 1 semester. The scholars come from University of Ibadan, Federal University of Agriculture, Makurdi (2) and the University of

Port Harcourt. The new students are taking classes such as: Spatial Ecology, Ecology Monitoring Data Analysis and Statistics for Biologist and Soil Resources.

Please refer to section "1.1.2 National Trainings (universities, think tanks, research institutions, CBO's NGOs)" above that clearly demonstrates a priority of the Project Scholar's Program: "Train one to train others."

On the second day of the Second Agricultural Policy Conference, August 14-16, 2018 (Wednesday, 15 August 2018), a special parallel session was organized for the Project Scholars. The session was titled, "Project Visiting Scholars, Empowering the Next Generation of Nigerian Scholars for Agricultural Policy".

Three scholars gave presentations:
- Blessing Iveren Agada (Federal University of Agriculture, Makurdi): Taking the fertilizer conversation further- a focus on Site Specific soil- crop fertilizer use
- Aisha Lawal Ibrahim (Ahmadu Bello University Zaria): Gender dynamics in agglomeration economies; A case of parboilers in rice processing clusters in Kano State, Nigeria
- Toyin Ademola (Federal University of Agriculture Abeokuta): The effect of Lactic Acid Fermentation on mycotoxin reduction and levels in south west Nigeria (with A. Obadina, S. Liverpool-Tasie and F. Wu)

Additionally, a panel discussion, "How the policy project scholars program empowers the next generation of Nigerian scholars" had these panelists (project scholars):
- Mr. Osawe Wellington (University of Ibadan)
- Mr. Monday Brave (Kogi State University)
- Mr. Wale Ogunleye (University of Ibadan)

On August 16, 2018, two Project Scholars, Blessing Agada and Wellington Osawe, were guests on a nationwide live discussion on agricultural policy and development in Nigeria at studios of Voice of Nigeria in Abuja. During the 45-minute program, the Project Scholars discussed their ongoing research and linked it to potential evidence for policy making. They also evaluated the project and its potential influence on the agricultural policy making environment.

During this quarter, preparations were made to receive 2 visiting professors in FY19 1st quarter (Oct-Dec 2018) and the 3 new PhD Project scholars in FY19 Quarter 2.

Outreach Pamphlet for dissemination to households and communities was produced by a project scholar.

In the bid to ensure that research output translates to relevant practical output for Nigerians, project scholar worked with a mentor at Michigan State University to develop a pamphlet based on her research for dissemination to the Nigerian public.

1. **Properly ferment and prepare your Ogi/Koko/Akamu/Pap! It can save your life!** Oluwatoyin Ademola. Saweda Onipede Liverpool-Tasie, Adewale Obadina, Felicia Wu & Nikita Saha Turna. September 2018. https://www.canr.msu.edu/resources/properly-ferment-and-prepare-your-ogi-koko-akamu-pap

Program Highlights produced by the scholars:
1. The Kellogg Biological Station Long-Term Economical Research. Highlights 30, Agada Iveren Blessing, September 2018. http://www.canr.msu.edu/resources/the-kellogg-biological-station-long-term-economical-research
2. Learning a New Language: The R Programming Way. Highlights 29, Osayamon Wellington Osawe, September 2018. http://www.canr.msu.edu/resources/learning-a-new-language-the-r-programming-way
3. The future of Africa: making "Africanists", driver of our own development. Wellington Osawe. Project Highlights 30, September 2018. http://www.canr.msu.edu/fsp/countries/nigeria/highlights
4. Changing one's perspective to data analysis: my journey with r statistical programming. Blessing Agada. Project Highlights 31, September 2018. http://www.canr.msu.edu/fsp/countries/nigeria/highlights
5. Income generation from stinging bees without a sting. Onyinye Prince Choko. Project Highlights 32, September 2018 http://www.canr.msu.edu/fsp/countries/nigeria/highlights

Policy Research Briefs Prepared by Project Scholars
1. Sustainable Agricultural Data Collection: Insights from the United States of America for Nigeria. Ufedo M. Shaibu and Oluwatoyin M. Ademola, 2018. Feed the Future Innovation Lab for Food Security Policy Research Brief 69. http://www.canr.msu.edu/resources/sustainable-agricultural-data-collection-insights-from-the-united-states-of-america-for-nigeria
2. Changing the fertilizer conversation in Nigeria: The Need for Site Specific Soil-Crop Fertilizer Use. Mrs. Blessing Agada. Policy Research Brief 73. September 2018 https://www.canr.msu.edu/fsp/countries/nigeria/publications
3. The occurrence and co-occurrence of aflatoxin and fumonisin along the maize value chain in southwest Nigeria. Lenis Liverpool-Tasie, Nikita Saha Turna, Oluwatoyin Ademola, Adewale Obadina, Felicia Wu. September 2018. Feed the Future Innovation Lab for Food Security Policy Research Brief 84. https://www.canr.msu.edu/fsp/countries/nigeria/publications

Research Papers produced by Scholars
1. The Effect of Processing Practices on Mycotoxin Reduction in Maize Based Products: Evidence from Lactic Acid Fermentation in Southwest Nigeria. Oluwatoyin Ademola, Lenis Saweda O. Liverpool-Tasie, Adewale Obadina, Nikita Saha Turna, Felicia Wu. Research Paper. September 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 116.

Component 2: Policy driven collaborative research and analysis.

The policy driven collaborative research and analysis component in Year 3 continued to directly support the knowledge needs of the policy process at the federal and state levels. Particular emphasis was placed this year at the national level (FMARD) and on selected FTF focus states. The following research topics have been approved for Year 3 work plan, classified under the following thematic areas:

Activity 2.1 FMARD/National Research and analysis:

2.1.1 Leveraging agriculture transformation for improving food and nutrition security in rural Nigeria
In the fourth quarter and as specified in the Project workplan for Year 3, the tasks of Activity 2.1.1 "Leveraging Agriculture Transformation for Improving Food and Nutrition Security in Rural Nigeria" (led by Dr. Olivier Ecker) for Q4 were:

1. Draft research paper and policy note, and
2. Present research results at workshop/conference in Nigeria.

Task 1 is completed: The research paper, entitled "Transforming Agriculture for Improving Food and Nutrition Security among Nigerian Farm Households," has been published as *NSSP Working Paper No. 56* in September 2018. The paper includes an abstract that can be used for dissemination purposes such as in a note to policymakers and other key stakeholders. Furthermore, a policy note (to accompany the working paper) was also drafted for publication as an NSSP Policy Note in Oct. 2018 following a review process. Regarding the second task, Dr. Ecker presented the Activity 2.1.1 research results at the Second Agricultural Policy Conference in Abuja, Nigeria. Dr. Ecker gave two presentations that summarized the research activities in Year 3 and their findings. The first presentation was entitled "Leveraging Agricultural Transformation for Food and Nutrition Security among Nigerian Farm Households" and was part of the policy roundtable discussion on "Food Security and Nutrition Challenges for Agricultural Policy in Nigeria" that took place on August 14, 2018. The second (and more technical) presentation was entitled "Dietary Diversity Effects of Food Price Changes and Production Diversification among Nigerian Farmers" and was part of Parallel Session 8 on "Nutrition, Food Safety, and Food Security" that took place on August 15, 2018. The feedback from the audience on the presented (preliminary) research results as well as comments/suggestions and information received during Dr. Ecker's personal communications with several key stakeholders were incorporated into the Working Paper manuscript.

2.1.2 Subnational panel data analysis of public investment's agricultural welfare effects: Study across Nigeria and in seven selected states

In the fourth quarter, the research team set out to achieve two primary objectives: (1) to draft a write-up of the results for subsequent publication as working papers, and (2) present some results of this analysis at the Abuja meetings the week of August 15, 2018. The research team completed the two primary objectives: the subnational expenditure data on expenditures as well as several agricultural, economic and household welfare indicators, were descriptively analyzed and the results have been written up in a draft NSSP Working Paper. A federal level expenditure analysis has also been drafted as a separate draft NSSP Working Paper and was finally published as *NSSP Working Paper No. 57* in September 2018. A second paper with a focus on state-level analysis was also completed in September 2018 and is currently under review for publication as an NSSP Working Paper. Finally, a presentation on the research work was made during the Second Agricultural Policy Conference in Abuja on 14-16 August 2018.

Activity 2.2 State Level Research and Analysis

2.2.1 Understanding the landscape for land access in Nigeria and its relation to food security within the realm of various global factors
Work under Activity 1 covering the 7 FTF States was presented at the Second Agricultural Policy Conference. Draft Reports completed, awaiting review by respective collaborators at the State Ministries, following which final drafts would be produced and disseminated.

Under Activity 2, data cleaning was completed in the fourth quarter. Analysis ongoing, however, preliminary results of findings to date were presented at a stakeholder workshop in Abuja in September 2018.

2.2.2 Environmental Research: Sub-national adaptation and/or resilience strategies in Nigeria
In quarter four the research team completed data collection for its study on climate change adaptation in Ebonyi State. Analysis of the data collected on community level adaptation to climate change was also conducted. Preliminary results from the study were presented by the team Lead at the Second Agricultural Policy Conference in Abuja. A draft report of the study was produced with a current Project scholar, who was trained in new software and data analysis techniques to complete the analysis. Several dissemination outputs emanating from this work are expected in year 4. The community level adaptation study was envisaged for both Kaduna and ebonyi. Due to challenges (flooding) associated with reaching communities in Kaduna State during the scheduled data collection exercise on community level adaptation to climate change, the team decided to cancel the proposed activity as it became clear that it would not be feasible for the project to complete the activity before the end of year 3. However, activities in Ebonyi were conducted as planned.

2.2.3 State level research on aquaculture in Kebbi State
In quarter 4, the research team on the fish subsector in Kebbi and Niger states completed the analysis of the data collected in Q3. A team meeting and training session was held on August 13, 2018 in Abuja just before the Second Agricultural Policy Conference. The team meetings provided an opportunity for the team to come together to have a joint discussion of the data

analysis and draft reports for both states that had been generated. Following the training, team members went back and revised the reports which have both been finalized,

2.2.4: Agricultural mechanization
In the fourth quarter, the research team working on agricultural mechanization set out to complete two empirical papers: 1) a qualitative paper that describes general conditions of the tractor market in Nigeria focusing on Kaduna and Benue states, and 2) a quantitative paper that analyzes the associations between cropping choices and the use of agricultural mechanization. Each of these goals has been achieved, the results have been discussed with relevant stakeholders, and the study is on track for Q4 and the year. For the qualitative paper, the qualitative, analytical narratives have been written about the characteristics of tractor markets in Kaduna and Benue states, based on the data from small surveys of tractor sellers in Kaduna state and tractor owners in Benue state. The paper provides useful insights into the business characteristics, transactions costs, and economic constraints of tractor sellers. Such information is often highly scarce, not only in Nigeria, but also in Africa more generally. The paper was finally published as an *NSSP Working Paper No. 55* in September 2018. For the quantitative paper, the analyses on the role of mechanization on economies of scope/diversifications between crops (for example, between rice that often exhibits distinct production practices, and other crops), using the LSMS-ISA survey data, were completed in the same quarter. The paper was subsequently reviewed, revised, and published as an *NSSP Working Paper No. 53*.

2.2.5 Land Access, Migration Decisions and Youth Employment in the Nigerian Agricultural Sector
In the fourth quarter, the research team working on the above research topic finalized the draft paper on "Role of land access in youth migration and youth employment decisions: Empirical evidence from Rural Nigeria". The draft was also submitted for publication as an NSSP Working Paper following an internal review process. The paper was subsequently published as an *NSSP Working Paper No. 58*. During the quarter, the research team also finalized the data collection and management of the supplemental survey that was undertaken in 6 states.

2.2.6 Assessment of agricultural storage infrastructure and market characteristics in Nigeria
In the fourth quarter, the research team working on the above subject set out to: 1) draft a research paper on market characteristics and storage infrastructure; and, 2) draft a policy brief on the same. Both of these were achieved in Q4. The research paper was drafted, reviewed, and published as *NSSP Working Paper 54* in September 2018. The Policy Note was drafted and is currently under review for publication in the NSSP Policy Note series. Journal articles that are associated with *NSSP Working Paper 54* and the previously published *NSSP Working Paper 51* entitled "Grain Price Seasonality in Kebbi State, Nigeria" are in progress.

2.2.7: Monitoring and evaluating the agricultural sector's role in macroeconomic adjustment
In the fourth quarter, the research team working on the above topic finalized and put together a social accounting matrix. The research team also produced consumption poverty

estimates based on the 2016 LSMS survey. The consumption poverty work with the LSMS data provides insights into the relative well-being of female headed households. It also provides a solid basis for future analysis of gender issues such as are young girls provided the same resources as young boys and if that differ by consumption levels. These estimates form an integral and valuable part of the final report emanating from this research work. The *NSSP Working Paper No. 52* was also published in September 2018 along with a short policy paper published in *The Conversation Africa* (September 2018).

2.2.8: The political economy of informal food retail trade: The case of Nigeria's secondary cities

In the fourth quarter, the survey data collected in the previous quarter on the political economy of informal food retail trade was analyzed. In addition, a draft of a working paper was finalized at the end of the quarter and will be ready for publication by October 2018. The paper shows how the legal and regulatory environment that policymakers theoretically support, which were garnered from interviews in Calabar and Minna, is not actually implemented on the ground according to the survey responses of traders. Licensing and hygiene trading are part of the responsibilities of state and LGA officials, but few traders could confirm that they had a license or ever received any government hygiene training. This has important implications for the food safety environment in urban Nigeria.

Component 3: Strengthening evidence-based policy process and promoting impact

Activity 3.1: Outreach, engagement and dissemination of results from component 2

3.1.1   FMARD/National/State Level Dissemination
Fourth Quarter
On July 17, 2018, Dr. Patrick L. Hatzenbuehler, Associate Research Fellow at the International Food Policy Research Institute (IFPRI), delivered a research seminar entitled, "Seasonality of Grain Prices and Market Characteristics in Kebbi state, Nigeria" at Kebbi State University of Science and Technology – Aliero (KSUSTA). The seminar focused on the aims and results from implemented and ongoing collaborative research between IFPRI and KSUSTA researchers. The main research findings that were discussed suggest that there are sufficient differences in price behavior across markets in Kebbi state to justify a statewide analysis, and that these differences are likely related to the physical characteristics of markets, such as the availability of storage and mobile networks. These findings are expected to be of great interest to state and local agricultural policymakers, since directing their attention toward market modernization can plausibly improve the general business climate in the near term. The seminar was attended by 226 participants (207 males and 19 females) made up of Producers (38-males, 10-Females), Private sector (18-males, 1-female), Gov't sector (5-males), Civil society (146-males, 8-females), including local dignitaries such as His Excellency, Senator Abubakar Atiku Bagudu, the Executive Governor of Kebbi state, and Professor Barshar Ladan Aliero, Vice Chancellor of KSUSTA, students and faculty of KSUSTA,

as well as traders and farmers from throughout the state. In his comments after Dr. Hatzenbuehler's presentation, the Executive Governor Bagudu said that he greatly appreciated the aims of the research and described several exciting recent developments in the Kebbi state agricultural sector. One notable example the Governor provided was that of a state government loan to the local government of Aliero, where KSUSTA is located, which it used to invest in improved infrastructure in its onion market. The Governor mentioned that this investment has greatly improved the business environment for onion traders in the area, and that they are making money as a result. This example of how investment in physical infrastructure of markets can improve marketing conditions is exactly what the presented research advocates, especially in the most isolated, rural markets. Based on these comments from the Governor, dissemination activities will target local government authorities throughout the state to promote market modernization to improve local business conditions.

On 9 August 2018, discussions of results from the agricultural mechanization study were held during a research seminar organized at the National Agricultural Extension and Research Liaison Services (NAERLS), Ahmadu-Bello University, in which the government official from Kaduna State Ministry of Agriculture also attended. Delivered by Dr. Hiroyuki Takeshima, the seminar presentation provided results on the estimation on how the adoption of animal traction or tractors affects the Economies of Scope (EOS) between rice, non-rice grains, legumes/seeds, and other crops, which are the crop groups that are most widely grown with animal traction or tractors in Nigeria. The adoption of mechanization technologies is associated with lower EOS between non-rice grains, legumes/seeds, and other crops, but greater EOS between rice and other crops. The results inform how mechanization can support crop diversification and specialization. Feedback was received on the mechanization research from each stakeholder for consideration in preparation of the final reports at the end of the quarter.

3.1.2: Second Agricultural Policy Conference
On 14-16 August 2018, the Project organized a major conference on "Collaborative Research for Agricultural Policy in Nigeria". This was the Second Agricultural Policy Conference following the successful launch of the Project during its first conference in September 2016. This high-profile three-day event attracted 148 participants from all over Nigeria and was held at Transcorp Hilton in Abuja. Participants included representatives from academia, federal and state government officials, agribusiness, private sector, farmer organizations, the media, and civil society organizations among others. Participating and present at the opening segment of the Conference were the Honorable Minister of Agriculture and Rural Development, Chief Audu Innocent Ogbeh, the Deputy Mission Director of the United States Agency for International Development (USAID/Nigeria), Dr. Erin Holleran; and the Chairman of the Senate Committee on Media and Public Affairs, Distinguished Senator Dr. Aliyu Sabi Abdullahi. Others were the Chief Economist USAID, Dr. Louise Fox; the Kebbi State Commissioner for Agriculture & Natural Resources, Hon. Attahiru Maccido; Permanent Secretary, Niger State Ministry of Livestock and Fishery, Dr. Jonathan Wasa; Representatives of the Commissioners for Agriculture of the 6 other USAID Feed the Future Focus States (Benue, Cross River, Delta, Ebonyi, Kaduna and Niger); various senior advisors of the government of Nigeria; senior management of FMARD and other ministries among others.

Various presentations were delivered on relevant policy topics including youth employment, food systems transformation, land governance, climate change, technology adoption, nutrition, public agricultural expenditures and the overall nexus between agriculture and the macro economy. Presentations were based on the best papers selected from a Call for Papers (CfP) widely advertised within Nigeria (through a rigorous review process) and in connection with the conference theme. Various papers were also presented in connection with policy relevant research work conducted by the Feed the Future Nigeria Agricultural Policy Project since the inception of the Project. The conference program also included 3 invited parallel sessions organized by the Nigerian Association of Agricultural Economists (NAAE), the Association of Deans of Agriculture in Nigeria (ADAN) and the Agriculture Policy Research Network in Nigeria (APRNet). The conference also featured three plenary sessions and policy roundtables focusing on (1) food systems transformation and implications for employment and food safety in Nigeria, (2) food security and nutrition challenges for agricultural policy, and (3) strengthening further collaborative research for agricultural policy.

In his keynote address, the Minister of Agriculture and Rural Development thanked USAID/Nigeria, IFPRI and MSU for their support to Nigeria through the Project. He said "To USAID and the Feed the Future Nigeria Agricultural Policy Project, I cannot thank you enough because you support us, you give us encouragement. And when we share our anxieties, you make us feel like we are getting something right, if not altogether. We do not know everything, but that is why we are here." Dr. Aliyu Sabi Abdullahi, Distinguished Senator and Chairman of the Senate Committee on Media and Publicity, in his own goodwill message, stated that the conference with its theme was timely. According to him, "I want to draw our attention that sustainable success requires that we pay attention to homegrown productivity increases among our farmers and other value chain actors. This will require that we pay greater attention to our agricultural research and innovation system; which is not in the best of shape."

In the closing plenary session on *Strengthening Further Collaborative Research for Agricultural Policy in Nigeria*, a group of distinguished panelists with substantial experience working on agricultural policy in Nigeria highlighted instances of collaboration in agricultural policy that were already taking place in Nigeria. They also suggested measures that would help strengthen further collaboration in agricultural policy research for Nigeria, stressing that agriculture is a "team sport". That said, it was agreed that to improve collaboration in agricultural policy research, there was need for all the players in the sector to collaboratively address issues challenging agricultural policy and its effectiveness in solving problems. For instance, the private sector could fund research, decreasing dependence on donors and the government for research funding. Research could also be made more collaborative by building more interdisciplinary interactions into research teams. The need to prioritize and support young Nigerian scholars was also discussed. Appreciation was given for efforts thus far with a call for more support articulated.

3.1.3 Support to FMARD policy processes
Support to FMARD remains a key objective of the Project. The Project has continuously strengthened the good partnership with FMARD since inception. FMARD has a

representative on the Policy Project's National Advisory Committee and the Project has regular meetings with FMARD management and senior advisors to the Honorable Minister of Agriculture (HMA), among others.

Fourth Quarter

i.   Support to the Joint Sector Review (JSR) process

Support to the Ministry and in connection with the Joint Sector Review process continued in quarter 4 and Dr. George Mavrotas, on behalf of the Project, participated in the JSR meeting that was organized during the quarter on 29 August 2018. During the same quarter the Ministry finally released the much anticipated JSR research report which was pending for some time, and in which Dr. Mavrotas had a vital contribution with various comments provided on the draft version long time ago.

ii. Support to the Project Coordinating Unit of FMARD

During the fourth quarter, the Project continued working closely with IITA and other stakeholders towards the alignment of research and delivery to country strategic goals in agriculture. On 28 August 2018, a meeting was held and chaired by the Project Coordinating Unit of FMARD to share the outcomes of the Country Consultative meeting that was held on 10-12 April in Abuja and to seek FMARD ownership and engagement in the process. During the meeting, Dr. George Mavrotas made a presentation on the outcome of the Country Consultative meeting on behalf of the Project. Other presentations were also made by other stakeholders including the Nigeria Joint Sector Review framework and processes, private sector engagement in the alignment process, and the role of ARCN in the engagement of National Research Institutes (NARIs) in the alignment process so as to achieve government goals. The private sector in the meeting was represented by Sahel Consulting Agriculture and Nutrition Limited which was earlier nominated to be part of the group engaging with FMARD on the alignment process. Following the meeting, the Department for planning in FMARD was nominated as the focal point of the alignment process within the Ministry, while the Agriculture Research Council (ARCN) was mandated to lead the process of alignment among research institutions at country level. It was also emphasized during the meeting of the need to also incentivize the private sector to fund demand driven research in Nigeria. To this end, private sector representatives could support ARCN by providing information on specific private sector requirements. The Project alongside the rest of the members of the Country Alignment and System Integration team will continue to support the alignment process.

iii. Policy round tables for the National Assembly

Over the course of implementation of activities in Year 3, the Project has kept constant communication with the Senate regarding the delivery of policy round tables for the Senate Assembly. Despite numerous efforts by the Project, these policy roundtables have not been able to be organized for reasons beyond the Project's control. This has come about due to delays and other engagements from the National Assembly Senior Management (and mostly related to the election campaign in the country already started). This highlights the challenges that are sometimes faced by the Project in delivering joint events with various stakeholders (in this case, the National Assembly).

Activity 3.2 Support for state agricultural policy development (or review) for FTF states

3.2.1 Support for State Agricultural Policy Development (or review) Kebbi State and Cross River State (FTF states)

Cross River
In the fourth quarter, the Project continued working with the State Ministry of Agriculture and Natural Resources in Cross River toward the development of the agricultural policy. The Collaborators finalized working on the draft policy document within the quarter. Both the Project and the Ministry have provided their comments within the quarter on the first policy draft and returned the revised draft to the Collaborators for finalization. The finalized policy document was shared with the Ministry. In the review process, the Project ensured that the draft policy was in line with the state's requirement and in tandem with the Agriculture Promotion Policy (APP) of the country. The Project will continue to engage with the State Ministry towards the implementation of the policy.

Kebbi
In this quarter, the Project alongside collaborators at the State Ministry of Agriculture & Natural Resources recommended by the Ministry (Director, Project Monitoring & Evaluation; Deputy Director, Planning Research & Statistics), Kebbi State University of Science and Technology Aliero, 2 Project Scholars (Monday Shaibu of Kogi State University and Osawe Wellington of University of Ibadan), and a Project Collaborator and Project Visiting Scholar (Dr. Kabiru Ibrahim of Kogi State University) continued work on the agricultural policy for Kebbi State. During the quarter, a survey across the four agricultural development zones was conducted. Data cleaning and analysis was conducted during the quarter for inclusion in the policy work. This was followed by stakeholder consultations (modeled after the core themes of the Agriculture Promotion Policy) across the 21 Local Government Areas, grouped under the 4 Agricultural Development Zones in the State. The draft policy document is awaiting finalization through a project policy team presentation to the relevant ministries identified for its implementation. The Commissioner for Agriculture and Natural Resources has taken on the responsibility to convene the meeting of Commissioners of the relevant ministries.

Activity 3.3 Media engagement and training

3.3.1: Media engagement and Training (Federal Level)
In the fourth quarter, the Project planned to deliver the third and final training course on Policy Communication for the Senate Media. The training course was scheduled for 28-29 September 2018 but was postponed due to reasons beyond the Project's control following a nationwide strike organized by the Labor Union. The training course has subsequently been rescheduled for October 2018.

3.3.2: Media engagement and Training at the State Level (Agricultural Communication and Grant Writing)

In the fourth quarter, the Project organized a training on policy communications for journalists in Minna, Niger State on August 29-30, 2018, given the importance of journalists in creating an enabling environment for effective policymaking. The 20 (14 male, 6 female) participants of the training represented various state and national news media firms (radio, television and print) operating in Niger State. The topics covered by the training included an introduction to policy communications, the use of social media and sources of information on agriculture. There were also group exercises where participants were challenged to apply their new knowledge to solve problems. Participants gave positive feedback, stating that they had a broader understanding of the policymaking process and on how to work with evidence from different sources (including research) in their reporting on agriculture. Many also expressed a commitment to begin using social media and other digital platforms to disseminate news more broadly, but more specifically on agricultural issues.

The Project also delivered a training on policy communications for journalists in Benue State on 23-24 July 2018. The 15 participants (7 males and 8 females) included journalists from both private and government-owned, mainstream radio, television and print media firms, as well as online publications. The training covered topics ranging from the introduction of concepts in policy communications, to the use and tracking of content on social media and how to create online audiences. The participants had also the opportunity to apply the information and knowledge from the presentations in a series of exercises. As a result of the training, the journalists renewed their commitment to covering agricultural issues related to Benue State, while also promising to report more critically on agricultural issues in other parts of the country.

Journalists, due to their role as information sharers, play a significant role in any country's policy space. In recognition of this fact, the Project organized a policy communications training for 19 journalists (16 males and 3 females) from private and public news media in Delta State on 17 and 18 July 2018. The training was aimed at exposing journalists to concepts related to policy communications, as well as introducing them to tools and sources of information relevant to agricultural policy in Nigeria. As a result of this training, journalists in Delta State promised to dedicate more resources to covering agricultural policy issues as well as to increasingly use social media as an extra avenue for the dissemination of agricultural related policy issues.

Activity 3.4 Engagement with private sector

3.4.1: Engagement with private sector
Fourth Quarter
  i.   During the fourth quarter, the Project was involved in a number of activities with the Private sector. These included among others a seminar presentation by Dr. Patrick Hatzenbuehler on "Seasonality of Grain Prices and Market Characteristics in Kebbi state, Nigeria" at Kebbi State University of Science and Technology – Aliero (KSUSTA) which brought together a total of 226 (207 males, 19 females) stakeholders made up

of Producers (38-males, 10-Females), Private sector (18-males, 1-female), Gov't sector (5-males), Civil society (146-males, 8-females) including grain traders. Towards the alignment of research and delivery to country strategic goals in agriculture, the Project also interacted with the private sector to ensure that they are involved in the process (see support to the Project Coordinating Unit under Activity 3.1.3 for further details). Finally, the Second Agricultural Policy Conference brought together various stakeholders including the private sector to discuss issues related to collaborative research for agricultural policy in Nigeria.

Activity 3.5 Engagement with other non-governmental stakeholders (civil society and think tanks) with particular focus on FTF states, where possible

3.5.1: Engagement with non-government stakeholders (e.g. civil society, NGOs, and thinktanks) with particular focus on FTF states
Fourth Quarter:

i. Support to the Agricultural Policy Research Network APRNet
   On 30 August 2018, the Project assisted and attended APRNet's multi-stakeholders' forum on "Making agricultural policy research work for end-users" which was organized at Valencia Hotel in Abuja. The forum was aimed at exploring best options for making agricultural policy research work for end-users thereby improving the livelihood of farmers and other agriculture industry players in Nigeria. The forum, which was well-attended, included representatives from diverse fields with interest in agriculture and rural development.

ii. Meeting with Farmer Associations (AFAN and POFAN)
   On 6 September 2018 a follow up meeting was held with Chief Daniel Okafor of the All Farmers Association of Nigeria (AFAN) as well as Mrs. Nwali Perpetual of the Potato Association of Nigeria (POFAN) to finalize capacity building arrangements for capacity building initiatives for farmer groups in Ebonyi State. Plans were made during the meeting for a Group Dynamics training course to be organized for farmer groups within that month. See Activity 1.1.2 (fourth quarter) for further details on this.

3. INTEGRATION OF CROSSCUTTING ISSUES AND USAID FORWARD PRIORITIES

Gender Equality and Female Empowerment
Gender is a critical issue, and this is reflected in research activities as well as capacity building initiatives undertaken by the Project. Research topics approved in the Year 3 work plan considered gender as an important element in the development of research questions and in analysis. The majority of the research work was deliberately designed to use data that had enough gender information to enable analysis at the gender disaggregated level. Furthermore, the composition of research teams (where possible) was undertaken in such a

way that gender was considered. Under activities to promote policy driven collaborative research and analysis, the Nigeria Agriculture Policy Project Research teams were composed with particular attention to gender balance and where possible the Project made a deliberate attempt to ensure that there was as equal participation of both males and females (as possible) ensuring that both gender groups were represented and appropriately contributed to the research activities. One example was the newly formed research team on fish in Kebbi and Niger State composed of 6 males and 5 females.

4. M&E PLAN UPDATE

Regarding Monitoring and Evaluation (M&E) processes, The Project launched the midline survey on the Nigeria Agriculture Food Security Policy Processes Survey as a follow up to the baseline survey that was undertaken in Year 1 of Project implementation. As part of the monitoring and evaluation framework of FSP, the project had proposed two qualitative indicators to assess and track the institutional architecture and quality of policy processes on agriculture and food security in FTF countries where the project has major country level activities either through mission buy-ins or associate awards. Nigeria is one of the countries where the Project proposed to assess and monitor t two qualitative indicators as part of the Nigerian Agriculture Policy Project (See indicators 11 and 12 in Annex A). The Project followed up on participants that were interviewed in the baseline to assess any changes in the institutional architecture or in the quality of policy processes on agriculture and food security in Nigeria.

The Project finalized preparations for the launch of the midline survey on the Nigeria Agriculture Food Security Policy Processes Survey earlier in the year as a follow up to the baseline survey that was undertaken in Year 1 of Project implementation. It is worth noting that the baseline survey was not conducted in all the FTF focus states, therefore to have data for comparisons between baseline and midline, all the baseline states were maintained, and information added from the new FTF focus states. The implication is that the sample size was increased to include the additional states, as the additional numbers would be collected from the new focus states. The focus of the survey was on institutions and not individuals and in cases where the previous individual was no longer available, a replacement for the individual from the same institution was made. This was done to ensure same people and organization institutions were maintained. The Project followed up on participants that were interviewed in the baseline to assess any changes in the institutional architecture or in the quality of policy processes on agriculture and food security in Nigeria. Significant effort was made during the year towards monitoring and evaluation process on the midline survey of the Nigeria Agricultural Food Security Policy Processes survey. By the end of third quarter, more than 65 percent of the participants had responded, and these were inclusive of participants from the 4 FTF states (Benue, Kebbi, Niger and Cross River) that were included to the baseline states. Increased efforts to reach the remaining participants who had delayed in responding to the survey were also made by using collaborators in those states with high number of non-response cases.

The midline survey was concluded in the fourth quarter with the majority of the participants from the survey responding to the follow up survey. All the newly included participants from the FTF states (Benue, Kebbi, Niger and C/River) sent in their responses. The data collected were analyzed to generate results for indicators 11 and 12. The result of the analysis for indicator 11 showed that the Index (or Scorecard) of quality of agricultural and food security policy process as measured by stakeholder evaluation survey to capture level of satisfaction and confidence at the country level was 1.44 compared to the baseline value of 1.21 which was obtained in 2016 giving a 19 percent increase on the index value for the indicator. While the analysis for indicator 12 showed that the Index (or scorecard) of quality of the institutional architecture for agriculture and food security policy processes in Nigeria, as measured by stakeholder evaluation survey to capture level of satisfaction and confidence at the country level was 1.74 resulting in a 30 percent increase from the baseline value of 1.34 which was conducted in 2106. Taken together these results indicate that stakeholder satisfaction and confidence in both the quality of agriculture and food security policy processes in Nigeria and the institutional architecture for agriculture and food security processes in Nigeria.

5. MANAGEMENT AND ADMINISTRATIVE ISSUES

Staff Developments
At the end of this quarter:
- The staff at the IFPRI Office in Abuja includes: A Senior Research Fellow & Program Leader (Chief of Party), an Associate Research Fellow, a Country Program Manager, a Research Analyst II, 3 Research Analysts I, a Senior Program Assistant, a Program Assistant, a Communications Specialist, a Communications Assistant, an M&E Specialist, and 2 drivers.
- The staff at MSU associated with this project includes: 1 Associate Professor (Principal Investigator), 1 Distinguished Professor, 1 Associate Professor, 2 Assistant Professors, 1 Specialist, 2 Graduate Research Assistants, an Accountant, and a Travel Coordinator.

6. LESSONS LEARNED

A number of lessons have been learned over the course of implementation of Project activities in Year 3. Some lessons were learned from implementation of research activities. From the research on public expenditures, it was learned that agriculture expenditure data is disjointed, and their functional classification varies from one fiscal year to another. Furthermore, there is no uniform way that these data are reported across the sources from which they came. By methodically going through the files from each data source and documenting the format of their original presentation (and in some cases, going through each time period of the given data source to carry out this process), more efficient means were developed to organize, reshape and compile the data in a way in which that they can now be more effectively compared and complemented by the information each provides.

The analysis for the research on leveraging agriculture transformation for improving food and nutrition security in rural Nigeria was challenged by unexpected low data quality of the Nigeria General Household Survey Panel (GHS-Panel). The GHS-Panel is implemented by the Nigeria National Bureau of Statistics (NBS) in collaboration with the World Bank Living Standards Measurement Study (LSMS) team as part of the Integrated Surveys on Agriculture (ISA) program. It is hence a standard and well-established survey instrument worldwide. The main survey rounds used in the data analysis are the post-harvest and post-planting survey rounds of the third panel survey wave. The low data quality is surprising because of the application of a standard survey instrument and the involvement/oversight of the NBS and the World Bank. The quality of the third wave survey data was expected to be good also because the survey implementer (should) have gained experience during the implementation of the first two waves. The data quality may require adjustments to the analysis in order to be able to present accurate results. The Project will follow up with NBS regarding data quality.

The climate change study team has learned that while collaborative research ultimately proves the best way to conduct research, it can often involve delays beyond the control of the project, particularly where data collection is involved. While the survey team for one state on community level adaptation were able to proceed on schedule, the other survey team has experienced some delay. The project has had to encourage the delayed team to make progress and hopes the team will be able to catch up in the next quarter.

The scholars program has been a very exciting experience and the project has been pleased with the general level of engagement of scholars. Majority of the scholars continue to engage with the project upon returning home and, this has further improved their research and writing skills while supporting project activities. Though this requires additional time of senior researchers, this further reveals the importance of mentoring and continued follow up after a training has been received as part of true capacity building.

7. PLANNED ACTIVITIES FOR NEXT QUARTER/UPCOMING EVENTS

Please refer to the Year 4 annual work plan for further details on planned activities by the Project in Year 4.

8. WHAT DOES USAID NOT KNOW THAT IT NEEDS TO?

The Feed the Future Nigeria Agricultural Policy Project continued to make excellent progress in Year 3 of Project implementation. The Project's good relationship with its key stakeholders combined with the delivery of capacity building activities and outreach and policy dialogue events contributed to a number of successes during the year. As a result of capacity building initiatives on monitoring and evaluation organized for the Agricultural

Research Council of Nigeria (ARCN), the institution has worked on an M&E plan for the *Journal of Applied Agricultural Research* (JAAR). Under the Council's Knowledge Management Program, the journal publishes manuscripts on productivity enhancing agricultural technologies. Such technologies have the potential to reduce hunger and poverty as well as to improve nutritional outcomes in Nigeria. The decision to commence with an M&E plan for the JAAR as a pilot was due to the fact that team members had readily available information for this project and also a learning opportunity for team members which would further be used to refine further the development of the ARCN M&E Framework and Plan with support from the Project. Such developments within ARCN enabled the Project to provide advisory and mentoring support which further helped improve national capacity in the agricultural sector in Nigeria.

Recognizing the importance of media in shaping the social narratives on agriculture, a number of Policy Communications training courses were organized for media personnel at the federal and state levels to enhance media involvement in Nigeria's agricultural policy process. Following these training courses, journalists have been more active on social media and dedicating more resources to covering agricultural policy issues. Feedback received from training participants indicated that the Policy Communications training courses enhanced the journalists' skills and techniques in effectively communicating agricultural policies at the federal and state levels as well as providing necessary information to farmers for improved agricultural productivity.

As part of efforts towards strengthening Nigeria's capacity for greater evidence-based policy processes in agriculture by increasing the capacity of Nigerian analysts to undertake and make widely available relevant evidence-based policy analysis at the state level, training courses on "Econometrics for Policy Analysis using Stata" have enhanced the capacity of ministry officials to contribute to policy process in their various states. Following these trainings, participants from the various Feed the Future states have collectively worked on state specific policy briefs to contribute to their states agricultural policy implementation. In addition to the training courses, the Project also supported Cross River and Kebbi states in the review of their respective agricultural policy documents.

The scholars program continued to be an exciting mechanism for the project to work with and through young dynamic Nigerian scholars and their supervisors. The project continues to see evidence of numerous ripple effects of investing deeply in a subset of young Nigerians. Between August 2016-November 2018, the 10 scholars (graduated and current) have produced **2 peer reviewed journal articles**, **5 research papers**, 9 **policy briefs, 20 blog posts** and **18 project highlights**. During this same period, their research supervisors produced **10 project highlights**. Together, these scholars have presented research supported by the project. They have also **trained over 800 Nigerians** in Stata, R and data collection best practices. Not only are the scholars' research capacity being strengthened through the classes and mentoring that they receive at MSU, but they are building international networks as they present at different conferences and seminars across the USA. At the same time, they are informing important global dialogs about their work and other research findings in Nigeria. The project has enjoyed watching scholars pass on what has been gained from the program. Besides technical trainings, scholars assist their supervisors

and peers in preparation of Power Point Presentations. As they review and critique each other's work, the individual lessons learned through the classes and mentorship of the program are clearly displayed confirming positive change and maturity.

ANNEX A: PROGRESS SUMMARY

NOTE: Revisions to the MEP were made taking into account USAID/Nigeria's comments and the MEP was resubmitted to USAID/Nigeria on December 4, 2015. The Feed the Future Nigeria Agricultural Policy Project on January 18, 2016 received approval of the MEP.

Table 1: PMP Indicator progress - USAID Standard Indicators and Project Custom Indicators [a]

Indicator	Data Source	Baseline data		FY 2018		Quarterly Status – FY 2018				Annual Performance Achieved to Date (in %)	Comment(s)
		Year	Value	Annual Cumulative Planned target	Annual Cumulative Actual	Q1	Q2	Q3	Q4		
Intermediate Result (IR):											
1.1. Increased agricultural competitiveness											
1.2 Improved business environment											
3.2 Improved responsiveness of targeted government institutions											
3.3 Increased capacity for civic advocacy, monitoring, and engagement											
Sub-IR: 1.3 Improved agricultural policy environment											
1. Number of high quality research reports published	Project Records	NA	NA	11	16	5	1	3	7	145	
2. Number of participants attending project organized research and policy events	Project Records	NA	NA	765	1274	438	37	186	613	167	

#	Indicator	Source											
3.	Number of agricultural and nutritional enabling environment policies analyzed, consulted on, drafted or revised, approved and implemented with USG assistance (RAA)completing the following processes/steps of development as a result of USG assistance in each case: 1. Underwent analysis; 2. Underwent public debate and/or consultation with stakeholders on the proposed new or revised policy; 3. Were newly drafted or revised;	Project Records	NA	NA	3	3	0	0	0	3	100	
4.	Number of collaborative policy research work and analysis completed jointly with local partner.	Project Records	NA	NA	7	12	3	0	4	5	171	
5.	Number of individuals who have received USG supported short-term technical training in agricultural sector productivity or food security policy analysis training.	Project Records	NA	NA	850	1085	187	374	310	214	128	
6.	Number of individuals who have received USG supported degree-granting agricultural sector productivity or food security training.	Project Records	NA	NA	8	7	2	3	0	2	88	

7.	Number of government units or divisions that have received short-term training (USG assistance)	Project Records	NA	NA	11	13	1	9	2	1	118	
8.	Number of agriculture policy communications developed and/or written for stakeholder consumption	Project records	NA	NA	18	49	9	8	15	17	272	
9.	Number of public private advocacy dialogues focused on policy that supports private sector	Project records	NA	NA	4	3	0	0	0	3	75	
10.	Number of for profit private enterprises, producers' organizations, water users associations, women's groups, trade and business associations, and community-based organizations (CBOs) receiving	Project Records	NA	NA	30	41	2	12	0	27	137	
11.	Index (or scorecard) of quality of agriculture and food security policy processes in Nigeria, as measured by stakeholder evaluation to capture level of	Project Records	2016	1.206	1.326	1.44	NA	NA			NA	
12.	Index (or scorecard) of quality of the institutional architecture for agriculture and food security policy processes in Nigeria, as measured by stakeholder evaluation survey to capture level of satisfaction and confidence	Baseline, mid-term and end-line	2016	1.342	1.476	1.74	NA	NA			NA	

ANNEX B: NUMBER OF HIGH QUALITY RESEARCH REPORTS PUBLISHED (Indicator 1)

Paper description
Fourth Quarter
1. Hosaena Ghebru, Mulubrhan Amare, George Mavrotas, and Adebayo Ogunniyi. 2018. Role of land access in youth migration and youth employment decisions: Empirical evidence from rural Nigeria. *NSSP Working Paper 58*. Washington, DC.: International Food Policy Research Institute (IFPRI). http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/132895
2. Chinedum Nwoko, Amarachi Grace Ikejiofor, Nchedo Theresa Nnaji, and Tewodaj Mogues. 2018. Federal government support for agriculture in Nigeria: Analysis with a public expenditure lens. *NSSP Working Paper 57*. Washington, DC.: International Food Policy Research Institute (IFPRI) **http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/132891**
3. Ecker, Olivier; Hatzenbuehler, Patrick L.; and Mahrt, Kristi. 2018. Transforming agriculture for improving food and nutrition security among Nigerian farm households. ***NSSP Working Paper 56***. Washington, DC: International Food Policy Research Institute (IFPRI). **http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/132881**
4. Hatzenbuehler, Patrick L.; Takeshima, Hiroyuki; Edeh, Hyacinth; and Lawal, Akeem. 2018. Cost and policy determinants of features of tractor markets in Nigeria: Case studies of tractor sellers in Kaduna state and tractor owners in Benue state. ***NSSP Working Paper 55***. Washington, DC: International Food Policy Research Institute (IFPRI). **http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/132873**
5. Hatzenbuehler, Patrick L.; Mavrotas, George; Maikasuwa, Mohammed Abubakar; Aliyu, Abdulrahaman; and Bashir, Amina. 2018. Grain storage and marketplace characteristics in Kebbi State, Nigeria. ***NSSP Working Paper 54***. Washington, DC.: International Food Policy Research Institute (IFPRI). http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/132817
6. Takeshima, Hiroyuki; Hatzenbuehler, Patrick L.; and Edeh, Hyacinth. 2018. Effects of agricultural mechanization on economies of scope in crop production in Nigeria. *NSSP Working Paper 53*. Washington, DC: International Food Policy Research Institute (IFPRI). http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/132817
7. Arndt, Channing; Chuku, Chuku; Adeniran, Adedeji; Adetutu, Morakinyo; Ajayl, Victor; Mavrotas, George; and Onyekwena, Chukwuka. 2018. Nigeria's macroeconomic crisis explained. *NSSP Working Paper 52.* Washington, DC: International Food Policy Research Institute (IFPRI) **http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/132812**

ANNEX C: NUMBER OF PARTICIPANTS ATTENDING PROJECT ORGANIZED RESEARCH AND POLICY EVENTS (Indicator 2)

Learning Forum	Location	Participants
Fourth Quarter		
1. Grain price seasonality in Kebbi state, Nigeria	Aliero, Kebbi State. July 17, 2018	Total of 226 (207 males, 19 females) made up of Producers (38-males, 10-Females), Private sector (18-males, 1-female), Gov't sector (5-males), Civil society (146-males, 8-females)
2. Effects of agricultural mechanization on economies of scope in crop production in Nigeria	NAERLS, ABU-Zaria August 9, 2018	Total of 86 (70 males, 16 females) made up of Research/Academic Institutions (70 males, 16 females)
3. Second Agricultural Policy Conference	Transcorp-Hilton Hotel, Abuja, 14-16 August 2018	Total of 148 (97 males and 51 females) made up of government sector (23 males and 12 females), private sector (18 males and 2 females) civil society (55 males and 37 females)

ANNEX D: NUMBER OF INDIVIDUALS WHO HAVE RECEIVED USG SUPPORTED SHORT-TERM AGRICULTURAL SECTOR PRODUCTIVITY OR FOOD SECURITY TRAINING (Indicator 5)

Date	Location	Topic	Participants		
			Type	Male	Female
Fourth Quarter					
July 17-18, 2018	Delta State	Policy Communications	Journalists	16	3
July 23-24, 2018	Benue State	Policy Communications	Journalists	7	8
July 23-27, 2018	University of Agriculture, Makurdi	Econometrics for policy analysis using Stata	Faculty and students	26	12
July 30-31, 2018	Abuja	Follow-up Policy Communications	Journalists	9	6
August 27-28, 2018	Niger State	Policy Communications	Farmer groups, CBO's, Extension Agents, and agro-dealers	10	8
August 29-30, 2018	Niger State	Policy Communications	Journalists	14	5
September 24-25, 2018	Ebonyi State	Groups Dynamics	Farmer Groups	24	7

ANNEX E: NUMBER OF AGRICULTURE POLICY COMMUNICATIONS DEVELOPED AND/OR WRITTEN FOR STAKEHOLDER CONSUMPTION (Indicator 8)

Paper description
Fourth Quarter
1. Hatzenbuehler, Patrick L.; Mavrotas, George; Maikasuwa, Mohammed Abubakar; and Aliyu, Abdulrahaman. 2018. Synopsis: Grain price seasonality in Kebbi state, Nigeria. NSSP Policy Note 47. Washington, DC: International Food Policy Research Institute (IFPRI). http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/132729
2. The Kellogg Biological Station Long-Term Economical Research. Highlights 30, Agada Iveren Blessing, September 2018. http://www.canr.msu.edu/resources/the-kellogg-biological-station-long-term-economical-research
3. Learning a New Language: The R Programming Way. Highlights 29, Osayamon Wellington Osawe, September 2018. http://www.canr.msu.edu/resources/learning-a-new-language-the-r-programming-way
4. Nigeria Policy Project Scholar Launches Innovative Research Project at her Home Institution. Highlights 28, Steve Longabaugh and Saweda Liverpool-Tasie, June 2018. http://www.canr.msu.edu/resources/nigeria-policy-project-scholar-launches-innovative-research-project-at-her-home-institution
5. Climate Change Adaptation among Poultry Farmers: Evidence from Nigeria. Lenis Saweda O. Liverpool-Tasie, Awa Sanou and Justice A. Tambo, 2018. Feed the Future Innovation Lab for Food Security Policy Research Brief 72. https://www.canr.msu.edu/resources/climate-change-adaptation-among-poultry-farmers-evidence-from-nigeria
6. Sustainable Agricultural Data Collection: Insights from the United States of America for Nigeria. Ufedo M. Shaibu and Oluwatoyin M. Ademola, 2018. Feed the Future Innovation Lab for Food Security Policy Research Brief 69. http://www.canr.msu.edu/resources/sustainable-agricultural-data-collection-insights-from-the-united-states-of-america-for-nigeria
7. Properly ferment and prepare your Ogi/Koko/Akamu/Pap! It can save your life! Oluwatoyin Ademola. Saweda Onipede Liverpool-Tasie, Adewale Obadina, Felicia Wu & Nikita Saha Turna. September 2018. http://www.canr.msu.edu/resources/properly-ferment-and-prepare-your-ogi-koko-akamu-pap
8. Income Generation from Stinging Bees without a Sting. Onyinye Prince Choko. Project Highlights 32, September 2018. http://www.canr.msu.edu/fsp/countries/nigeria/highlights
9. The Future of Africa: Making "Africanists", Driver of Our Own Development. Wellington Osawe. Project Highlights 31, September 2018. http://www.canr.msu.edu/fsp/countries/nigeria/highlights
10. Changing Ones Perspective to Data Analysis: My Journey with R Statistical Programming. Blessing Agada. Project Highlights 33, September 2018. http://www.canr.msu.edu/fsp/countries/nigeria/highlights

11. Changing the fertilizer conversation in Nigeria: The Need for Site Specific Soil-Crop Fertilizer Use. Mrs. Blessing Agada. Policy Research Brief 73. September 2018. http://www.canr.msu.edu/fsp/countries/nigeria/publications

12. The Effect of Processing Practices on Mycotoxin Reduction in Maize Based Products: Evidence from Lactic Acid Fermentation in Southwest Nigeria. Oluwatoyin Ademola, Lenis Saweda O. Liverpool-Tasie, Adewale Obadina, Nikita Saha Turna, Felicia Wu. Research Paper 116. September 2018. http://www.canr.msu.edu/resources/the-effect-of-processing-practices-on-mycotoxin-reduction-in-maize-based-products-evidence-from-lactic-acid-fermentation-in-southwest-nigeria

13. The occurrence and co-occurrence of aflatoxin and fumonisin along the maize value chain in southwest Nigeria. Lenis Liverpool-Tasie, Nikita Saha Turna, Oluwatoyin Ademola, Adewale Obadina, Felicia Wu. September 2018. Feed the Future Innovation Lab for Food Security Policy Research Brief 84. http://www.canr.msu.edu/fsp/countries/nigeria/publications

14. Why Nigeria Urgently Needs to Grow Non-oil Exports. Arndt, Channing; Chuku, Chuku; Adeniran, Adedeji; Adetutu, Morakinyo; Ajayl, Victor; Mavrotas, George; and Onyekwena, Chukwuka 2018 (September). Published in *The Conversation Africa*.

15. Climate Change Adaptation among Poultry Farmers: Evidence from Nigeria. Lenis Saweda O. Liverpool-Tasie, Awa Sanou and Justice A. Tambo. September 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 117. http://www.canr.msu.edu/resources/climate-change-adaptation-among-poultry-farmers-evidence-from-nigeria-research-paper

16. The rapid transformation of the fish value chain in Nigeria: Evidence from Kebbi State. Ayuba Gona, Gwoni Woji, Sunday Norbert, Hajaru Muhammad, Lenis S. O. Liverpool-Tasie, Thomas Reardon, Ben Belton, September 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 118. http://www.canr.msu.edu/resources/the-rapid-transformation-of-the-fish-value-chain-in-nigeria-evidence-from-kebbi-state

17. The Rapid Transformation of the Fish Value Chain in Nigeria: Evidence from Niger State. By G. Ebiloma, R. Olatunji, T. Matthias, J. Nmadu, E. Olorunsanya, K. Baba, A. Jirgi, H. Tsado, S. Liverpool-Tasie, and T. Reardon. September 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 119. http://www.canr.msu.edu/fsp/countries/nigeria/publications

18. The Occurrence and Co-Occurrence of Aflatoxin and Fumonisin along the Maize Value Chain in Southwest Nigeria. Lenis Liverpool-Tasie, Nikita Saha Turna, Oluwatoyin Ademola, Adewale Obadina, Felicia Wu. September 2018. Feed the Future Innovation Lab for Food Security Policy Research Report 120. http://www.canr.msu.edu/fsp/countries/nigeria/publications

ANNEX F: PROJECT SUCCESS STORIES

Fourth Quarter

1. **M&E Plan for the Agricultural Research Council (ARCN) of Nigeria**
   Following three courses delivered to various ARCN staff over the year, participants were taught the principles of M&E, and development and implementation of an M&E plan and framework among others. These training courses would eventually result in the development of log frameworks and an M&E plan for ARCN. Following these trainings and as a pilot, selected members of the staff from ARCN that were involved in the training courses have developed an M&E plan for the *Journal of Applied Agricultural Research* (JAAR), an activity of the Council under the Knowledge Management Program that is into publication of manuscripts from authors on agricultural technologies that could increase agricultural productivity thereby reducing hunger and poverty as well as improving nutrition outcomes in Nigeria. The decision to commence with an M&E plan for the JAAR as a pilot was due to the fact that team members had readily available information for this project and also a learning opportunity for team members which would further be used to refine further the development of the ARCN M&E Framework and Plan with support from the Project. Such developments within ARCN enabled the Project to provide advisory and mentoring support which further helped improve national capacity in the agricultural sector in Nigeria.

2. **Group dynamics training for farmer groups in Ebonyi**
   On 24-25 September 2018, the Project organized a training for farmer groups on group dynamics in Ebonyi State. The training, which was opened by Ebonyi State's commissioner for Agriculture, Chief Moses Nome, was attended by 31 participants (24 male and 7 female) all representing 15 farmer groups based in the state.

   The training was aimed at further empowering Nigeria's farmers to be able to strengthen the ability of their local formal and informal groups to manage their assets,

make strategic group decisions and create a balanced level of participation in agriculture. Topics covered in the training included Group Vision and Mission, Working as a Team, Leadership, Communication, Conflict Management and Resolution, Group Decision-making, Group Registration, Mobilizing Resources, Planning and Implementation and Organizing Records. Following this training, farmer group leaders have started stepping down the knowledge and skills gained from the training in their various groups.

3. **Social Media and Agriculture - Enhancing Research Dissemination in Nigeria**
   On July 20, 2018, Wandieville Media http://wandievillemedia.com, in collaboration with the Nigeria Agricultural Policy project, trained 16 Nigerian Scholars (7 male and 9 female) from several institutions of higher learning across Nigeria on "Social Media and Agriculture". The training covered several topics focusing on 'enhancing agricultural research dissemination through social media'. The training strengthens the capacity of the participants to utilize social media for research, research dialogues, research dissemination etc... The training provided the Project Scholars heightened understanding of blogging etiquette and is expected to improve their management of the agricultural policy project blog. This training shows how the policy project collaborates with the private sector in Nigeria, setting the stage for more sustainable capacity development. The skills gained from this training can be put to immediate use.

4. **Policy Project launches first formal training on innovative free software for empirical analysis in agriculture for Nigerian scholars**

   On July 9, 2018, the agricultural policy project in collaboration with the Centre for Petroleum, Energy Economics and law, University of Ibadan launched its first 2-week training course on "Agricultural Data Analysis using R". The training (led by Michigan State University faculty) was offered for the 8 current project scholars (as part of the project scholars' program train one to train others initiative) and 10 other young Nigerian

researchers. The 10 other participants were selected from over 60 applicants across tertiary institution in Nigeria. The participants are sponsored by their own institutions and not the project. This demonstrates the high demand for the training course in Nigeria and how the policy project responds to such demand in a sustainable way. After the training, project scholars and other promising participants will be supported to develop the proficiency to train others on this software in the future. The training launch was covered by Voice of America

https://www.voahausa.com/a/amurka-na-tallafawa-nigeria-a-fannin-noma/4479376.html

ANNEX G: NUMBER OF COLLABORATIVE POLICY RESEARCH WORK AND ANALYSIS COMPLETED JOINTLY WITH LOCAL PARTNER.

Fourth Quarter

1. Chinedum Nwoko, Amarachi Grace Ikejiofor, Nchedo Theresa Nnaji, and Tewodaj Mogues. 2018. Federal government support for agriculture in Nigeria: Analysis with a public expenditure lens. *NSSP Working Paper 57*. Washington, DC.: International Food Policy Research Institute (IFPRI). http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/132891

2. Patrick Hatzenbuehler, Hiroyuki Takeshima, Hyacinth Edeh, and Akeem Lawal. 2018. Case studies of tractor sellers in Kaduna state and tractor owners in Benue state. *NSSP Working Paper 55*. Washington, DC.: International Food Policy Research Institute (IFPRI). http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/132817

3. Hatzenbuehler, Patrick L.; Mavrotas, George; Maikasuwa, Mohammed Abubakar; Aliyu, Abdulrahaman; and Bashir, Amina. 2018. Grain storage and marketplace characteristics in Kebbi State, Nigeria. *NSSP Working Paper 54*. Washington, DC.: International Food Policy Research Institute (IFPRI). http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/132817

4. Arndt, Channing; Chuku, Chuku; Adeniran, Adedeji; Adetutu, Morakinyo; Ajayl, Victor; Mavrotas, George; and Onyekwena, Chukwuka. 2018. Nigeria's macroeconomic crisis explained. *NSSP Working Paper 52.* Washington, DC: International Food Policy Research Institute (IFPRI). http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/132812

5. Arndt, Channing; Chuku, Chuku; Adeniran, Adedeji; Adetutu, Morakinyo; Ajayl, Victor; Mavrotas, George; and Onyekwena, Chukwuka. 2018 (September). Why Nigeria Urgently Needs to Grow Non-oil Exports. Published in *The Conversation Africa*.

6. The Effect of Processing Practices on Mycotoxin Reduction in Maize Based Products: Evidence from Lactic Acid Fermentation in Southwest Nigeria. Oluwatoyin Ademola, Lenis Saweda O. Liverpool-Tasie, Adewale Obadina, Nikita Saha Turna, Felicia Wu. Research Paper 116. September 2018. http://www.canr.msu.edu/resources/the-effect-of-processing-practices-on-mycotoxin-reduction-in-maize-based-products-evidence-from-lactic-acid-fermentation-in-southwest-nigeria

7. The occurrence and co-occurrence of aflatoxin and fumonisin along the maize value chain in southwest Nigeria. Lenis Liverpool-Tasie, Nikita Saha Turna, Oluwatoyin Ademola, Adewale Obadina, Felicia Wu. September 2018. Feed the Future Innovation Lab for Food Security Policy Research Brief 84. http://www.canr.msu.edu/fsp/countries/nigeria/publications

8. The rapid transformation of the fish value chain in Nigeria: Evidence from Kebbi State. Ayuba Gona, Gwoni Woji, Sunday Norbert, Hajaru Muhammad, Lenis S. O. Liverpool-Tasie, Thomas Reardon, Ben Belton, September 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 118. http://www.canr.msu.edu/resources/the-rapid-transformation-of-the-fish-value-chain-in-nigeria-evidence-from-kebbi-state

9. The Rapid Transformation of the Fish Value Chain in Nigeria: Evidence from Niger State. By G. Ebiloma, R. Olatunji, T. Matthias, J. Nmadu, E. Olorunsanya, K. Baba, A. Jirgi, H. Tsado, S. Liverpool-Tasie, and T. Reardon. September 2018. Feed the Future Innovation Lab for Food Security Policy Research Paper 119. http://www.canr.msu.edu/fsp/countries/nigeria/publications

10. The Occurrence and Co-Occurrence of Aflatoxin and Fumonisin along the Maize Value Chain in Southwest Nigeria. Lenis Liverpool-Tasie, Nikita Saha Turna, Oluwatoyin

Ademola, Adewale Obadina, Felicia Wu. September 2018. Feed the Future Innovation
Lab for Food Security Policy Research Report 120.
http://www.canr.msu.edu/fsp/countries/nigeria/publications

ANNEX H: POLICY COMMUNICATIONS TRAINING FOR MEDIA

	Ebonyi State	Kebbi State	Cross River State	Abuja Masterclass	
S/N	Media Houses				Location
1	National Gazette	Kebbi Radio	New Telegraph	Voice of Nigeria	FCT
2	Voice of Nigeria	Equity FM	Business Day	Blueprint	FCT
3	Vanguard	Leadership Hausa NP	Daily Trust	New Telegraph	FCT
4	New Telegraph	Vision FM	Punch	Tribune	FCT
5	Thisday	Kebbi TV	News Agency of Nigeria	Authority	FCT
6	AIT	Nigerian Tribune	Blue Print	Guardian	FCT
7	Daily Trust	NTA Kebbi	Leadership	News Agency of Nigeria	FCT
8	Independent	The SUN News Paper	The Guardian	BusinessDay	FCT
9	Punch	News Agency of Nigeria	National Accord	Food Farm News	FCT
10	Business News	Daily Trust	Vanguard	New Telegraph	Cross River
11	Oracle News Paper	Guardian NP	Voice of Nigeria	Daily Trust	Cross River
12	Daily Post	Leadership NP	Thisday	Voice of Nigeria	Cross River
13	The Nation		Radio France Intl	Leadership	Cross River
14	National Light		The Pioneer News Paper	Business News	Ebonyi
15	Blue Print		The Sun	New Telegraph	Ebonyi
16	Leadership News Paper		The Nation	Nigerian News Direct	Ebonyi
17	The Voice		Min. of Information	Radio Nigeria	Ebonyi
18	Radio Nigeria		National Gallery of Art	NAERLS	Kaduna
19	Orient Daily		Daily Post	Leadership	Kaduna
20	Sunrise			News Reservoir	Kaduna
21	Guardian			Leadership (Hausa)	Kebbi

22	The Sun			The Sun Newspaper	Kebbi
23	Authority News Paper			News Agency of Nigeria	Kebbi
24	News Agency of Nigeria			Daily Trust	Kebbi
25				New Telegraph	Niger
26				Punch	Niger
27				Prestige FM	Niger